Youth Leadership Program:
The Longitudinal Benefits on Classroom Performance for Urban Youth after a Challenge Course Program

by
Nicolas J. Salibrici

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Department of Recreation, Parks and Leisure Studies
State University of New York
College at Cortland

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ABSTRACT

Youth Leadership Program: The longitudinal benefits on classroom performance for urban youth after a Challenge Course program.

Nicolas J. Salibrici
State University of New York at Cortland
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The purpose of the study was to examine the benefits of a six-week challenge course program on urban youth’s academic and social achievement. Through an interactive, experiential learning environment, the Youth Leadership Program (YLP) aimed to increase participant’s self-confidence, self-motivation, and sense of community through socially and physically challenging activities that yielded positive rewards (Rohnke, 1984; Schoel, 1988). Ultimately, the program aimed to help participants realize their ability to make positive academic and social choices in the classroom by learning how to overcome challenges and obstacles. A study group was randomly selected from the target population, ninth and tenth graders performing below a C average with multiple disciplinary infractions; this group was compared to a control group randomly selected from the same demographic who received no treatment. Overall grade point average (GPA), disciplinary infractions (DI) and the School Social Behavior Scale (SSBS-2) were used to determine changes in academic behavior, social competence and antisocial behavior. Focus group discussion sessions were also conducted with the study group to gain a deeper understanding of the participant experience. Data were analyzed using ANOVA and paired t-tests. Results indicated no statistically significant change but positive trends were recorded. Qualitative results showed the presence of benefits elicited from the program and four months following completion of the program. Participants in the study group did experience a positive academic and social change in the classroom after the extended challenge course program. However, this positive change was disrupted by confounding variables experienced by urban youth living in an unstable and unpredictable environment. A challenge course program as a part of core curriculum could potentially mitigate the effect of negative stressors and have positive long-term effects on overall academic and social performance.
ACKNOWLEDGEMENTS

After almost a decade of classroom teaching, I found myself on the receiving end. I was sitting in Dr. Young’s Recreation Resource Management class wondering what exactly I was doing. The information was endless. The task ahead, daunting. A moment of uncertainty came over me and I questioned if I was ready or even able to take on a Master’s education. But I hung in there and let my love for the outdoors and my love for adventure drive me forward. Now here I am at the end, and there are many people to whom I owe thanks.

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Chapter 1

INTRODUCTION/BACKGROUND

“We fool ‘em into exercising, thinking, cooperating, taking risks, and feeling good about their accomplishments.” – Karl Rohnke, from Cowtails and Cobras II

Karl Rohnke, in his time with Project Adventure and at the advent of introducing new games and adventure education into high school curricula, coined the acronym F.U.N.N, Functional Understanding Not Necessary. The purpose of introducing new games, group initiatives, trust activities, and cooperative play, all a part of challenge course programming, was to educate participants about using positive risk to realize positive behavioral change (Cheffers, 1984). The term F.U.N.N represents the process that a participant goes through during a challenge course program: participating in fun but purposeful activities and tasks that build self-confidence and self-esteem through physical and emotional risk in an encouraging group environment (Rohnke, 1984).

Challenge course programs employ the principles of Adventure Based Counseling (ABC). ABC, according to Dick Prouty (1988), combines “experiential learning, outdoor education and group counseling techniques” to augment self-concept and group cohesion through positive risk-taking (p. 10). These benefits are characteristic of a challenge course experience: a goal-oriented, outcome-based experience that makes use of actual and perceived risk in order for participants to realize benefits (Schoel, 1988). Being faced with difficult
challenges through activities that pose actual and perceived risk allows a group to learn that they are able to find success when faced with obstacles. Because a certain level of risk-taking can allow an individual or group to realize benefits, it is important to understand the concept of risk as it applies to the adventure experience.

**Using Risk as a Tool**

According to Wyatt and Peterson (2005), risk-taking is described as any action that will yield either success or failure. The outcome of such an action is uncertain because it is unknown whether there will be a loss or a gain (Priest & Gass, 1997). Before an individual carries out any action, he or she weighs perceived benefits and perceived consequences. The ability to choose between the benefits and the consequences for a “subjectively valued” goal is known as decision competence (Fischhoff, 2008); in other words, the ability to choose actions that increase achievement of self-determined goals. Another way to understand decision competence is to consider risk/benefit analysis. An individual will examine a risk and determine if the potential benefits are greater or less than the potential risk. However, the ability to discern between risk and benefit depends on the individual.

Risk is defined at different levels according to the subject; consequently, the outcome of any risk takes on different possibilities, positive or negative. Positive risks can be viewed as constructive risks that are healthy, legal, and yield positive outcomes, whereas negative risks yield undesirable outcomes. Wyatt and Peterson (2005) used rock climbing as an example of a challenging, constructive risk that “allows for discovery and establishment of one’s identity” (p. 229). An activity with an element of risk that may be dangerous can allow a person to grow
physically, emotionally, or even psychologically (Wyatt & Peterson, 2005). However, an activity like rock climbing might result in physical injury, so there is the possibility of a negative outcome. The ability to mitigate negative risks, resulting in a positive outcome, will allow an individual to learn from the behavior and potentially grow in some way.

Risk is discretionary because goals are often self-determined. Whether or not we choose to partake in any action depends on our experience, our level of competence, and our willingness to behave in a risky manner. At the most basic level, risk-taking is differentiated depending on personality (Cooper, Agocha, & Sheldon, 2000). For example, some are inclined to engage in risky behavior just for the thrill (Wyatt & Peterson, 2005), while others will exhibit self-preservation if the risk outweighs the benefits (Cooper, et al., 2000). An adventure experience, like rock-climbing, provides a challenge with actual and perceived risk. If balance between the risk intrinsic to the activity and a person’s ability to react to the risk appropriately can be reached, there is the potential for a positive outcome (Ewert & Hollenhorst, 1997).

Priest’s (1986) Adventure Experience Paradigm (AEP) shows the possible outcomes of an adventure experience depending on the level of risk and the level of competence:

Figure 1 – Priest’s (1986) Adventure Experience Paradigm
The AEP illustrates how the outcome of a risk depends on one’s level of competence and the perceived level of risk. This model is a useful tool in determining what level of risk to use when creating adventure learning experiences to meet program needs for participants (Anderson, Anderson & Young, 2000). As an example, a challenge course activity may appear impossible to complete and involve the perceived risk of physical harm, but with group effort and cooperation, a positive outcome may be realized (Rohnke, 1989).

A challenge course program uses risk as a tool to facilitate personal growth in participants. Creative problem-solving activities that vary in perceived emotional and physical risk encourage decision-making to solve a problem (DuFrene, Sharbrough, Clipson, & McCall, 1999). These hands-on, highly interactive group experiences have been shown to foster participants’ personal growth and skill development (Hatch & McCarthy, 2003). Positive benefits resulting from such a program use a progression of cooperative, team-centered activities and initiatives that allow a group to work together in order to problem-solve and build trust (Wolfe & Samdahl, 2005). Participants also realize the value of positive risk-taking and positive decision-making.

