Girls in Action:

Fostering Relatedness in and beyond Physical and Health Education

By Jennifer Gruno, Sandra L. Gibbons, Richel Condie and Deanna Wilton

The aim of health and physical education (HPE) is to help children and youth develop physical activity and health behaviors that will benefit them beyond HPE classes and throughout their lives. However, adolescent girls' disengagement from high school HPE has been well documented (Camacho-Minano, LaVoi, & Barr-Anderson, 2011; Olafson, 2002). Girls are more likely than boys to report less positive attitudes toward HPE (Koca & Demirhan, 2004). Girls are also significantly less likely than boys to enroll in HPE when it is no longer required, to attend HPE class daily when it is required, or to participate in vigorous physical activity during the average HPE class (Centers for Disease Control and Prevention, 2004).

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Additionally, educators struggle with the challenge of providing relevant HPE experiences for female students that extend beyond class. This disengagement has led to the examination of alternative curricula to facilitate girls' engagement in and beyond HPE and the exploration of the type of learning environments preferred by girls. For example, making connections with community instructors and facilities to explore further physical activity opportunities in HPE has been identified

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as important for girls' enjoyment, engagement and participation in HPE programs and physical activity outside of school (Gibbons, 2014; Pfaeffli & Gibbons, 2010). Additionally, Gibbons (2009) found that girls placed considerable importance on the opportunity to actively choose and plan physical activities and on having a socially supportive learning environment.

This article describes a program, Girls in Action (GIA), designed by two high school HPE teachers in response to the need for providing relevant and meaningful physical and health activities to adolescent girls that extend beyond HPE class. Girls in Action is grounded in the concept of a relatedness-supportive learning environment — an environment in which students have opportunities to develop healthy relationships with others. Relatedness is the feeling of being connected to others in a social context (Ryan & Deci, 2002). Relatedness is similar to the concept of connectedness, which describes a sense of belonging resulting from the bonds that students develop within a school (Libbey, 2004).

Research has suggested that participating in physical activities with friends can be a source of enjoyment for many girls in HPE (Hills, 2007). For example, one girl in GIA commented that her goal for being active was "to participate well, have fun and make new friends," while another young woman stated that she achieved her physical activity goal because "[she] won the game but above all because [she] was with [her] friends." A relatedness-supportive learning environment can be created by allowing girls to plan and organize events in a girls-only HPE class in which their voices are honored, thus strengthening their ties to the course and to one another. They then experience further relatedness support beyond HPE by participating in physical activities in the community with other students (who are often

their friends and classmates), along with staff members and family members who are supportive of the girls' ideas and leadership.

Relatedness: Putting Theory into Practice

The concept of relatedness is grounded in the self-determination theory of motivation (Deci & Ryan, 2000). Self-determination theory proposes a three-part model to describe how motivation develops and influences behavior. There are three innate psychological needs (autonomy, competence and relatedness) that determine the state of motivation an individual will display (Deci & Ryan, 2000). Thus, if a girl's needs for autonomy (having a sense of choice), competence (a sense of efficacy) and relatedness (a sense of social attachment) are met, she may be intrinsically motivated to engage in a certain behavior, such as physical activity.

A main tenet of GIA is to build this social connection in and beyond the school while engaging in physical activity in the community. Goulimaris, Mavridis, Genti and Rokka (2014) suggested the need for relatedness because it "reflects the necessity of a person to feel that there is a reciprocal relation of confidence and respect with others, during the performance of an activity and a sense of belonging in a group of interacting people" (p. 278). In turn, a relatedness-supportive environment is one in which individuals have the opportunity to develop healthy relationships with others (Ullrich-French, McDonough, & Smith, 2012). Teachers and leaders can foster such an environment in and beyond the HPE classroom by using strategies that develop supportive and respectful relationships with their students and by taking actions that help students develop positive relationships with their classmates, peers and community.

Several researchers (Eime et al., 2013; Pfaeffli & Gibbons, 2010; Shen, McCaughtry, Martin, Fahlman, & Garn, 2012) have highlighted the need for relatedness as particularly important for girls' participation in physical activity. Social relationships play an important role in girls' participation in HPE (Hills, 2007) and physical activity across the life span (Springer, Lamborn, & Pollard, 2013). Shen et al. (2012) suggested that "a sense of relatedness is one of the key self-system processes that individuals develop over time in response to interactions with the social context" (p. 214). In their examination of the all-girls physical activity environment, Shen and colleagues found that girls with a high sense of relatedness (social connection) were more likely to show enthusiastic participation. Additionally, Pfaeffli and Gibbons (2010) found that girls in a physical activity course tailored to meet their needs and interests emphasized the sense of connection they felt in an all-girls' environment and expressed the importance of participating with friends, making new friends, and feeling safe. These authors suggested that for many girls, relatedness is clearly tied to their willingness to positively engage in physical activity.

