GETTING GIRLS IN THE GAME: ACTION RESEARCH IN THE GYMNASIUM

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ABSTRACT
This article presents an action research project focused on improving physical education (PE) for adolescent female students. One university researcher, three male PE teachers, and 13 of their most disengaged female students participated in the one-year, two-cycle, action research project. The process and results are offered so that future PE teacher educators and PE teachers might recognize action research as a possibility for effecting positive change within PE programs. The results suggest PE teachers and their students can benefit from similar action research projects.

Keywords: action research, classroom action research, physical education, gender

INTRODUCTION
Physical education (PE) has a storied history of gender privilege within Canadian schools (Mandigo, Corlett, & Lathrop, 2012). Initial paramilitary orientations within PE, in which drill and discipline were idealized to shape male students' character and military preparedness, were further reinforced after the turn of the 20th century. For example, in 1909 Donald Smith (Lord Strathcona) and the federal government promoted and financially supported the inclusion of physical training within public schools (Cosentino & Howell, 1971; Hall, 2002). Lasting until the end of World War II, this Strathcona Trust required schools to not only promote physical training, but to also encourage the formation of military cadet corps. During this time, the relatively expensive cost of the required
uniforms, the unequal distribution of material and human resources, and the obvious gendered focus of instruction resulted in minimal-to-no benefits for female students (Hall, 2002; Lenskyj, 1990). Indeed, female students’ experiences within PE were then often limited to “joyless, formal calisthenics” (Hall, 2002, p. 30).

After the end of World War II, the paramilitary/para-medical orientation was gradually replaced with a movement education focus, largely shaped by the happenings within England and Laban’s movement analysis framework (Newlove & Dalby, 2005). This new movement education focus supported the inclusion of other forms of bodily movement into PE; these included various forms of dance and gymnastics. Despite the promises and possibilities during this brief period, ideologies of femininity continued to limit the movement possibilities for female students to those that would not “challenge the biologically determined assumptions of femininity and women’s future role as mothers” (Flintoff & Scranton, 2006, p. 771). By the 1970s and 1980s, movement education-informed and newly emerging female traditions of PE became subsumed by the “male view” of PE. This male view was informed by narrow notions of masculinity (i.e., focusing largely on attributes related to power, strength, and competition) and it, once again, did not meet the needs of most female students (Fletcher, 1994; Flintoff & Scranton, 2006).

Most recently, PE curricula throughout Canada have become more holistic, now characterized by cognitive, psychomotor, and affective outcomes related to a number of movement domains (e.g., games/sport experience, dance, gymnastics, outdoor pursuits, and active living). Notwithstanding the potential of such well-balanced programs, in practice, PE teachers invariably ascribe a disproportionate amount of their instructional time to sport experience/games within their PE programs (Mandigo et al., 2004). This current predominant model, one Kirk (2010) has labeled physical education-as-sport-techniques, has continued to privilege male students at the expense of female students (Flintoff & Scranton, 2001; Penney & Evans, 1999). To this, Flintoff and Scranton (2001) have concluded, “it is unlikely that ... a traditional games-based curriculum will attract many young women into an active lifestyle” (p. 18) while Penney and Evans (1999) have suggested that the traditional games approach to PE has been dominated by masculinized forms of sports, perpetuating gender inequalities through PE. Accordingly, there exists considerable literature detailing female students’ disengagement from contemporary PE, often suggesting that the key problems lie with curricular and pedagogic content and practices (e.g., see Couturier, Chepko, & Coughlin, 2005; Fisette, 2011; Flintoff & Scranton, 2006; Gibbons & Gaul, 2004; Gibbons & Humbert, 2008; Hastie, 1998; Humbert, 2006; Robinson, 2012).

**Purpose and Questions**

That such gender privilege continues today suggests attention and action ought to be dedicated to improving the experiences of female students within PE. Given this observation, three PE teachers who witnessed some of their own female students’ discontent within their secondary PE programs committed to a one-year, two-cycle, action research project. This action research project was envisioned to consider the happenings of local educational contexts, the existing relevant literature related to female students and
PE, and the abilities and intentions of the PE teachers themselves, so that female students might be more inclined to participate in, and enjoy, their PE classes—or, as the title suggests, so that girls might “get in the game.”

More specifically, the goal of this research was to develop an improved understanding of PE teachers’ and students’ reactions to an action research project in which gender relevant/responsive pedagogical practices were introduced. The two research questions guiding this study were:

- How do preadolescent and adolescent female students experience and interpret a PE program when it is purposely organized and taught so as to be gender relevant/responsive?
- What are PE teachers’ reactions to implementing a gender relevant/responsive PE program intended to meet the unique needs of preadolescent and adolescent female students?

**Relevant Literature**

*Female Students and PE*

Within Canada, most female students in high school do not participate in PE (Luke, 2000; Spence, Mandigo, Poon, & Mummery, 2001). With the lone exception of Manitoba, where PE is mandatory for all students in all years of high school, Canadian high school PE classes are made up of greater numbers of male students than female students. More specifically, once PE becomes an optional subject in high school (Hickson, Robinson, Berg, & Hall, 2012), enrollment significantly decreases with female students exhibiting a more noticeable decline in participation than do male students (Cameron, Craig, Coles, & Cragg, 2003; Eastman, Hostetter, & Carroll, 1992; Gibbons & Gaul, 2004; Hurley & Mandigo, 2010; Spence et al., 2001). Furthermore, these low enrollments for female students in optional PE are not specific to small or unique demographics but rather are evidenced throughout North America and other Western nations such as Australia, New Zealand, and England (Brown, 2000; Centers for Disease Control and Prevention, 1997; Hardman & Marshall, 2000, 2009; Park & Wright, 2000; Sleap & Wormald, 2001).