As Cheffers (1984) points out in his introduction to Karl Rohnke’s guide to leading challenge course activities, “people are at risk when they learn. This risk may be physical, social, emotional, intellectual, or spiritual in nature” (p. 7). A challenge course may involve very real emotional and social risk for participants, but it does so in a controlled, facilitated environment. Participants learn to feel comfortable in a physically, socially, and emotionally safe group environment while being encouraged to push those same boundaries (Rohnke, 1984). It is within
this environment that participants can grow individually and learn to maximize their true potential.

**Adolescent Risk and the Classroom**

The role that risk plays in adolescent development is a key aspect of this study. Adolescents are faced with many obstacles as they attempt to fulfill their developmental tasks of maturation and individuation (Ginsburg et al., 2002). This time period, when adolescents separate from their parents and begin to form a sense of self, is marked by a likelihood to engage in negative risk-behavior in order to be accepted by their peers (McClanahan & Holmbeck, 1992). Adolescents deal with the need for social acceptance to validate their self-worth, and this is compounded by a “dramatic shift in school context” (Aikins, Bierman, & Parker, 2005, p. 13). Not only are the demands for academic performance increased, but they happen in an environment that is self-directed with limited adult supervision. New social pressures for acceptance in and around school are intensified (Brown, 1990). Adolescents feel that they may be unable to rely on their own faculties or friends alone to aid broad adjustment to heightened academic and social responsibility (Aikins et al., 2005).

There is a direct relation between the stress and strains of adolescent adjustment and academic performance. Not only are youth attempting to find a social niche, but they are also attempting to be successful in an unfamiliar academic environment. The transition to middle school coupled with the transition into adolescence marks a period where adolescents may choose to behave negatively or positively to gain social recognition and acceptance (Erath, Flanagan, & Bierman, 2008). Risk plays an obvious role in adolescent development, so it may be
possible for the dynamics of a challenge course experience, using actual and perceived risk as a tool, to positively affect this role.

**Statement of Purpose**

The purpose of this study was to measure the effectiveness of the Youth Leadership Program (YLP) on urban youth’s ability to take positive risks. More specifically, this study assessed the effect of a six-week challenge course program on academic and social performance in the classroom. Additionally, the study assessed the longitudinal effects of the YLP.

**Significance of Study**

Challenge course programs have been growing in popularity as effective treatment programs for groups ranging from college students to dentists. They have been found to affect resiliency, self-concept and self-esteem, and moral reasoning among others (Smith, Strand, & Bunting, 2002). The program design of a challenge course experience has also been studied to better understand the participants’ experience. However, there is a lack of empirical data that examines the guiding principles of such programs, the dynamics of those principles, and the participant perception of those principles (Haras, Bunting & Witt, 2005; Wolfe & Dattilo, 2006; Wolfe & Samdahl, 2005). A broader, empirical understanding of the positive, long-term benefits of a challenge course experience is needed, as well as an understanding of exactly how this experience yields any benefits.
The role risk plays in challenge course programming is essential to understand how such a program works. A close examination of the theoretical framework behind a challenge course experience may show how facilitating actual and perceived risk experiences in a structured adventure learning environment can affect positive learning outcomes for the participant. Specifically, this study will examine if this type of experience can yield positive outcomes for urban adolescents: making positive decisions when faced with negative stressors.

**Research Questions**

The study sought to determine if an extended challenge course program could positively impact urban youth in the classroom. Quantitative and qualitative feedback was gathered to determine what effect the program had on participants’ grade point average, number of discipline infractions, and socially competent behavior in the classroom. Further, data was collected four months following the program to assess lasting effects of the treatment.

The research questions below served as an overall focus for the study:

RQ 1: Does participation in a six-week challenge course program affect participants' overall grade point average and amount of disciplinary infractions?

RQ 2: Does participation in a six-week challenge course program positively affect social competence and antisocial behavior in the classroom?

RQ 3: What are the benefits, immediate and long-term, of an extended challenge course program?

RQ 4: What is the expressed impact of an extended challenge course program on academic and social performance?
Delimitations

The subjects for this study were delimited to adolescents ages 14 to 16 enrolled in an urban high school. The purpose of this delimitation was to focus on urban youth faced with negative stressors caused by an unstable and unpredictable environment. The study was also delimited to social competence and antisocial behavior as measured using the School Social Behavior Scale (Merrell, 2002), and academic and social performance in the classroom as measured using grade point average and disciplinary infractions.

Limitations

The primary limitation of this study was how the program was facilitated. The choice of facilitators was a limitation because the experience of any one facilitator can vary. Since the facilitators make decisions affecting the framing and frontloading of all activities, their ability to shape the experience to the specific needs of the participants is crucial. Also, the researcher was the lead facilitator and also a teacher at the school from which participants were drawn, thus a prior classroom relationship with the subjects potentially influenced outcomes of the program (e.g. participants giving socially desirable or scripted responses).

Another limitation was generalizability. The results may only apply to the demographic served: urban high school students performing below a 2.5 grade point average with multiple disciplinary infractions. Additionally, results may only pertain to students from the participating local high school.
Sample size was a limitation. An effective facilitator to participant ratio is two facilitators for every fifteen participants. To ensure the desired effectiveness of a program, this ratio allows facilitators to efficiently manage risk and maintain a safe environment, physically and emotionally.

Another possible limitation was that cooperating teachers who completed academic and behavior surveys may have provided biased feedback based on prior knowledge of a participant. At each assessment period, cooperating teachers did not complete surveys for the same student twice in an attempt to control this limitation; however, previous relationships with the subjects may have inhibited the teacher’s ability to provide objective feedback at any of the assessments. Teachers also varied in their perception of student behavior.

Lastly, benefits of the program may be affected by confounding variables outside of the researcher’s control. Because many of the subjects of this study came from an unstable environment, influences outside of the program (e.g., poverty, unemployment, violence) may have positively or negatively affected the results.

**Definitions/Variables**

**Challenge course program.** An adventure program that relies on a progression of group activities aimed at breaking down inter and intrapersonal barriers. Once these barriers are overcome, participants can realize program benefits, such as increased self-concept and sense of community (Hatch & McCarthy, 2003). The following are common elements associated with challenge course programs:
1. Icebreakers, Games and Initiatives – games and activities that allow participants to let down barriers and become more familiar with each other (Wolfe & Samdahl, 2005).

2. Low Elements – activities suspended a few feet off the ground with cables and ropes that pose challenging tasks participants must accomplish (Wolfe & Samdahl, 2005).

3. High Elements – activities suspended high in the air using cables and ropes. Participants harness into a belay rope and must complete “in-the-air” tasks individually (Hatch & McCarthy, 2003).