Therefore, a program that targets learning activities that enhance a relatedness-supportive environment both within HPE and beyond, such as GIA, can contribute directly to girls' positive involvement in physical activity by giving them an avenue to be leaders and have their voices heard. Cox and Williams (2008) suggested that identifying factors that may support girls' feelings of relatedness is particularly important as feeling socially connected can be an even stronger predictor of self-determined motivation than feelings of competence or autonomy in HPE. Girls in Action focuses on fostering this social connection.

What is Girls in Action?

Richel Condie and Deanna Wilton, HPE teachers at Spectrum Community School in Victoria, British Columbia, Canada, created GIA to empower young women to plan community physical activity events in HPE and participate in these events with other young women outside of HPE. Girls in Action is a series of mass events, such as hiking, aerobics and bowling, which are open to any and all girls (if they choose) from the school. The intent is to have girls from all grades participating together, thereby fostering role modeling for the younger participants by the older girls. Additionally, other women in the school are invited — for example, office staff, teachers and administrators. Condie and Wilton aimed for participants to acknowledge their strengths and differences and to understand the importance of being confident, active role models in society.

To foster this role modeling in the greater school community, Condie and Wilton direct students in their Women's Health Activity and Movement (WHAM) senior HPE class to act as leaders at the events. As a part of leadership, the girls take an active role in planning and advertising the events and serve as role models by leading aspects of the physical activities. Each event is advertised through HPE classes and through posters (see Figure 1) displayed throughout the school.
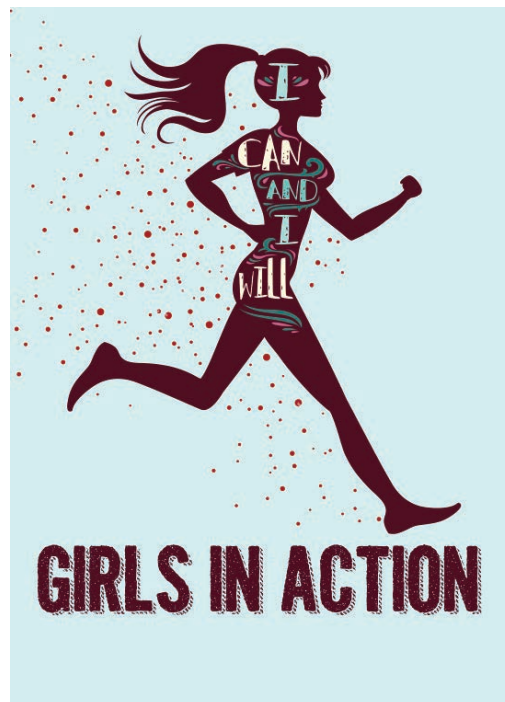

Figure 1. Girls in Action poster

	Before the Event	Day of the Event	After the Event
Actions taken by the teacher	❑ Recruit girls from the Women's Health Activity and Movement (WHAM) class to develop their leadership skills by helping to plan and organize the event. This first step helps foster relatedness because responsibility is shared between the teachers and the girls as they work toward a common goal. ❑ Apply for grants for funding transportation, healthy snacks and/or a guest instructor and contact possible guest instructors to lead the event (guest instructors can add a sense of novelty). ❑ Inform the staff about the event and ask for their support in advertising the event and allowing their students to possibly miss class to attend (arrange events throughout the year, so they do not affect the same classes a number of times). ❑ Arrange transportation if traveling off campus. ❑ Send an email to parents of female health and physical education (HPE) students inviting them to attend the event. Involving family promotes a relatedness-supportive environment. ❑ Distribute permission/waiver forms to participants. Set a date for returning completed forms. ❑ Ask for volunteers to be involved in the event. If traveling off campus, see if a teacher, educational assistant or administrator with first-aid training can participate. Including staff members extends the relatedness-supportive environment once again. ❑ Send out a final announcement telling students it is their last chance to sign up for the event. ❑ Collect completed forms from all participants and submit a list of names to the school office to excuse students from class.	❑ Make sure student leaders have cameras to take pictures during the activity. If the event is occurring outdoors, have safety vests or identifiable clothing for them. Having students take responsibility during the events provides participants with role models and leaders to whom they can relate.	❑ Follow up with any grant or donation providers (e.g., grocery store for healthy snacks) by thanking them with an email, poster or card (include photos). ❑ Post pictures of the event (with permission) and provide some photos for the yearbook. These mementos can further bond participants and encourage them to participate in future events.
Actions taken by the students, facilitated by the teacher	❑ Design a poster to advertise the event. Use resources such as the art or technology department in the school. Once again, HPE students are asked to take on a leadership role. ❑ Place posters around the school to advertise the event and provide a place for students to sign up to participate. ❑ Provide student leaders from WHAM with funds to purchase healthy snacks and prizes for after the event (or have them ask for donations for these items). These steps help to connect the students to the community.	❑ Student leaders make introductions and explain the event (teachers provide scripts to them if necessary). All participants fill out a slip of paper to be entered in the prize drawing.	❑ Immediately after the event, leaders hand out and collect evaluation forms and provide healthy snacks to all participants. ❑ Debrief as a class to allow the students to share what they learned and what they can improve for the next event.