Given this trend, there has been considerable research conducted investigating female students and their experiences within PE. Literature detailing female students’ disengagement from contemporary PE has repeatedly pointed to a small number of recurring “priority” issues. These priority issues include the public nature of PE, the presence of aggressive male students, the lack of variety or authentic choice, social barriers related to looking good or being popular, and perceived-to-be unfair or inattentive PE teachers (Couturier et al., 2005; Gibbons, 2009; Gibbons & Humbert, 2008; Gibbons, Wharf Higgins, Gaul, & Van Gyn, 1999; Humbert, 2004; Martel, Gagnon, & Tousignant, 2002; Olafson, 2002; O’Reilly, Tompkins, & Gallant, 2001; Sleap & Wormald, 2001; Tannehill, Romar, O’Sullivan, England, & Rosenberg, 1994).
Public nature of PE. The public nature of PE has been shared by female students as being a major factor contributing to their dislike of the subject (Brooks & Magnusson, 2006; Couturier, Chepko, & Coughlin, 2007). Specifically, female students have shared that they do not like performing skills in front of their peers (Brooks & Magnusson, 2006; Couturier et al., 2007). Adolescent female students have shared that they feel self-conscious participating in activity in front of certain “types” of students within their classes; these others have been described as, “athletic, naturally skinny, fit, overachievers, and people who succeed at everything, especially sports” (Sulz, Humbert, Gyurcsik, Chad, & Gibbons, 2010, p. 9). Such female students have shared that they wished to avoid being judged by their peers within a physical activity setting (Sulz et al., 2010). Furthermore, public displays of one’s body become increasingly problematic when bare bodies are functionally on full display, such as would be the case when students are swimming or changing in PE (Flintoff & Scranton, 2001).

Aggressive males. Sulz et al. (2010) found that female students preferred being segregated from male peers during PE. They perceived male students to dominate the class, increase competition, and generally make PE class less enjoyable (Sulz et al., 2010). Brooks and Magnusson (2006) and Garrett (2004) similarly found adolescent female students’ negative physical identities to be heavily influenced by hostile responses from male peers. Vu, Murrie, Gonzalez, and Jobe (2006) found that the primary barrier to adolescent female students’ participation in PE was the presence of male students. Male students were seen to make fun of female students, providing unsolicited and negative feedback when female students did not perform an activity correctly or play according to defined or “understood” rules.

Lack of variety and/or choice. Current sport-based curriculum models for PE have been identified as problematic for many female students (Dale & Corbin, 2000; Dale, Corbin, & Cuddihy, 1998). Replacing a sport-based PE program with a health-related fitness PE program was one method by which to meet the expressed needs and desires of female students (Dale & Corbin, 2000; Dale et al., 1998). Related to a lack of variety and/or choice, female students not intending on enrolling in optional PE have suggested that the repetitive nature of PE, particularly with a repetition of the same sports, was especially problematic for them (Sulz et al., 2010). Affording voice and choice to students themselves has shown to produce favourable results and attitudes amongst female students (Wright, Patterson, & Cardinal, 2000). For example, Gibbons and Gaul (2004), in their study of Women’s Only Physical Education 11 (WPE 11), found that affording both choice and a variety of lifetime physical activities were some of the most important program considerations for engaging female students.

Social barriers. Sulz et al. (2010) found many female students had peers who had a direct influence in their decisions to opt out of elective PE. Specifically, several of their female participants explained that because many of their close friends were not enrolling, they would not either. Similarly, Dwyer et al. (2006) found that female students felt pressured by their friends to do things other than physical activity. Whitehead and Biddle (2008) found many inactive adolescent female students held strong stereotypical views related to
feminine appearance and actions, and that these views prevented them from engaging in exercise or physical activity. The students explained that being feminine entailed being “more concerned with appearance and clothes than exercise or physical activity” (Whitehead & Biddle, 2008, p. 246). Furthermore, many of these female students were reluctant to become active in PE, explaining that they did not want to get sweaty. Similarly, Couturier et al. (2007) and Vu et al. (2006) found that one of the most striking differences between female and male students was the degree to which female students identified social issues as barriers to participation in PE; these included discomfort with changing, time to shower and change, breaking a nail, and getting dirty or sweaty.

Unfair PE teachers. Within PE, female students have perceived that their PE teachers dedicate more time and attention to male students and/or those who are most athletic (Duffy, Warren, & Walsh, 2001; Martel et al., 2002; Sleap & Wormald, 2002). Similarly, Flintoff and Scranton’s (2001) research found that many adolescent female students explained that they had PE teachers “who were sarcastic about their skill level, or held low expectations of them, or who just did not seem to care” (p. 12). Lentillon, CogéRino, and Kaestner (2006) examined gender differences with respect to grading practices within PE. They found female students received lower grades than male students and they expected lower grades than did male students. Similarly, Hay and Donnelly (1996) found female students’ physical capabilities, participation, and enjoyment of physical education were consistently underrated by their PE teachers (when compared to PE teachers’ ratings of male students).