4. Challenge-by-Choice – parameters set by participants to establish a comfort zone in attaining goals. A sense of ownership is created for participants by putting control of the situation in their hands (Schoel, Prouty, & Radcliffe, 1988).

5. Framing – the process of relating activities to the relevant issues or situations in the participants’ lives. Using metaphor builds each task around realistic situations (Smith et al., 2002).

6. Debriefing – opportunity for participants to make important connections between specific activities and real-life lessons. The facilitator creates discussion to process and connect the experience (Rathis, 1987).

**Urban youth.** A demographic of adolescents who are faced with negative environmental circumstances that create a propensity toward negative behavior. Difficult situations this demographic are exposed to can lead to aggressive tendencies when coping with stressors. Adolescents from urban environments are commonly referred to as at-risk youth, but because this term is typically associated with criminal and juvenile behavior, the term urban youth is used in place of at-risk (Attar, Guerra, & Tolan, 1994).
**Risk-taking.** Refers to any action with an uncertain outcome that will yield either success or failure (Priest & Gass, 1997; Wyatt & Patterson, 2005). To take a risk means to decide if the action is worth the outcome. Types of risk discussed in this study are:

1. Risk – any action that has the potential for a positive or negative outcome.
2. Perceived-Risk – any action that is seemingly dangerous but actually safe (Tholkes, 1998).
3. Decision-competence – the ability to determine between a positive or negative outcome (Fischoff, 2008).

**Adolescence.** The transitional, developmental period between childhood and adulthood, ages 12 to 20, where a young person strives to create distance from parental dependence (Casey, Gatz, & Galvan, 2007).

**Adolescent risk-taking.** A redefinition of risk-taking for adolescents because of the need to realize independence and individuality; adolescents are more likely to take negative risk in order to experiment with social values and roles (Aalsma, Lapsley, & Flannery, 2006; Casey et al., 2007).

**Positive/negative peer influence.** In order to fit into a social group, adolescents will be influenced, negatively or positively, by their peers to act a certain way. This pressure will determine what actions or risks a teen will take (Chan & Chan, 2008).

**Grade point average (GPA).** A measure of a student’s academic achievement in the classroom. Overall GPA will be collected and measured using the school’s database system.

**Disciplinary infractions (DI).** A measure of behavioral incidents in an academic environment. Disciplinary infractions refer to any negative behavior documented by cooperating teachers in the database system. Negative behaviors can be, but are not limited to, tardiness,
disturbing the classroom, or destruction of school property. This variable will be measured by recorded incidences in the school database system.

**School social behavior scale (SSBS-2).** A 64-item survey used to assess academic and social competence in school settings. Items in the survey describe positive and negative social abilities in the classroom (Merrell, 2002).

**Social competence (SCT).** The ability to exhibit positive behaviors in a social setting as well as the ability to adjust to certain social situations or environments. This variable will be measured by the SSBS-2 (Merrell, 2002).

**Anti-social behavior (ABT).** Behavior directed toward others that leads to defiance, delinquency, and negative consequences creating conflict between peers and teachers. This variable will be measured by the SSBS-2 (Merrell, 2002).

**Social functioning level (SFL).** The level of ability to perform socially as determined by an individual’s social capability and anti-social behavior. This variable will be measured by the SSBS-2 (Merrell, 2002).

**Assumptions**

It is assumed that participants in the YLP responded honestly and accurately during focus group interviews. It is also assumed that teachers responded honestly and accurately to the SSBS-2. Lastly, it is assumed that all instruments used provided accurate assessments of participant’s academic and social behaviors.
Summary

Participants in the study group attended the YLP, a six-week challenge course program, to learn the value of positive risk-taking and positive decision-making. Data were collected prior to and immediately following the YLP to determine how the program affected participants’ academic and social performance. A four month follow-up assessment was conducted to determine the long-term effects of those outcomes.

The participants selected demonstrated a propensity towards negative academic and social behavior in the classroom. The YLP, through the use of actual and perceived risk, attempted to refocus that negative behavior in a positive direction (Blanchard, 1992). After participating in a sequence of activities over an extended period of time (Witman, 1995) participants could increase self-concept and improve peer relationships (Robitschek, 1996, Witman, 1995), empowering them to improve classroom performance.
Chapter 2

LITERATURE REVIEW

The purpose of this study was to explore the academic and behavioral benefits of a challenge course program for urban adolescents. The following chapter explores these key areas of a challenge course experience: (a) definition and components of a challenge course, (b) actual versus perceived risk, (c) benefits of a challenge course program, and (d) challenge course programs for urban youth. The theoretical framework for the study is built on the concept of using risk to achieve desired outcomes. As will be shown in a review of relevant literature, central to a challenge course program is the use of actual and perceived risk as a learning tool. This chapter will explore how such a program can positively affect risk-taking and decision-making in the classroom for urban youth.

Challenge Course – A Definition

A challenge course program increases self-confidence, group cohesion, physical and emotional capability, and a sense of community. Participants take on activities that require effective group decision-making to complete a graduated series of tasks (Rohnke, 1984). Growth is both individual and group-oriented as participants realize their own capabilities and apply them to the accomplishment of group goals. These benefits are possible because of the basic principle of any challenge course program: “individuals are usually more capable than they
perceive themselves to be, and if given the opportunity to TRY in a supportive atmosphere, can discover this excellence within themselves” (Rohnke, 1989, p. 12). Rohnke defines a program that is encouraging but challenging and allows participants to take ownership over an experience that teaches them how to trust themselves and those around them to solve problems and overcome obstacles. The discussion of literature that follows shows the benefits and limitations of such challenge course programs.

Before understanding the intrinsic value and benefit of challenge course programs, it is important to understand what such programs look like, as well as how they are facilitated. The general sequence of a challenge course program begins with relatively low-risk, fun activities and progresses to perceived high risk, personally challenging activities. The progression typically begins with icebreaker activities (e.g. name games and tag games) which allow individuals to let down barriers and become more familiar with each other. Following these games are more team-oriented group initiatives and trust-building activities that involve some process of problem-solving. At this point, comfort levels have increased and a group can move on to the next step in the progression, low element activities (Wolfe & Samdahl, 2005).

Low elements are activities suspended a few feet off the ground with cables and ropes that pose a challenging task for the group to discern the best possible solution. Low elements also allow a group to build trust and rely on each other’s individual skills for group success (Wolfe & Samdahl, 2005). An example of a low element is the T.P. Shuffle, a log suspended a foot off the ground on which team members must reposition themselves while staying balanced and working within certain constraints, such as inability to talk (Hatch & McCarthy, 2003).

