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## ABSTRACT

The enhancement of positive self-concept has been identified as a key benefit of participation in team-building programs. This paper reviews research on the impact of team-building activities that include demanding physical challenges on the self-concept of physical education students. Team Building through Physical Challenges (TBPC) is a program comprised of a series of 22 Outward Bound-type problem-solving tasks that can be readily incorporated into a physical education setting. For any individual to succeed, the entire group must master each task. Program developers contend that TBPC provides significant physical and social challenges, as well as problem-solving tasks, and therefore should lead to improved self-concepts related to self-worth, athletic competence, social acceptance, and scholastic competence. Studies of Outward Bound showed improvement in participants' self-concept in domains related to program goals. Studies of team-building activities in elementary and secondary physical education settings found no significant treatment effects. Two recent studies of the TBPC program with middle school students in physical education settings found that participation increased student perceptions of athletic competence and global self-worth, but that effects were significantly greater for males than females. An ongoing research project will assess the effects of TBPC on student self-concept in an all-female physical education class. (Contains 14 references.) (SV)

# Team Building through Physical Challenges

Sandra L. Gibbons

*The enhancement of positive self-concept has been identified as a key benefit of participation in team building programs. This paper provides a brief discussion of the impact of team building activities that include demanding physical challenges on the self-concepts of students in physical education.*

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## Introduction

Enhancement of self-concept is widely viewed as a desirable learning outcome of physical education since it can be a powerful intervening process that may contribute to other positive changes. It is also recognized that participation in team building activities that utilize physical challenges has the potential to enhance the self-concept of students (Ebbeck & Gibbons, 1998; Gibbons & Black, 1997; Marsh, Richards, & Barnes, 1986; Marsh & Richards, 1988).

Glover and Midura (1992) utilized the concept of team building to design *Team Building through Physical Challenges* (TBPC). This program is comprised of Outward Bound-type tasks that can be readily incorporated into a physical education setting. The key for any one individual to succeed is that the entire group must master each task. Glover and Midura contend that this program can have a positive impact self-concept because as individuals master progressively harder challenges they feel better about themselves and their abilities. The authors also suggest that an individual's contribution to achieving a group goal can nurture acceptance of that person by the group.

## Self Concept Development

Self-concept is defined as the "descriptions or labels that an individual attaches to him- or herself, such as physical attributes, behavioral characteristics, or emotional qualities" (Weiss, 1987, p.88). Self-concept is currently viewed by researchers as a multidimensional construct (Harter, 1988; Weiss, 1987). This construct refers to the notion that one's over-all self-concept consists of several domain-specific self-perceptions. Multidimensionality also suggests that

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success at a particular activity can increase perceptions in one domain. This increase may or may not generalize to other domains. It follows that educational interventions designed to impact self-concept may be more effective if they have a specific focus on the individual domains of self-concept.

The construct of self-concept is well known in the field of education. In fact, Branden (1994) noted that teachers have been more receptive to the importance of self-concept than any other professional group. The interest in programs designed to change self-concept is understandable given the desirable outcomes associated with enhanced self-conceptions. Higher levels of self-concept are related to motivated behavior and supportive social interactions (Harter, 1987, 1993; Leary & Downs, 1995). Individuals with high, as opposed to low, self-concept are more likely to be motivated to pursue personal goals and persist in the face of obstacles. These individuals are more likely to receive support from significant others and be included in social groups. It is somewhat ironic that research has shown that teachers have not been particularly effective agents for increasing self-concept (Hattie, 1992). Hattie has suggested that typically teachers are not trained to implement programs designed to improve self-concept, and that schools need to look closely at settings in which such programs could be more effectively conducted" (p. 240).

### **Team Building**

Team building is a term used to describe a group problem-solving task that involves the structuring of participants' interactions so that each depends on, and is accountable to, the other members of the group. Typically, participants work in groups of six to eight, on challenging tasks that require considerable organization, communication, and cooperation among the members of the group in order to successfully complete the task. An important attribute of team building tasks is the de-emphasis of competition between groups and/or individuals. Although it may be necessary to have several small groups working on a similar task at the same time, the notion of winning by virtue of being the first group to complete the task receives no emphasis or reward. Team building tasks also include pre-determined rules to be kept for the duration of the task with specified consequences when rules are broken. Finally, tasks include a range of structuring formats for participant roles and responsibilities, from those with specific pre-task assignments to others where roles and responsibilities emerge as part of the problem-solving process.

Proponents suggest that this particular teaching strategy has the potential to foster: (a) psychological support for those students who lack confidence when initiating new learning; (b) concern about welfare of group members; and (c)

sharing of individual skills and talents. Reviews and meta-analyses have found that this type of teaching strategy can be more effective than interpersonal competition or individual goal setting for producing achievement in many academic areas and positive changes in self-concept.

### **Team Building through Physical Challenges**

Glover and Midura (1992) utilized the strategy of team building to design *Team Building through Physical Challenges* (TBPC), a sequence of 22 group problem-solving tasks in physical education that gradually increase in their physical, social/emotional, and intellectual challenge, while emphasizing a sense of adventure. The following are sample team building tasks:

*Introductory task – Alphabet Balance Beam.* Group members start by sitting on the balance beam in random order. The task is completed when all members are standing on the beam in alphabetical order. All members must stay on the beam during the task. If any person touches the mats or legs of the beam, the entire team must return to the original position and start anew.