Action Research

Lewin’s (1946/1948) initial conceptualization of action research recognized that research ought to have a positive impact on a/the social condition. This was made especially clear when Lewin (1946/1948) suggested that action research ought to be understood as, “a comparative research on the conditions and effects of various forms of social action, and research leading to social action. Research that produces nothing but books will not suffice” (pp. 202-203). Kemmis (2006) has steadfastly continued to make this same case, particularly within schooling and education contexts. In fact, Kemmis (2006) has gone so far as to suggest that action research must “be capable of ‘telling unwelcome truths’ against schooling in the interests of education” (p. 459). Similarly, Bogdan and Biklen (2007) have also advised that action research ought to be conducted by “people in the ‘real’ world” (p. 234) who are interested in both finding practical solutions and effecting social change.

Kemmis and others (Carr & Kemmis, 1986; Kemmis, 1982; Kemmis & McTaggart, 2000, 2008) have elaborated upon action research as a cycle, suggesting that the cycle of planning, action, observation, and reflection be followed by revised planning (see Figure 1).
Though the spiral model may seem to suggest a somewhat fixed and rigid structure, Kemmis and McTaggart (2000) have been clear in detailing that the stages in the cycle are to be conceived as overlapping constructs rather than discrete ones. Koshy (2005) has further explained that, in reality, “the process is likely to be more fluid, open, and responsive” (p. 5) than might be presumed from considering the cyclical model as it is commonly presented.

**Figure 1.** Action research cycle (Kemmis & McTaggart, 2008, p. 278).

*Action research within education.* Action research has been identified to be especially suitable for those who aim to address a specific educational problem (Creswell, 2005, 2009). Within educational contexts, action research designs provide systematic procedures to gather information about, and subsequently improve, the ways in which an educational setting operates; this often necessitates a focus upon improving teaching and learning processes (Creswell, 2005; Mills, 2000). Schmuck (1997) has described the evolution of action research within educational contexts, explaining how teacher and school-initiated inquiries have played an increasingly important role in school improvement plans and programs. Moreover, educational change leaders Fullan and Stiegelbauer (1991) have repeatedly advised that the likelihood of educational change increases when the main stakeholders are active participants; teachers’ involvement in action research situates them as key stakeholders and active participants.

Mills (2000) has suggested action research within educational contexts is important for many reasons. Specifically, it encourages change, fosters a democratic approach to education, empowers individuals through collaboration, positions teachers as learners, encourages reflection, and promotes the testing of new ideas. Kemmis and McTaggart’s (2008) description of classroom action research suggests that qualitative modes of inquiry
and data collection be employed by teachers (with assistance from university researchers) so that they may make judgments about how to improve upon their teaching practices. When university researchers are involved in classroom action research, their role is generally one of service to teachers. With this role, university researchers must generally be able to privilege, or at least hold in high regard, teachers’ experiential knowledge.

**Action research within physical education.** Action research is relatively new within PE. This is largely due to the fact that, historically, research within PE has positioned students as objects of study and has consequently used entirely deductive research techniques (Enright & O’Sullivan, 2010; Erickson & Schultz, 1992; Tinning, 1992). Recent PE-related studies that have employed an action research methodology have focused on a number of topics including curriculum negotiation (Enright & O’Sullivan, 2010), student perceptions of novel activities (Rogers, 2011), teachers’ pedagogical changes (Casey, Dyson, & Campbell, 2009), teachers’ attention to gender equity (Lock, Minarick, & Omata, 1999), and instructional paradigms (Hastie & Siedentop, 1999).

**Methodology**  
**Positionality**  
There are many positions a university researcher may take when engaging in action research. Herr and Anderson’s (2005) “Continuum and Implications of Positionality” (p. 31) identifies a continuum of six possibilities, ranging from an insider self-study to an outsider studying those who are insiders. Within this action research project, the university researcher’s positionality would be best described as somewhere between “reciprocal collaboration” and “outsider(s) in collaboration with insider(s)” (Herr & Anderson, 2005, p. 31). The university researcher was certainly from outside of the system or unit of study. However, the university researcher endeavored to enable participating PE teachers to develop their own action strategies. In this respect, the university researcher offered possibilities, facilitated group planning and action, and supported the decisions of the PE teachers. Moreover, given that the university researcher was a former PE teacher who had also worked with the participating PE teachers in other capacities (e.g., as a course instructor and/or in-service facilitator), the university researcher also enjoyed considerable insider knowledge and perspective, not unlike the “outsider within” described by Collins (1990).

**Research Context and Participants**  
With the assistance of a local school district’s Active Healthy Living (AHL) consultant, all secondary PE teachers from one largely rural Canadian school district were invited to attend a full-day professional development session focused on improving the experiences of female students within PE. This initial invitation also explained that this session would provide an occasion for interested PE teachers to begin to engage in a yearlong action research project. A total of eight PE teachers attended this initial session (all but one of whom were male). At the conclusion of this initial session, all eight PE teachers indicated their desire to engage in the action research project. However, within one month of that initial meeting, four of the PE teachers elected to opt-out of the action research project and
the lone female teacher began a maternity, then parental, leave of absence. Consequently, only three male PE teachers participated in the action research project.