Following the low elements, a group will typically move onto high elements, which more readily incorporate perceived risk of failure or injury. High elements, incorporating a belay
safety system, are typically 20 to 40 feet in the air and made with trees or poles cemented in the
ground. At this point in the progression, participants rely on team development established from
previous activities to encourage and promote individual risk-taking to climb high. The perceived
risk in climbing increases a sense of accomplishment as long as group members rely on each
other for encouragement and reinforcement (Hatch & McCarthy, 2003; Wolfe & Samdahl,
2005).

An important limitation of this progression is duration of experience. As seen in Wolfe
and Dattilo’s (2006) study, a major deterrent for groups realizing program benefits is that the
experience often lasts only one day and sometimes just a few hours. This poses a limitation as it
does not allow enough time to complete a full progression of activities that would maximize the
effectiveness of a challenge course program. Glass and Benshoff (2002) conducted a study of
group cohesion with adolescents that indicated a limitation of the experience due to the
program’s brevity. Teens engaged in icebreakers, initiatives and low elements, but only for a six-
hour period. The gains experienced by the group were thus short-term. Additionally, Hatch &
McCarthy’s (2005) study of college students participating in a half-day challenge course
program showed only short-term benefits. Results indicated that participants saw improvement in
group cohesion, but two-month follow-up test scores did not maintain these results. In order to
maximize the potential for a group to realize long-term benefits, the experience must occur over
a longer period of time (Long, 2001).

Another unique feature of a challenge course program is the ability of a facilitator to
frame and debrief the experience. Priest and Gass (1997) discussed the six different styles of
facilitation and how each creates a meaningful learning experience for the participant. The six
generations of adventure facilitation they describe are:
1. Letting the experience speak for itself – learning and doing

2. Speaking for the experience – learning by telling

3. Debriefing the experience – learning through reflection

4. Directly frontloading the experience – direction with reflection

5. Framing the experience – reinforcement with reflection

6. Indirectly frontloading the experience – redirection before reflection (Priest & Gass, 1997, p. 178)

Within each category, hands-on experiences facilitate growth and learning. Activities are structured so participants can observe specific behaviors, reasoning tendencies, and objectives that directly affect relevant problems or situations (Smith et al., 2002).

While there are different styles of facilitation, all are built around a common goal: creating an experience that is relevant once the participant is detached from the immediate learning experience. Framing each activity involves the process of relating each elemental experience on a challenge course to relevant issues or situations in the participants’ lives. Through the use of metaphors, participants are given the opportunity to draw parallels between the adventure activities they are engaged in and their lives outside of the experience (Priest & Gass, 1997).

In addition to framing an activity, the process of debriefing is important for maximizing learning. While framing allows participants to put a task into perspective through realistic and relevant connections, it is debriefing that reinforces those connections through reflection. Debriefing allows participants to tie things together and make important connections between specific activities and real-life lessons. Since participants may have difficulty remembering impressions and meaningful moments, debriefing offers an opportunity to process and connect the experience (Rathis, 1987). As DuFrene et al. (1999) stated, the most influential training
experience is not retained unless it is connected to realistic life situations. Furthermore, within a challenge course program, individual behavior patterns are clearly visible and the group is given the opportunity to debrief and reflect on those patterns and their negative or positive consequences. Part of the effectiveness and value of a challenge course program lies in the power of reflecting on activities that are directly framed and related to real-life scenarios. A challenge course provides a structured environment to practice problem-solving and critical thinking skills that participants can apply to their everyday life situations through reflection and debriefing (Smith et al., 2002).

The possibility for participants to learn from a challenge course relies heavily on the facilitator’s ability or experience with framing and debriefing. For this reason, the facilitator poses a limitation to the effectiveness of the program. The ability to positively and realistically connect a challenge course experience to the participants’ personal lives, whether it is in the classroom, the workplace, or life in general, determines the ultimate benefit of the experience. The ability to establish group expectations of the program is also essential in positively framing and debriefing the experience. A group’s relationship with the facilitator further impacts the development and progression of group cohesion, and what is suggested is that facilitators are trained and evaluated to ensure an effective program (Glass & Benshoff, 2002).

Lastly, two fundamental components of a challenge course program are the concepts of a full-value-contract (FVC) and challenge-by-choice. Whether a group will increase the desired benefits after participating in such a program is greatly determined by the ownership they take over the experience. At the beginning of many challenge course programs is the establishment of a FVC. Schoel (1988) defined this contract as a commitment to the following three principles:
1. The agreement to work together as a group and to work toward individual and group goals.
2. The agreement to adhere to certain safety and group behavior guidelines.
3. The agreement to give and receive feedback, both positive and negative, and to work toward changing behavior when it is appropriate. (p. 26)

At the start of the experience, group members create a set of goals they desire to accomplish, and the contract they establish models the behaviors and expectations necessary for accomplishing those goals (Schoel et al., 1988). These expectations and goals become the responsibility of each group member, and throughout the program, activities and challenges are continually framed back to these parameters (Wolfe & Dattilo, 2006). However, another essential element is that each group member decides his or her own level of participation to accomplish these goals. Ownership of the experience means that participants determine personal involvement dependent on personal comfort zone.

Determining personal comfort zone is known as challenge-by-choice, and it is a necessary if not fundamental component of the FVC. Karl Rohnke and Jim Schoel (1989) provide a clear understanding of challenge-by-choice and its benefits:

…the ability to choose and to say no is in most cases a sign of strength not weakness. In this sense, we are no longer so activity-oriented that we miss what is going on inside the individuals within the group. The activities are important, but only insofar as how they affect individuals. (p. 20)

Utilizing challenge-by-choice allows participants to define success and set their own goals for each activity. Because the activities involve physical challenges outside of a participant’s comfort zone, it is important that the participant be given the choice to engage. Priority is placed
on the participant, not completion of the activity. If the challenge becomes too strong or threateningly detrimental, participants have the choice to opt out. They are not pushed beyond their comfort level (Carlson & Evans, 2001).

**Actual versus Perceived Risk**

An element of risk is inherent in challenge course activities. While there is some real risk, most risk is perceived. Real risk, or actual risk, involves any action that may threaten a person’s physical or emotional health and safety (Davis-Berman & Berman, 2002). Breaking down personal barriers in front of others is an emotional risk because it represents vulnerability. An individual typically does not want to expose personal weakness (Glass & Benshoff, 2002). Another example of actual risk in a challenge course experience is physical risk: a participant may be asked to climb up a 20 foot pole, stand on top, and then jump off attempting to catch a trapeze out in front of the pole (Robitshcek, 1996). For a participant who is afraid of heights, this is very much a physical challenge as much as it is an emotional one. Low or high elements may appear to be dangerous, even though the actual challenge can be completed with very little actual risk (Tholkes, 1998).