Figure 1. Template for Planning and Implementing a Girls in Action Event

A sample event from the current school year was a hike up a local mountain in an effort to bring girls and women in the community together for a positive outdoor experience. Condie and Wilton and the WHAM class advertised the activity via a poster that read:

> We acknowledge that everybody has different abilities. Therefore, our plan is for you to set a goal on how you would like your hike to go. There will be a few student leaders for you to follow: whether you want to go to the top quickly, at a moderate pace, or just see how far you can go. Regardless, we will help you achieve whatever goal you set for yourself. No experience is necessary, as we want everybody to be able to come and enjoy the morning that we've planned.

After the hike, WHAM provided all participants with healthy snacks. This event was one of eight that WHAM organized that school year. Every time a student participates in one of the events, they can add their name to a prize drawing (for coffee-shop gift cards, sports gear, a massage, etc.) that takes place at the final event.

Helping students in the WHAM course learn how to plan for and implement a GIA event requires considerable groundwork by the teachers. Figure 2 shows a template the teachers developed to guide the student leaders. The template is divided into three sections: before the event, day of the event, and after the event. As mentioned in the table, after each event, Condie and Wilton have student participants fill out an evaluation form (see Figure 3). The purpose of this form is for teachers to learn what encouraged the girls to participate in the event, what their goal was for the event, if they achieved their goal, if they would participate in a GIA event again, and if they had any suggestions for future events. This feedback has helped strengthen the program since its inception in 2014.

In their evaluation forms, many girls shared that they felt a sense of relatedness during the GIA events. In response to the question, *"Did you achieve your goal? Why or why not?"* after a hike, one participant responded, "I made it up and down and up again, and I got to walk with my friends." A number of girls commented that they made connections with others during the hike: "I met new people and saw a really nice view" and "Really amazing hike and I made a new friend!" Additionally, a few girls commented that they were able to take on a leadership role; for example, one girl stated, "I worked hard and helped lead the group."

Evolution of Girls in Action

Condie and Wilton created GIA during the 2014–2015 school year. The first event (and only event during that school year) they organized with their WHAM class was a school-wide aerobics event for girls. The aerobics were led in the school gymnasium by Condie (and nicknamed Condieaerobics) and well over 100 girls and women (of the approximately 600 female students at the school) participated.

After the success of the first event, Condie, Wilton and the WHAM girls decided to increase to four events in the 2015–2016 school year. They were able to offer a variety of indoor and outdoor activities: hiking, Bellyfit, tai chi (in a park) and aerobics. Each of the four events was well attended by 60 to 80 girls with various ability levels and from different backgrounds. Of the 174 adolescent female participants, seven were First Nations students, five were special-education low-incidence students, and six were living with mental health or behavior-learning challenges.

Figure 3. Evaluation form

Four events also allowed for more female staff (educational assistants, teachers and administrators), and participants were encouraged to invite a parent, a sister, an aunt or a grandmother. In this way, in addition to fostering relatedness for the adolescent participants, GIA builds relatedness in a larger community of active multigenerational women. This community is important, as the need for relatedness does not stop with adolescent girls — it continues for adult women as well (Huberty et al., 2008). In total, 258 women participated in the events (some came to more than one event). During the 2016–2017 school year, Condie and Wilton increased the number of GIA events to eight. At the time of writing this article, girls and women in GIA had already participated in hiking, bowling and curling in the current school year.

Plans for the Future and Continuing Challenges

Condie and Wilton have learned over the years to offer a variety of activities for GIA. When they repeated aerobics two years in a row, the second time was not as well attended — perhaps because it was the only event in the previous year, and maybe the girls viewed it as not as exciting the second time. Another lesson learned by Condie and Wilton was to confirm dates with instructors as early as possible in September, as it takes a lot of time and planning. The WHAM girls really appreciate having a voice in planning the GIA events, so by hand-ing over some of the control, Condie and Wilton have created a relatedness-supportive environment in which the girls are involved, function as a team, know their voices are heard, and are encouraged to be leaders during physical activity.