Recognizing that action research must also be conducted in open communication with participants other than teachers (Kemmis, 2006), this project also included some of these three PE teachers’ most disengaged female students. Two of the schools had four female students as participants while the third school had five female students as participants.

![Figure 2. Action research participants.](image)

**Development of Actions/Interventions**

The initial planning session, which followed a half-day in-service workshop focusing on engaging female students in secondary PE, allowed the larger group of eight PE teachers to discuss possibilities for action actions/interventions within their own unique PE contexts. This initial planning session required the PE teachers to consider the existing relevant literature and what they were able and/or willing to do within their own programs. Common to many of these PE teachers (and to all three of the ongoing participants) were two actions/interventions. These were affording greater choice and variety to female students and purposely making an effort to be perceived as especially caring and negotiatory PE teachers.

The second (and midyear) planning session allowed the three participating PE teachers to reflect upon and discuss their, and their students, reactions to these actions/interventions. This also provided an occasion for the PE teachers to share their experienced “best practices” and/or “failed attempts” related to these two notions. With this shared information, the PE teachers were able to plan continued actions/interventions.

**Data Collection**

Kemmis and MacTaggart (2008) have advised that classroom action research typically involves qualitative or mixed methods modes of inquiry and data collection and, further, that teachers themselves—often with the assistance of university researchers—are tasked with these responsibilities. Within this action research project, data were collected through qualitative modes of inquiry, with both the PE teachers and their PE students.
PE teachers completed four questionnaires (in October, December, February, April) in which they answered a number of open-ended questions, including the following:

- Please describe the "action(s)/intervention(s)" you purposely introduced into your practice in order to improve the physical education experiences of your female students.
- With respect to the "actions/interventions" in your class, what have been some of the challenges you have experienced and what have been some of the successes you have experienced?
- How has your introduction of the "actions/interventions" shaped your thinking and practice related to teaching physical education to female students?

The three PE teachers also met with the university researcher at the midpoint of the year and at the end of the year for focus group interviews, reflection, and revised planning. Both the midyear and end-of-year focus group meetings were done virtually via an on-line synchronous platform (Blackboard Collaborate). These two on-line sessions lasted approximately 50 minutes and all conversations were audio-recorded and then transcribed to facilitate data analysis. These data collection procedures and practices were meant to allow for an understanding of the following research question: What are PE teachers' reactions to implementing a gender relevant/responsive PE program intended to meet the unique needs of preadolescent and adolescent female students?

The 13 female PE students participated in midyear and end-of-year focus group interviews. Given that Creswell (2005) has suggested focus groups typically should have between four and six people, the size of these focus groups (i.e., four or five participants) was deemed appropriate. There were six main questions (and 10 additional probing sub questions) though focus group interviews also led to additional unplanned conversations. Sample interview questions included:

- What are some of the things you dislike the most about physical education? Tell me about the worst class you had in physical education so far this year. What is the worst thing about physical education?
- What do you think about the “action/intervention” in your class? Did you like it/dislike it? How did it make you feel? How does the “action/intervention” make physical education more or less enjoyable?

The six focus group interviews lasted between 48 and 62 minutes. The interviews were all audio-recorded and later transcribed. These data collection procedures and practices were meant to allow for an understanding of the following research question: How do preadolescent and adolescent female students experience and interpret a PE program when it is purposely organized and taught so as to be gender relevant/responsive?” A summary of all data collection activities and action research foci is detailed in Table 1.
### Table 1: Summary of Data Collection Activities and Action Research Foci

<table>
<thead>
<tr>
<th>Date</th>
<th>“Active” People</th>
<th>Data Collection Activities</th>
<th>Action Research Foci</th>
</tr>
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<tbody>
<tr>
<td>September</td>
<td>University Researcher, PE Teachers</td>
<td></td>
<td>PLAN</td>
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<tr>
<td>October</td>
<td>University Researcher, PE Teachers</td>
<td>On-line Questionnaires</td>
<td>ACT &amp; OBSERVE, REFLECT</td>
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<tr>
<td>November</td>
<td>PE Teachers</td>
<td></td>
<td>ACT &amp; OBSERVE</td>
</tr>
<tr>
<td>December</td>
<td>University Researcher, PE Teachers</td>
<td>On-line Questionnaires</td>
<td>ACT &amp; OBSERVE, REFLECT</td>
</tr>
<tr>
<td>January</td>
<td>University Researcher, PE Teachers, PE Students</td>
<td>Student Focus Group Interviews, Teacher On-line Interview/Session</td>
<td>ACT &amp; OBSERVE, REFLECT, REVISED PLAN</td>
</tr>
<tr>
<td>February</td>
<td>University Researcher, PE Teachers</td>
<td>On-line Questionnaires</td>
<td>ACT &amp; OBSERVE, REFLECT</td>
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<tr>
<td>March</td>
<td>PE Teachers</td>
<td></td>
<td>ACT &amp; OBSERVE</td>
</tr>
<tr>
<td>April</td>
<td>University Researcher, PE Teachers</td>
<td>On-line Questionnaires</td>
<td>ACT &amp; OBSERVE, REFLECT</td>
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<td>May</td>
<td>PE Teachers</td>
<td></td>
<td>ACT &amp; OBSERVE</td>
</tr>
<tr>
<td>June</td>
<td>University Researcher, PE Teachers, PE Students</td>
<td>Student Focus Group Interviews, Teacher On-line Interview/Session</td>
<td>ACT &amp; OBSERVE, REFLECT, REVISED PLAN</td>
</tr>
</tbody>
</table>