Perceived risk is a “subjective perception” of the possibility for physical or emotional injury (Davis-Berman & Berman, 2002). Determining if a risk is actual or perceived, as discussed earlier, depends on the individual. In a challenge course environment, participants take ownership and determine their level of involvement, essentially choosing their level of risk. It is the element of perceived risk that pushes a participant and the group to challenge their normal boundaries. While the emotional risks participants may take are very real, the physical
challenges created within a challenge course environment are relatively safe. The possibility of physical injury on a challenge course is low, assuming appropriate safety measures and protocol are taken (Spacht & Hirch, 1995).

Perceived risk can then be defined as the participant’s perception of risk, which may or may not be accurate. Participants may view an element as dangerous when in actuality it is safe (Guthrie, 1997). A typical challenge course progression moves from low risk, get-to-know-you activities to perceived high risk, individually challenging activities. As discussed with Priest’s (1989) AEP model, a facilitator must find the appropriate balance between an activity’s level of perceived risk and the group’s level of competence to successfully complete a challenge. It is the priority of any facilitator to provide an emotionally and physically safe experience (Spacht & Hirch, 1995). The use of perceived risk as a tool provides a challenge that allows for a group to grow from the experience.

The Yerkes Dodson Law (as cited in Neil, 2007) illustrates the use of perceived risk as a tool:

![Figure 2 – Yerkes-Dodson Law (1908)](image)
The model shows that as a participant’s “arousal” increases so does “performance.” However, if either is too low, the other is negatively affected. A challenge course activity, appropriately facilitated, is an exciting challenge that can raise a group’s performance. The process or progression of these activities balances the level of a group’s perceived risk and the risk within an activity. This balance has the possibility to create a learning experience if the challenge is achieved.

Actual and perceived risks are inherent to a challenge course program. As Glass and Benshoff (2002) explained, low element activities ask participants to take social risks in front of peers to accomplish a task. An example of this is the Spider Web:

A group faces a spider web of rope strung between two trees. The challenge is to get the entire group through the web – without touching it and using each gap in the web only once. People have to let go and allow themselves to be hoisted into the air and put through the web. (as cited in DuFrene et al., 1999, pp. 26-27)

The risks here include proximity between participants and trust in being lifted up into the air by group members.

High element challenges pose the most obvious perceived risk for a group. Steinfeld (as cited in DuFrene et al., 1999) described this type of activity:

High element activities often focus on a series of rope-based activities placed 4 to 40 feet above the ground, rock-climbing or rappelling. Course participants are held secure with harnesses and a system of ropes and pulleys. A climbing tower or wall may also be used…The purpose of the high element activities is to push people out of their comfort zones. (p. 27)
Both examples show two things: the social risk participants can encounter and the perceived, personal risk of being lifted or climbing high into the air. The essence of the challenge course experience, as Priest (1985) described, is the fluctuation of perceived individual and social risk and how encountering those risks creates the possibility of learning.

Through a set progression of physical challenges that increase in difficulty, individuals can realize self-potential and how they can help a group. Physical challenges allow individuals within a group to increase self-confidence and self-concept, as well as group acceptance. By engaging in a progression of physical activities, learning is promoted as participants realize strengths that can aid the group and weaknesses where the group can encourage personal growth and courage (Gibbons, 1999).

**Benefits of the Experience**

The aim of any challenge course program is to bring a group closer together by allowing individuals to work on skills necessary for group cohesion (Wolfe & Samdahl, 2005). A challenge course program can increase group cohesion by engaging participants in problem-solving tasks and working together to achieve common goals. Groups must work cooperatively in order to be successful. This process encourages and increases positive risk-taking for participants who share similar values, interests, and backgrounds (Glass & Benshoff, 2002).

Smith et al. (2002) showed the benefits for moral and ethical reasoning for college students after participating in a challenge course program. Their process of thinking and evaluating actions and outcomes was positively benefited from front-loading and debriefing activities. Reflecting and evaluating outcomes, self-assessment of skills, and the interactive,
noncompetitive nature of the activities created an ideal situation for self-improvement, which lead to group improvement. According to Wolfe and Samdahl’s (2005) analysis of the features, methods and assessment of challenge course programs, there is the potential to increase self-efficacy, self-confidence, communication and resiliency. Furthermore, this “social and personal development” can be realized outside of the experience. A challenge course experience, in summary, can be beneficial by allowing participants to engage in physical activity that pushes personal limits in an environment that is non-threatening. Success is dependent on group encouragement and constructive, positive feedback.

Another study that supports the possible benefits of a challenge course program, conducted by Charles W. Blanchard (1992), analyzed the therapeutic value of such an experience. The role of facilitating an experience, the physical nature of activities and the reliance on the group for success all mimic a therapeutic experience. The challenge and perceived risk of activities teaches participants that they have the capability to overcome obstacles or barriers (Blanchard, 1992). The study looks at the challenge course process as treatment; from a therapeutic perspective, the outcome of such a program helps participants “find personal meaning…through emotional processing tasks” (p. 7).

A challenge course program, using techniques such as challenge-by-choice, framing, and debriefing, can be specifically tailored for each group. The effectiveness of a program is determined by how much it is personalized to suit the needs of the participants depending on their goals and objectives (Haras, Bunting & Witt, 2005).
Challenge Course Programs for Urban Youth

A review of literature shows the essential role that risk plays in a challenge course program. While risk-taking may be a universal term applicable to human behavior at many levels, it is particularly important when considering the lives and behavior of adolescents in academic and social settings. It is also important to understand how challenge course programs might affect risk-taking when applied to a specific social demographic.

Adolescent development is characterized by a propensity toward risky behavior in an attempt to be accepted by peers. Blyth and Fenzel (1986) describe this dilemma as “role strain.” The adolescent period is best described by this term because it is an important turning point for development. Adolescents not only deal with the need for social acceptance to validate their self worth, but it is happening during a transition to middle school, a period marked by a sharp decline in interest in school and academic performance (Erath et al., 2008). Whether or not a teen fits into some social context can greatly affect academic performance.

Youth from an urban environment are faced with quite different circumstances than peers from rural or suburban environments. Risk-taking for youth from urban environments has a greater likelihood for negative or uncertain outcomes. As Ginsburg et al. (2002) discussed, adolescents face many obstacles while they attempt to fulfill their developmental task of maturation and individuation, but teens who live in impoverished areas need to overcome the transition of growing up along with the obstacles and challenges of a volatile and unstable environment. The characteristics of adolescence remain the same for any teen in any environment, but urban youth are more inclined to take negative risks due to the negative influence of their environment (Ginsburg et al.).
The term at-risk is most commonly associated with teens from urban environments. High-school and college dropout rates, teen pregnancy, substance abuse, and gang involvement are common among at-risk youth. However, the term also extends to any teen who is labeled as aggressive and disruptive or afflicted with a learning or emotional disability (Tidwell & Garrett, 1994). “At-risk” is a loosely defined term, which results in an umbrella effect encapsulating young people into a category associated with crime and juvenile behavior. The disturbing realities for teenagers growing up in an urban environment may categorize them too easily as at-risk, so for the purposes of this discussion at-risk youth are referred to as urban youth. Despite the prevalence of high risk behavior in adolescents in general, urban youth are inclined to engage in even riskier behavior due to the nature of the environment they are exposed to during childhood development (Griffin, Scheier, Botwin, Diaz, & Miller, 1999; Tidwell & Garrett, 1994).