*Intermediate task – Bridge over the Raging River.* Group members are required to travel from one end of a space (land) to the other end using assigned equipment without touching the floor (river). The task is completed when all members have crossed without touching the river with any part of their bodies and the provided equipment has been transported across the river. If a rule is broken, the group must take the bridge back to the starting line and begin anew.

*Advanced task – Tarzan of the Jungle.* Group members move from one vaulting box across a designated distance (swamp) to the top of a second vaulting box. The members cross the swamp with the aid of three climbing ropes. The task is completed when everyone has crossed the swamp and is standing on the second vaulting box. If any member touches the floor anywhere in the swamp or falls off the vaulting box, one member of the group who has successfully crossed the swamp and the person touching the floor must return to the starting position.

The format of the TBPC program emphasizes the following regulations: (a) specific roles for each task; (b) positive group interactions; (c) task rules be obeyed (if rules are broken, consequences must be suffered and sacrifices made); and (d) post-task reflection. Individual tasks include the following specific roles for students to perform: (a) organizer - responsible for reminding group members of the challenge, rules and sacrifices; (b) praiser - responsible

for finding specific incidents of praise by group members; (c) encourager - responsible for acknowledging efforts of group during participation; and, (d) summarizer - responsible for telling instructor how team solved a problem, and coordinating completion of team report card. Emphasis on positive interaction during team building tasks focuses on the use of positive praise phrases between teammates and attempting to decrease the use of negative interactions (put-downs). Post-task reflection is defined as a *team report card*, and is intended to serve as a mechanism for group members to reflect on the actions of the group.

According to Marsh et al. (1986, 1988), it is expected that self-concepts most logically related to a particular intervention should evidence the greatest change. For example, increases in perceptions of physical ability would be predicted following a physically oriented program. Glover and Midura contend that the TBPC program provides significant physical and social challenges. Consequently, students exposed to the TBPC intervention should develop significantly higher conceptions of self-worth, athletic competence, and social acceptance. By their very nature, team-building tasks also require participants to brainstorm, experiment, and communicate toward finding solutions to challenging problems. One would expect that these actions associated with problem solving combined with the eventual successful completion of the challenges are likely to contribute to increased self-perceptions of scholastic competence.

### **Research on Team Building in Physical Education**

Outdoor education has been the primary setting for the majority of research on team building activities using physical challenges. Specifically, team-building tasks have been utilized in Outward Bound programs to meet a variety of outcomes, including enhancement of participant self-concepts. Outward Bound courses include physical and intellectual activities designed to help participants recognize their strengths and limitations. Marsh, Richards, and Barnes (1986) reported significant increases in multiple dimensions of self-concept for a group of young adults ( $N=361$ ) who participated in a 26-day Outward Bound program. Of particular note in this study was the improvement in dimensions of self-concept specifically related to the explicit goals of the Outward Bound program. For example, variables such as honesty, general-self, and physical ability showed notably more improvement than variables such as academic ability and mathematical ability, which are less related to program goals. These results provide support for the notion of domain-specific self-concept and the design of an intervention that focuses on particular aspects of self-concept. In a similar study, Marsh and Richards (1988) examined the effects of participation in a six-week Outward Bound program on the academic achievement and self-



concept of a group of low achieving ninth grade males ( $N=66$ ). The data showed significant improvement in the aspects of academic self-concept and achievement emphasized as part of this project. The results from these studies provide further support for the need for specific rather than general intervention strategies in order to achieve particular outcomes.

Several researchers have examined the use of team building activities in the physical education class setting. Langsner and Anderson (1987) investigated the impact of an outdoor challenge program in physical education on self-esteem and locus of control of boys ( $N=31$ ), aged nine to thirteen. The members of the experimental group ( $n=14$ ) participated in a 14-week program entitled Project Explore which followed seven sequential stages including goal setting, awareness, cooperative activities, trust, individual initiative tasks, group initiative tasks, and adventure activities. No significant treatment effects on either dependent variable between the experimental group and control group were found. The authors noted that any interpretation or generalization of these results must be tempered by the study's small sample size.

Two recent studies have specifically examined the effects of the TBPC program on self-concepts of physical education students. Gibbons & Black (1997) examined the effectiveness of the TBPC program on the self-concepts of male and female middle school students in a coeducational physical education setting. Results indicated significant pre- to posttest increases for members of the experimental groups on four of the six variables (global self-worth, social acceptance, athletic competence, behavioral conduct) following a 7-month intervention. In addition, boys reported significantly higher perceptions of athletic competence and global self-worth than girls. Ebbeck & Gibbons (1998) used a similar design with sixth and seventh grade students in coeducational elementary school physical education. One research question focused on whether gender differences would be found with younger students. Similar gender differences were found.

### **Current Research**

A current research project in progress extends the parameters set by Ebbeck & Gibbons, 1998; and Gibbons & Black, 1997 by attempting to tease out more information on the gender differences found in these studies. The purpose of this current project is to investigate the effectiveness of the TBPC program on the self-concepts (global self-worth, athletic competence, physical appearance, social acceptance, scholastic competence, and behavioral conduct) of female physical education students in grades eight and nine. The researchers in the two previous studies implemented the TBPC program in co-educational physical education classes. Given the documented gender differences across

self-concepts in these studies, it was decided in this project to implement the intervention in an all-female physical education class. The results will provide insight into the possible impact of the TBPC program on self-concepts of female students, without the presence of male students as a possible intervening factor.

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