**Data Analysis**

Data were coded and categorized according to methods outlined by Creswell (2005) and Miles and Huberman (1994). Data were originally analyzed by a university researcher (as a principal investigator) who searched for key issues, similarities, differences, recurring ideas, and relationships. In this content analysis, repeated statements that possessed similar meanings were highlighted with different codes and assigned a name or phrase based on visible content information (Morse & Field, 1995; Tesch, 1990). After several
readings, this systematic coding process allowed for the identification of similar themes to be derived from the participants’ responses (Patton, 2002). Emerging themes allowed for analysis and interpretation. To confirm and/or disconfirm the identified themes and supporting comments, a second researcher (research assistant) analyzed the written responses.

Ensuring Quality
Herr and Anderson (2005) have linked five validity criteria for action research (outcome, process, democratic, catalytic, and dialogic) with the goals of action research. Outcome validity refers to the extent to which actions occur. PE teachers were free to choose and implement (or reject or abandon) their actions. All three of them steadfastly committed to some actions for long periods of time. Process validity refers to the extent to which problems are framed and solved in a manner that allows ongoing learning. Although meetings with PE teachers focused on improving experiences for their female students, the meetings also necessarily were occasions for meaningful professional development as PE teachers found themselves developing a bona fide professional learning community. Democratic validity refers to the extent to which research is a collaborative process involving all stakeholders. Including both PE teachers and their most engaged students ensured that the process was a collaborative one. Catalytic validity refers to the degree to which the action research process reorients and energizes participants. Given that the action research process required considerable time and effort on the part of PE teachers, it was necessary for them to become reoriented and energized. Presumably the four PE teachers who quickly opted out of the action research project were unable or unwilling to do so; the three who remained were committed to this responsibility. Dialogic validity refers to the validity gained through a peer review process. That has been achieved through the peer-review process for this publication.

Ethical Considerations
Ethical approval was granted by both the university researcher’s own university research ethics board (REB) and the PE teachers’ central school board office. In keeping with the foundations of ethical research as outlined by the Tri-council Policy Statement: Ethical Conduct for Research Involving Humans (Public Works and Government Service Canada, 2005), all guidelines were strictly followed (e.g., with respect to consent, privacy, and confidentiality). For example, the information letter and consent forms explicitly outlined the use of audio recording measures, including the provision that all audio recorded data would continue to be securely stored for five years after the study, and eventually destroyed. Additionally, a hired transcriber read and signed a confidentiality agreement.

RESULTS AND DISCUSSION
Students’ Insights
The female students expressed varying degrees of dissatisfaction with PE. On many occasions their language use was strong as they freely shared what they “hated” about PE in the recent past or present. In all cases, the female students shared that they, at one time, enjoyed PE. This original interest was lost in many of these female students as they transitioned through junior high:
Student C2: I actually loved gym class in elementary school. I loved it ... Junior high sucked. I hated gym in junior high. I don't know why, I just hated it.

This sort of pattern was entirely consistent with what many past researchers have found (Gibbons & Humbert, 2008; Olafson, 2002; Robinson, 2012; Spence et al., 2001). The six focus group sessions revealed much more about the female students' experiences in PE, including their reactions to their PE teachers' actions/interventions meant to improve upon their PE experiences. The emergent themes related to previous experiences were "exercise," "public PE," and "boys in PE" and the emergent themes related to students' reactions to introduced actions/interventions were "providing options," "caring and negotiatory teachers," and "future directions."

Exercise. The female students shared that some of the things they disliked most about PE were related to exercise. For these students, exercising was simply something they did not like. This was especially true of activities which required running:

Student A1: I don't like exercise. I don't like running a lot.
Student A2: I don't like running either. I hate running actually.
Student A3: Yeah, why do we have to do so much exercise in gym anyway? I like games and stuff sometimes but, you know, I am obviously not in shape and stuff, and so why would I want to exercise when everyone can do things I can't do? I can't run as good as everyone, yeah, I hate that too.

Again, these sorts of responses have been shared by female students within other similar contexts (Couturier et al., 2007; Vu et al., 2006; Whitehead & Biddle, 2008). When asked to elaborate upon exercise as a negative feature of PE, these female students offered additional information related to exercising within the school day:

Student C1: Well, I can exercise but why would I want to get all ready for school and then just sweat and do stuff and have to get ready all over again?
Student C3: Yeah, gym shouldn't be in the middle of the day. If maybe it was last thing I wouldn't care as much. I don't know.