Urban youth are at greater risk of engaging in negative behavior because of prolonged exposure to stressors. Attar et al. (1994) classified this urban descriptor as “neighborhood disadvantage,” characterized by poverty, unemployment or underemployment, limited resources, substandard housing, and high crime rate. The level of environmental stress for urban youth leads to a variety of behavioral and emotional difficulties (Attar et al., 1994). These stressors combined with the difficulties associated with adolescent transition create susceptibility to high-risk behavior.

Attar et al. (1994) also highlighted how parental guidance of urban youth under such stressful conditions often times instills aggressive tendencies:

Parental feeling of powerlessness and fears about child victimization may lead them to use more assertive and authoritarian parenting practices, which, in turn, may contribute to
an increase in their children’s aggressive behavior…being tough and aggressive both minimizes the emotional impact of persistent stressors and maximizes their ability to survive under difficult and extreme environmental conditions. (p. 398)

Adolescent urban youth who are exposed to deprived and violent conditions are more likely to adopt the tendencies they observe adults using to cope with such conditions. This learned behavior can also affect social performance in and out of the classroom because when faced with conflict, urban youth will exhibit the negative learned behavior to deal with conflict.

Williams, Stiffman and O’Neal (1998) stated that environmental conditions, exposure to violence, victimization, conflict and physical punishment determine why and how often urban youth act violently. In the classroom such behavior is labeled as victimization. Hanish and Guerra (2000) demonstrated that aggressive, argumentative and disruptive behaviors predict victimization. Interpersonal aggression (Griffin et al., 1999) is a common, negative behavioral tendency among urban youth, and exposure to an unsupportive, neglectful environment yields this type of behavior. Consequently, urban youth exhibit a greater propensity toward violence, victimization and other negative behaviors that affect classroom behavior and academic achievement.

The redefinition of risk for adolescents in general and the confounding variables present in the lives of urban youth make apparent a tendency towards high risk activities for this demographic. The types of risk that urban youth will take, according to Schoel (1988), are indicative of a choice to engage in negative social challenges. Rewards from these kinds of choices, consequently, are negative. Schoel goes on to define how Adventure Based Counseling (ABC) can help treat this problem:
The ABC program deliberately designs situations of ‘perceived risk’ where participants will experience stress. The use of individual and group goals for participating in activities, however, removes the activities from the thrill-seeking category and puts them in a context of self-improvement and social meaning…group members learn that they can experience and overcome difficult challenges [and] a powerful success experience has been generated. (p. 33)

A challenge course experience shares this fundamental characteristic: the use of perceived risk in order for participants to learn the value of positive risk-taking. Participants learn how to improve themselves, individually and socially, through the positive social challenges faced during a challenge course experience.

A study of at-risk youth who went through a one-day challenge course program shows the potential benefits for urban youth. The study defines at-risk youth as individuals who did not feel able to achieve goals and had low self-efficacy and self-esteem because of “poverty, discrimination, and educational failures (Robitscheck, 1996; Smith, 1983). After completing the program, participants had a positive experience that increased their ability to accomplish goals. It was also suggested that participants improved self-confidence and group cohesion. Positive outcomes were realized because they learned to “view their fear of the perceived risk and the challenge of the tasks themselves as obstacles to be overcome in striving to meet their goals” (Robitschek, 1996, p. 166).

A study of middle and junior high students participating in a challenge course program provides another example of how a program can be designed to meet the unique needs of urban youth. Prior to the experience, participants demonstrated negative internalizing and externalizing behaviors, such as withdrawal and aggression. Following participation on a challenge course,
students exhibited more positive social behaviors. Involvement in activities and affiliation with peers greatly increased during the program. Due to the interactive, hands-on atmosphere of the challenge course, teens experienced a positive result from the program. However, this study also posed a limitation in that the duration of the experience was not long enough to yield any long-term effects. Some participants stated in a follow-up interview that the activities were fun but didn’t have any implications related to school or everyday life. The duration of a program determines the presence and longitudinal influence of the benefits (Conley, Caldarella & Young, 2007).

A study of a group of girls with behavioral and emotional disorders shows how a challenge course experience has the potential for long-term effects. In this study, the experience lasted over a period of several months where participants were involved in a challenge course experience for at least twelve hours each month. Results showed that prolonged exposure to perceived risk and a cooperative learning environment allowed the girls to drop their defenses and learn to trust themselves and one another. Each member realized her individual role and how her role could impact the group as a whole. Their attitudes and ideas of success and trust improved as the challenge experience progressed over an extended period of time (Long, 2001).

**Summary of Literature**

The implications of this literature review are that urban youth may benefit from a challenge course program. Urban youth are in a distinct adolescent category because of their propensity to engage in risk behavior as related to the negative influences of their surroundings. Urban youth may shut themselves off or act out against peers and authority as the direct result of
a deprived environment, negative adult role models, or exposure to violence and crime. A challenge course program offers an engaging, interactive, and cooperative learning environment that pushes participants to challenge themselves and the group in order to reverse negative risk taking into positive risk-taking. The potential for a challenge course to have this effect is clear based on studies of the nature and outcomes of such a program. However, the lack of empirical, in particular longitudinal, effectiveness of challenge course programs is lacking. For urban youth specifically, a study that exposes them to a challenge course experience and then observes changes in their academic and social behaviors is necessary.
Chapter 3

METHODS

The purpose of this study was to measure the effects of an extended challenge course program on the classroom performance of urban adolescents. The study is based on the premise that urban youth, due to environmental stressors, are more likely to exhibit negative risky behavior. It was supposed that after participating in a challenge course program, urban youth would learn the value of positive risk-taking and how that positive behavior can apply to successful classroom behavior and academics.

This study used a mixed methods approach to determine whether or not the effects of a six-week challenge course program had any longitudinal implications. While most research showed a short-term change in participant behavior, the study attempted to show whether or not such a program could change negative classroom behavior patterns in urban youth over a period of time.

Study Design and Overview

This study used an experimental, pretest-posttest control group design. Fifteen participants were selected for both the study and the control group. A social behavior scale was completed by cooperating teachers for each participant to measure social competence and anti-social behavior in the classroom. In addition, academic and social progress was observed through
information obtained using the cooperating school’s database system. Quantitative data were collected before and after the treatment program and again four months following the program. A post-test focus group discussion session was held to obtain qualitative data directly from study group participants. A four month follow-up focus group session was held to help measure long-term effectiveness.