Conclusion

Programs like GIA provide girls in HPE, the school and the community with a relatedness-supportive learning environment for physical activity. With some planning and creativity, programs that promote relatedness can successfully be integrated into a school to further support girls and women in being active. Girls who experience a relatedness-supportive learning environment in and beyond HPE are better positioned to become good communicators, team members, leaders and more active individuals.

References

Camacho-Minano, M. J., LaVoi, N. M., & Barr-Anderson, D. J. (2011). Interventions to promote physical activity among young and adolescent girls: A systematic review. *Health Education Research, 26*, 1025–1049. doi:10.1093/her/cyr040

Centers for Disease Control and Prevention. (2004). Participation in high school physical education — United States, 1991–2003. *Morbidity and Mortality Weekly Report, 53*, 844–847.

Cox, A. E., & Williams, L. (2008). The roles of perceived teacher support, motivational climate, and psychological need satisfaction in students' physical education motivation. *Journal of Sport & Exercise Psychology, 30*, 222–239. doi:10.1123/jsep.30.2.222

Deci, E. L., & Ryan, R. M. (2000). The 'what' and 'why' of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry, 11*, 227–268. doi:10.1207/S15327965PLI1104_01

Eime, R., Harvey, J. T., Sawyer, N. A., Craike, M. J., Symons, C. M., Polman, R. C. J., & Payne, W. R. (2013). Understanding the contexts of female participation in sport and physical activity. *Research Quarterly for Exercise and Sport, 84*, 157–166. doi:10.1080/02701367.2013.784846

Gibbons, S. L. (2009). Meaningful participation of girls in senior physical education courses. *Canadian Journal of Education, 32*, 222–244.

Gibbons, S. L. (2014). Relatedness-supportive learning environment for girls in physical education. *LEARNing Landscapes, 7*, 139–150.

Goulimaris, D., Mavridis, G., Genti, M., & Rokka, S. (2014). Relationships between basic psychological needs and psychological well-being in recreational dance activities. *Journal of Physical Education and Sport, 14*, 277–284.

Hills, L. (2007). Friendship, physicality, and physical education: An exploration of the social and embodied dynamics of girls' physical education experiences. *Sport, Education, and Society, 12*, 335–354. doi:10.1080/13573320701464275

Huberty, J. L., Ransdell, L. B., Sidman, C., Flohr, J. A., Shultz, B., Grosshans, O., & Durrant, L. (2008). Explaining long-term exercise adherence in women who complete a structured exercise program. *Research Quarterly for Exercise and Sport, 79*, 374–384. doi:10.1080/02701367.2008.10599501

Koca, C., & Demirhan, G. (2004). An examination of high school students' attitudes toward physical education with regard to sex and sport participation. *Perceptual and Motor Skills, 98*, 754–758. doi:10.2466/pms.98.3.754-758

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Libbey, H. P. (2004). Measuring student relationships to school: Attachment, bonding, connectedness, and engagement. *Journal of School Health, 74*, 274–283.

Olafson, L. (2002). 'I hate phys. ed': Adolescent girls talk about physical education. *Physical Educator, 59*, 67–74.

Pfaeffli, L. A., & Gibbons, S. L. (2010). Girls getting active: Exploring a physical education program tailored to young women. *HPENex Journal, 2*(3), 1–21.

Ryan, R. M., & Deci, E. L. (2002). An overview of self-determination theory. In E. L. Deci & R. M. Ryan (Eds.), *Handbook of self-determination research* (pp. 3–33). Rochester, NY: University of Rochester Press.

Shen, B., McCaughtry, N., Martin, J., Fahlman, M., & Garn, A. (2012). Urban high-school girls' sense of relatedness and their engagement in physical education. *Journal of Teaching in Physical Education, 31*, 213–245. doi:10.1123/jtpe.31.3.231

Springer, J. B., Lamborn, S. D., & Pollard, D. M. (2013). Maintaining physical activity over time: The importance of basic psychological need satisfaction in developing the physically active self. *American Journal of Health Promotion, 27*, 284–293. doi:10.4278/ajhp.110211-QUAL-62

Ullrich-French, S., McDonough, M., & Smith, A. (2012). Social connection and psychological outcomes in a physical activity-based youth development setting. *Research Quarterly for Exercise and Sport, 83*, 431–441. doi:10.5641/027013612802573049

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