Public PE. When probed further about their dislike of PE, one of the female students elaborated, suggesting that exercise was not really an issue for her. Rather, exercising in public was problematic:


Others offered that it was not exercising in front of others that was problematic. Rather, performing in front of (or with) others was experienced as a negative event:
Student B2: Yeah, I hate that too. Well I am a shy person. Having people watch you, I don’t like that.

Student B3: What I don't like, the worst thing I don't like about gym is that I am really low self-esteem. Doing things, it is, invades my personal space going in front of people. I hate going in front of people.

Other students shared a similar sentiment:

Student A4: I really don’t like being in front of people. That’s why I wouldn’t like something like archery. Everyone would see you, like if we had it set up in front of the whole class. Like, I’d rather do it at separate times of, like, in groups.

Student A3: I hate it when he sets it up like everyone is watching you. Yeah, and everyone is staring at you and if you mess up.

Some students also offered specific insight into what was problematic with the public nature of PE. They suggested that they were opposed to judgments about their performance and their appearance:

Student B2: We don't want people to judge us on our skills of doing it. Or if we are doing it right. Or, what we look like after we are done, and sweaty and stuff.

Student B1: I need to look good too. Yeah, we don’t want to mess up our hair.

Student B4: Yeah, everyone thinks they are so great too. They should worry about themselves more than trying to see if we know it right.

Such public displays within PE have been previously identified as problematic for female students within PE (Brooks & Magnusson, 2006; Couturier et al., 2007; Flintoff & Scranton, 2001; Sulz et al., 2010).

Boys in PE. In addition to many of these female students sharing stories related to the public nature of PE, many also made mention of the role that male students had on their dislike of the subject. These female students explained that their male peers were often too rough, too competitive, and, generally, unkind.

Researcher: What is the worst thing about physical education?

Student C3: The guys. We play capture the flag, dodge ball version, if you heard of that. And all the guys spike the ball like they are trying to break your bones.

Student C4: Yeah, and they get way too competitive.

Student C5: I don’t like the fact that in my class we have to share our classroom with the guys most of the time. I don’t like the fact that all of the guys in the class are, well, dicks.
Other female students also offered examples of how male students can make PE less enjoyable, speaking about getting hurt both physically and emotionally by them:

Researcher: What do you dislike about physical education?

Student B3: Dodgeball. The guys are too rough. They like bif it at you and if you are wearing shorts it really hurts.

Student B4: The guys throw the ball too hard when playing dodgeball. And it is really rough.

Student B1: I hate that the guys are so aggressive and I do think sometimes they make fun of you when you mess up sometimes. Like today I was, I am not going to say names, but one was pointing out, like, “Oh, you missed the ball, ha, ha, ha, you missed it.”

Student B2: The guys in high school became more aggressive and more muscular and could hurt more and then they would say, “I am better than you. I can do everything better and you can’t so.”

Student B1: We don’t like to be rough and the guys will really beat you to death. They will pretty much beat you to death.

Again, the male students do not necessarily have to be doing any explicit and easily-observable transgressions to be viewed as problems for female students. Their mere presence, and their observation of female students can make them feel uncomfortable:

Researcher: What do you dislike about physical education?

Student C1: Having other boys watching me. I feel very uncomfortable.

Student C2: I hate having them watch us. You know they are making fun of us just because we are girls.

Providing options. All three of the PE teachers aimed to provide opportunities for female students to exercise options as one of their actions/interventions. Sometimes, these options were related to enabling female students to exercise choice with respect to pursuing out-of-the gymnasium health-related fitness programs. This concession allowed female students to spend parts of PE classes, or entire PE classes, engaged in health-related fitness activities in an adjacent space. Responses to this action/intervention were wholly positive:

Student C1: Riding stationary bikes is the most fun thing I’ve done in gym because it does not involve me embarrassing myself in front of the other students. I don’t know why I can’t do this more often, especially when others are making fun of me.

Researcher: Does that happen often? Do you feel like people make fun of you often?
Student C1: Yeah. Well, no. I don’t know. I guess I mean if I feel like people might make fun of me, maybe because I suck at something, I’d rather go exercise by myself.

Female students not only appreciated the opportunity to pursue health-related fitness programs, but they also very clearly shared that they appreciated the opportunity to exercise authentic choice:

Student B2: In senior high I guess it is better now. I guess because I have the option of going to the workout room now. I can do my own thing and still get points for it. Cause I am exercising but I don’t have to do it with the rest of what the class is doing. I like having an option.

Student B4: It is a lot better in high school because the options make it bearable.

Student B1: Having an option to either go outside and walk around or go in the weight room or do things like that or sometimes he brings in his Wii Fit and we play with that. But having the options you don’t have to do the activity you do not like is good. That is why I like gym class more right now.

Student B2: Having options is good. I can pick whatever I want to do. I like it. If I didn’t have a choice I would probably be sitting on the bench most of my classes.

Student B4: Last year I thought about how I could manage to get out of gym class and just sit there and relax. I like this year way better than last year. I love this year because we have more options.

When asked about how being afforded opportunities for choice made them feel, female students offered further insights:

Researcher: How does having the opportunity to have choices make you feel?

Student A2: Empowered.

Student A3: Yeah, he is giving us, like, practice for the future and we have to make more choices. So, he is, like, giving us choices and by giving us these little few choices that don’t matter will eventually lead us up to bigger choices when we get older that will matter in our life.