Selection of Sample

Using stratified random sampling, participants for the study and control groups were selected from a local urban high school. Cooperating teachers provided a list of ninth and tenth grade students whose current grade point average was at or below a 2.5 and had multiple disciplinary infractions. From this list of 60 students, fifteen participants were randomly assigned to the study group and fifteen to the control group. Names were listed randomly and the researcher selected every fifth one. The first 15 selected were the study group, and the second 15 selected were the control group. Participants for both study and control groups and their families were given consent forms that explained the intention of the intervention program (see Appendices A, B and C for these forms).

Experimental Treatment

Participants in the study group attended a total of six intervention programs held at The Adventure Center in Liverpool, NY and at Adam’s Eden Camp in Lafayette, NY. Participants carpooled from their school to the site every Saturday for six weeks. Each Saturday the program
ran from nine o’clock in the morning until two o’clock in the afternoon. In addition, one session was held on a Wednesday from four to eight o’clock in the evening. The program began at the end of the third academic quarter and finished at the end of the fourth academic quarter. Following the progression of a typical challenge course, participants worked on breaking down barriers to more successfully work with one another in order to accomplish common goals. At the start of the program, the group created a set of goals focused on making better, more effective choices at school and in life. Goals were reflected on and modified for the duration of the experience to help participants apply what they were learning during the YLP to the decisions they were making at school. Modifications and adaptations were made throughout the experience to account for group dynamics. Appendix D offers a detailed program schedule.

**Instrumentation**

**Quantitative Data**

This study used quantitative data provided by the cooperating school’s academic database system, which includes academic records for students, as well as social progress reports. The researcher had access to document academic progress and behavior reports for each subject in the study and control groups. Data were organized using Microsoft Excel spreadsheets and then converted to SPSS Version 17.

The teacher-scored School Social Behavior Scale (SSBS-2; Merrell, 2002) was used to measure social competence and antisocial behavior in participants. The scale consists of 64 units that measures participants’ social competence, as well as behavior that is at-risk or produces
negative social outcomes. The social competence subscale, measures peer relations, self-management, and academic behavior. The antisocial behavior subscale measures behaviors that are common problems for adolescents leading to defiance, delinquency, and negative consequences.

The author of the SSBS-2 defines social competence as certain behaviors an individual exhibits in social settings as well as an individual’s ability to adjust in certain social situations or environments (Merrell, 2002). Social competence is measured by using three subcategories: peer relations, self-management, and academic behavior. Merrell (2002) defines peer relations as “social skills or characteristics” (p. 4) that are necessary in establishing and maintaining positive peer acceptance. Items in the survey that deal with peer relations measure a subject’s ability to cooperate, empathize, connect and interact with peers. Self-management is defined as having the ability to control oneself within a structured environment of rules and expectations. Merrell qualifies self-management as having the following skills: “self-restraint, cooperation, and compliance” (p. 4). Items in the survey that measure self-management include a subject’s ability to cooperate with peers and teachers, to deal with conflict in a calm and measured capacity, and to compromise and adjust to varying behavioral expectations. Academic behavior is defined as a subject’s ability to positively engage in and complete schoolwork. These behaviors rely strongly on the teacher’s perception of a subject’s adjustment, academically and behaviorally, to classroom expectations. Items in this subcategory measure transition, work completion, independence, self-motivation and request and acceptance of help.

Merrell (2002) defines antisocial behaviors as behaviors that create conflict between peers and teachers that strain or breakdown relations. Scale B is divided into three subcategories: hostile/irritable, antisocial/aggressive, and defiant/disruptive. The hostile/irritable category
relates to behaviors that will result in failed peer acceptance or relation. Examples of these items are placing blame, not sharing, not controlling temper or outbursts, and exhibiting cruelty to others. The antisocial/aggressive category includes observable or unobservable disobedience or bullying. Again, this category relies strongly on a teacher’s perception of student behavior, but, as Merrell states, this volatile type of behavior can result in peer rejection (p. 5). Items include stealing, fighting, swearing and exhibiting physical aggression. Defiant/disruptive is the last subscale, and it measures behaviors that interrupt learning, including inappropriate burdens on peers or teachers, like insulting or ignoring others, difficulty controlling behavior, or negative outbursts in the classroom.

For each subcategory, the SBSS-2 uses a specific social functioning level (SFL) to qualify the different levels of possible scores. As Merrell (2002) states, “the SFLs...are based in general on the same rationale as the popular prevention-oriented ‘tiered’ approach to behavior and instructional support” (p. 23). The specific levels are a “suggested level of interpretation” and are determined by each subscale. The scores correspond to the subject’s academic and social abilities in a school environment: classroom, hallways, etc.

For social competence, a higher score would equate to a “high functioning level,” or “excellent social competence.” A score that is in the middle would equate to “average,” or adequate or unexceptional ability; a low score would indicate “at-risk.” This level indicates a need for further assessment. The fourth level, “high risk,” would indicate the subject is in need of intervention. A sample item from scale A is item 16: “follows school and classroom rules.” A high Likert score response would be a 5 which indicates that the subject does so frequently. Social competence total (SCT) focuses on positive academic abilities and relationships (Merrell, 2002).
The antisocial scale, or scale B, focuses on negative peer and teacher relationships. A lower score indicates positive social behavior. Scores are rated on three different levels. The first, “average,” falls within an appropriate percentile rank. Subjects at this level are not of concern. The next level, “at-risk,” would require further assessment because of developing antisocial behavior. The level “high-risk” exhibits considerable antisocial behavior. A sample item from scale B is item 17: “threatens other students; is verbally aggressive.” A low Likert score response for antisocial behavior total (ABT) would be one that indicates the subject never exhibits this behavior (Merrell, 2002).

Using Cronbach’s coefficient alpha (SCT = .97; ABT = .98) and Spearman-Brown’s split-half reliability procedure (SCT = .96; ABT = .97), the SSBS-2 was found to have strong internal stability, which makes the reliability of this tool acceptable. The validity of the scale is acceptable because the design of this scale considers a review of pertinent literature and existing measures as well as limiting repetition with questions (Merrell & Caldarella, 2002).

**Qualitative Data**

Qualitative data were obtained through two focus-group interviews; the first, immediately following completion of the six-week challenge course program, and the second four months after the program. Participants were given the opportunity to reflect on their experience, its benefits, and its connections to academic and social achievement in the classroom. Additional qualitative feedback was gained through a debriefing process for facilitators held at the conclusion of each session. The researcher also kept a journal to document key areas of change during the YLP.
Data Collection

Procedures and Analysis

In an attempt to fully understand the benefits of a challenge course program, this study utilized a mixed-methods approach, obtaining both quantitative and qualitative data. The two sets of data provided empirical evidence of program effects by offering statistical data regarding academic and social progress and a deeper understanding of effects through participants’ personal response to the program. Survey data was collected before the start of the program, immediately following the program, and four months after the program ended. Focus-group interviews were conducted immediately following and four months after completion of the program.