Knowing that affording choice has had positive effects in the past (Gibbons & Gaul, 2004; Sulz et al., 2010; Wright et al., 2000), this, again, is in-line with previous literature.

Caring and negotiatory teachers. Planning and revised planning sessions with PE teachers included discussions about the importance of being perceived-to-be caring teachers to their disengaged female students. Rather than treating all of their students in identical manners (e.g., by having consistent expectations, consequences, etc.), the PE teachers became “open” to negotiations with their disengaged female students. The hope was that such a caring and negotiatory approach might signify to their students that they
were keen and willing to work together to establish a more enjoyable PE experience. Effects of this caring and negotiatory approach were revealed by the female students:

Student C4: Our gym teacher now is, like, he says, “please” and he is polite and calm and he won’t be, like, if you get in trouble he will just take you aside and speak quietly with you instead of yelling at you and getting mad. Well, he might get mad but he says it lesser in a tone of voice.

Student C5: The teacher is more encouraging now in volleyball. Like, if I can get the ball over the net, it is, like, “Good job, next time you will get it or when you practice you will do better.” But last year our gym teacher was not all that supportive.

Student C1: He is like more nice and friendly and like the tone of voice. Like I never heard him yell before at all. If you get in trouble he will like tell you in a calm tone of voice. Like it is not yelling or anything and then he like praises you when you like do something like it is a good job.

PE teachers’ negotiations could have been related to a number of PE elements. However, when students were asked about their current PE teachers’ practices, they spoke of the ability to negotiate time-on-task and preparedness for class:

Student A4: I like the teacher we have now because he is more, like, I don’t know what, but he is like, if I play hard for half the class he will let me take it easy in the later part of the class. You know, like play for 45 minutes and don’t complain and then have the last 15 minutes as cool down time.

Student A2: It is truthfully better that you can do gym without changing.
Student A1: Yeah, now he lets people play without gym clothes.
Student A4: I like that. I like that if you don’t have your gym clothes you still get to do gym.

While female teachers of females-only PE classes have been able to be perceived by their students as caring (Duffy et al., 2001; Gibbons & Gaul, 2004), this action research project presents some original information for consideration. Specifically, after making a plan (as part of an action research project) to be more caring and negotiatory, three male PE teachers of co-educational PE classes have been able to have a perceived positive impact upon their female students.

Future directions. Focus group interviews allowed the female students to offer their suggestions about how PE could be improved upon within their schools. This information was especially important to their PE teachers. Midyear information shaped PE teachers’ revised plans and end-of-year information could have been considered by PE teachers for their own future plans. Female students’ suggestions were most often related to content and gender-segregation:
Researcher: What could your physical education teacher do to make physical education better?

Student C2: Sometimes, you know, girls like to dance. So we get other teachers from around and she will do, like, one hour with the girls and some of the students from different classes can come if they want to.

Student C3: Yeah, why can't we do more dance?

Student C4: And maybe other things girls would like. Like maybe if you like yoga or something girls would maybe like different things.

Student C3: I like dance and Zumba stuff. Yeah, I don't like playing just, like, sports all the time.

Female students’ calls for gender segregated classes were not altogether surprising, given their shared stories of male students’ impact on their PE experiences:

Researcher: What sorts of things would make physical education more enjoyable in the future?

Student B1: Like, separate the girls and the guys.

Student B3: Yeah, definitely, separate classes.

Researcher: Why?

Student B3: Because then we don't have to, like, stand there while the guys play, like, when the guys play we most of the time don't even play at all.

Student B2: Yeah, we kind of just stand there and the guys just do their thing. And they don't even, like, worry about us.

While these sorts of suggestions have been shared in the past (Dale & Corbin, 2000; Dale et al., 1998; Sulz et al., 2010), gathering this information through action research has enabled these teachers to consider their own female students’ experiences and suggestions.

Teachers’ Insights

Through their involvement in the action research project, the male teachers also had many opportunities to share perspectives related to their role, and resultant learning, from the entire process. Their actions/interventions were generally related to offering choice and a variety of movement experiences and engaging in caring discussions and negotiations with disengaged female students. With this in mind, the PE teachers experienced some similar successes and unique challenges. They also identified how their involvement in the action research project has shaped their thinking and practice related to teaching PE to adolescent female students.

The PE teachers found a number of successes related to the action research project. These included engaging more female students (e.g., “I believe some of the girls in my classes have had more of a chance to experience what physical education is all about this year. Most days the girls and the boys left the gym sweating and I see this as a good sign.”) and connecting with female students (e.g., “I believe that the female students at this school are happy PE teachers are trying to change the gym programs to better suit the entire class.”)
The majority of the students respect the fact that this study’s primary goal is to get females more active in society and overall they have been trying harder.”).

The PE teachers found a number of challenges related to the action research project. These included frustrations with female students’ responses to actions/interventions (e.g., “In some cases it did not matter what I did or what activities were being offered, some girls just refused to participate.”), male students’ resultant conduct (e.g., “Some challenges that still remain are males dominating physical activities. Most boys are okay but a few still are very competitive and have a hard time slowing down their pace if need be. Sometimes it was also very difficult to get the boys in the class to take part in dance or yoga.”), and curriculum restrictions (e.g., “Offering choice makes it hard to follow the curriculum guide and mark during the report card season as several of the students are meeting different outcomes at different times or not at all.”).

The PE teachers also revealed the manners in which their own pedagogical thinking related to teaching and learning PE was impacted. Through their involvement in the entire action research project (including, especially, the initial professional development session and subsequent focus group meetings), PE teachers have become increasingly familiar with literature related to female students’ disengagement from PE. In addition to this increased familiarity, these PE teachers have also been able to gain a better understanding of the sorts of issues perceived by female students who are similar to their own students (and, in fact, have also learned about their own students’ perceptions):

Teacher B: I think it has made me realize that girls do want to be active, they are often just scared of a few factors: boys watching them, the roughness in some games, the thought that some games are predominately played by boys, the dress code, not all of their friends are playing with them. If I can eliminate some of these factors, which we did during the study, I have realized that girls are more apt to try new things and participate more in phys. ed. class.

Teacher C: I now try to stay away from team sports as much as I can and add more cooperative game activities which seem to help. This seems to make the girls more engaged and it has shown the boys that everything doesn't need to be revolved around competition. The girls as well as the boys seemed to enjoy a circuit training unit I did as they got a chance to use their imagination and just have fun and not worry about failure as in a sport setting and even asked to do it again.

Teacher A: I have become more aware of the needs of the girls in my class. I have also really had my eyes opened to the disparity that exists between boys and girls when it comes to participating in all activities, not just phys. ed. Far fewer girls are in the gym when it is open in the mornings, at recess, and at noon hour. Far fewer group activities are scheduled through the municipal rec. department for females. There is co-ed badminton and volleyball, but no girls-only leagues that I know of. There is basketball several nights a week, floor hockey
leagues and hockey leagues for men. Women’s hockey is one hour on Monday night.

Perhaps the most promising revised plan (for the academic year following the action research project) on the part of Teacher A was to create and offer a females-only PE class. This initiative came as a result of his participation in this action research project:

Teacher A: I am excited to see if a good number of girls sign up for the all-girls phys. ed. class. It would be nice if this became a permanent fixture. It’s too bad that the one female teacher in the school who is trained in phys. ed. would not agree to teach the course, but having a male phys. ed. teacher teach an all-girls class is better than not having the class at all.

CONCLUSION

Clearly, this action research project was not borne of nothing. The university researcher recognized an already-established need to address the experiences of female students within PE. The three participating PE teachers similarly recognized this need within their own local contexts. The impetus, then, for both the university researcher and the PE teachers was the understood need for social change—clearly within a microenvironment, yet, with recognition that broader environmental change is required too.

The PE teachers’ willingness to engage in such an inquiry necessitated that they first take the obvious professional risk of acknowledging that their teaching practices were unsuccessful at meeting all of their female students’ needs. Such an act deserves recognition; many PE teachers (or people in general for that matter) are often unwilling to engage in such an act. However, only by first recognizing their limitations were these PE teachers also able to engage in an action research project intending to “fill in the gaps” in their knowledge, skills, and attributes. Their very participation in the action research project suggests that they were caring teachers who were also committed to ongoing professional development.

Lewin’s (1946/1948), Kemmis’s (2006), and Bogdan and Biklen’s (2007) calls for social change-driven action research were constantly kept mindful by the university researcher and the PE teachers. All of these participants were involved to “make a difference.” Making a difference entailed making a difference in PE teachers’ understanding. However, and most importantly, it also entailed making a difference in the immediate lives of their female PE students. While the PE teachers shared some of their perceived challenges, it is clear that both the PE teachers and their students found that the goal of improving instruction, and female students’ reception to that instruction, was in many respects a success.

Also worthy of note is that by their participation in this action research project, the PE teachers have become teacher-researchers. They have engaged themselves in classroom research in which they have questioned their own practice, purposely planned how to improve their practice, taken consideration of the results of their actions/interventions,
and have repeated the cycle. Moreover, they have engaged with others, in a sort of professional learning community, as they worked through this process. While this action research project occurred over the course of a single year, all three teachers continue to follow the action research model, planning, acting and observing, reflecting, and planning again. For example, Teacher A's decision to introduce a females-only PE class has occurred after the conclusion of this time-bound action research project. This post-action research project initiative was shaped largely by his active participation in the cyclical process. Teacher B has chosen to enroll in a graduate program in physical education with a goal of further understanding how to improve PE for disengaged students. His enrollment within this graduate program will undoubtedly enable him to learn more about research (including action research) so that he may become a better consumer and producer of school-based research. Teacher C has taken a lead on engaging in a similar action research project with his peers at the nearest school. This initiative will allow other PE teachers and students to benefit as insiders collaborate with insiders.

Within the single year for this action research project, much was accomplished. The PE teachers’ improved understanding and teaching practices have allowed them to become better pedagogues. Because of their involvement and commitment to an ethic of care for their female students, their students have clearly benefited. The PE teachers have learned the requisite skills to become action researchers so that they might “tackle” other issues in their future teaching. Recognizing that action research has been largely absent from the PE literature (and that PE has been largely absent from the action research literature), this action research project presents promise for others. Action research within the gymnasium can improve teaching, learning, and in-school research possibilities.

REFERENCES


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