The researcher collected academic progress reports from the school database system for study and control group subjects. GPA reflected overall grades for the third and fourth quarters of the 2010-2011 school year. Follow-up posttests, four months after the program, measured GPA half-way through the first quarter of the 2011-2012 school year.

Additionally, discipline infractions (DI) were collected through the database system. DI is determined by the number of times a subject receives demerit points for any academic or behavioral issue. An example of this is tardiness. If a student is tardy to class, then he or she receives five demerit points. Demerit points can be viewed by the date they were earned. For the purposes of the study, one discipline infraction was counted each time discipline points were recorded in the database, regardless of the number of demerit points or type of infraction.
Cooperating teachers of study and control group subjects completed the SSBS-2 survey before the program, immediately following the program, and four months after the program ended. Teachers were randomly selected from a list of ninth and tenth grade teachers at a local urban high school in Syracuse, NY. All surveys were delivered in a sealed envelope to the researcher; total scores and final social functioning levels (SFL) were determined using score conversion tables in the SBSS-2 user’s guide. Cooperating teachers did not provide data on the same subject at each assessment period to limit biased responses.

A mixed method assessment approach was used to understand the long-term benefits of a challenge course program and how those benefits could help participants in the classroom. Quantitative data, including GPA, DI and SBSS-2 survey results, were analyzed using SPSS Version 17.0. The dependent variables were evaluated between groups and across assessment periods. Descriptive statistics showed mean scores between groups, gender and grade. A 2 x 4 MANOVA was used to measure any significant difference between groups at the pretest. A two-way repeated measures analysis of covariance (ANCOVA) found no differences in pretest scores so a traditional, two-way repeated measures analysis of variance (ANOVA) was used to determine any significant change in scores across assessments.

Focus-group interviews were audio recorded and transcribed. The researcher read, coded and analyzed participant responses for evident themes and subthemes; these data were then reviewed by an additional reader. Direct accounts of the experience were used to define and describe program benefits. All data collected were reviewed and analyzed by two persons: the researcher, assisting facilitators, and/or the project advisor. This preventive measure assured that all data was complete, accurate and consistent.
The first interview was held at the conclusion of the last session and was led by the researcher, an assisting facilitator, and the researcher’s advisor. Participants wrote on a piece of paper one benefit they realized during the six-week experience. They were then encouraged to share their responses and a discussion followed on what the benefits were and how they were possible. The final interview was held in the researcher’s classroom four months following treatment. Participants were asked to recall their experience, the benefits of the experience, and whether the benefits persisted beyond completion of the program.

The researcher, as lead facilitator, held interviews with assisting facilitators after each session to gain feedback on participant experience and progress. Additionally, the researcher’s journal provided detailed accounts of participant experience, progress and anecdotes after each session. Information obtained through facilitator reflection interviews and lead facilitator program notes provided direct observations of the progress of the YLP.

**Summary**

This chapter described the methods used to determine the long-term effectiveness of the YLP. A mixed methods approach provided empirical data of the benefits of such a program. Descriptive statistics, analysis of variance, and paired t-tests provided statistical evidence of how participants were affected by the program, academically and socially. The two focus-group interviews provided personal accounts of the core elements of a challenge course program, the benefits of those elements, and whether the benefits persisted after completion of the YLP.
Chapter 4

ANALYSIS OF DATA

The purpose of this study was to measure the immediate and long-term effect of the Youth Leadership Program (YLP), a six-week challenge course program for urban youth struggling in the classroom. More specifically, the aim was to determine the effect of the program on academic and social behavior for struggling students. To achieve this, multiple sources of data were collected and analyzed. This study combined quantitative and qualitative measures to better understand the effect of the program. This chapter reports the results of quantitative data obtained from academic progress reports and the School Social Behavior Scale (SSBS-2). Additionally, qualitative findings from two focus group interviews, one conducted immediately following the program and a second four months after completion of the program, are reported. Data are divided into the following categories: (a) academic progress reports based on GPA and social behavior progress based on DI, (b) SBSS-2 results measuring social competence and academic behaviors, and (c) feedback about the benefits of the program gained through two focus group sessions.

Response Rate and Sample Demographic

Fifteen participants were randomly selected from all ninth and tenth graders from an urban high school in Central New York to participate in the YLP. Participants selected had a grade point average at or below a 2.5 and had received multiple disciplinary infractions at
school. In addition, fifteen were randomly selected from the same population to serve as the study group. All participants consented to participate in the program and the study. Of the fifteen selected for the program, twelve completed the program, two never attended and one moved out of the area before the study was complete. Of the twelve who finished, two did not return for the following school year and hence did not participate in the follow-up interview four months following program completion. Pre and post test data were based on the twelve participants who completed the six-week treatment program; follow-up assessments were based on the ten who returned for the following school year.

Attendance throughout the YLP ranged from nine to twelve participants at each session. Four participants attended all six sessions; seven attended five out of the six, and one participant attended three out of six sessions. Average participation rate was 85 percent. Among the participants, six were males (42%) and seven were females (58%). With regard to grade level, there were six ninth graders (50%) and six tenth graders (50%).

As mentioned, fifteen students were also randomly selected from the same sample demographic of 60 students to serve as the control group. Of the fifteen selected, three did not return consent forms, reducing the control group to twelve. Of the twelve that consented, one did not return to the same school the following year so follow-up data four months post could not be obtained on that student. The control group was comprised of eight males (66%) and four females (34%). There were five ninth graders (42%) and seven tenth graders (58%). Presented in Table 1 is a summary of the sample demographics for this study.
Table 1

Demographic of Test Subjects

<table>
<thead>
<tr>
<th>Gender</th>
<th>Study</th>
<th>Control</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>5 (42%)</td>
<td>8 (66%)</td>
</tr>
<tr>
<td>Female</td>
<td>7 (58%)</td>
<td>4 (34%)</td>
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</table>

<table>
<thead>
<tr>
<th>Grade</th>
<th>9th</th>
<th>10th</th>
<th>Total N</th>
</tr>
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<tbody>
<tr>
<td>Study</td>
<td>6 (50%)</td>
<td>6 (50%)</td>
<td>12</td>
</tr>
<tr>
<td>Control</td>
<td>5 (42%)</td>
<td>7 (58%)</td>
<td>12</td>
</tr>
</tbody>
</table>

The YLP began in April at the end of the 3rd quarter of the 2010-2011 school year and finished in June at the end of the 4th quarter in the same school year. All participants in both the study and control groups were promoted to the next grade level at the end of the 2010-2011 school year. The one participant in the control group who did not return was in danger of repeating the ninth grade. Four month follow-up information was collected half way through the first quarter of the 2011-2012 school year.

Treatment Effects

To begin, a 2 x 4 MANOVA was conducted at the beginning of the study to determine if there were any significant differences in pretest means between study and control groups. Table 2 gives pretest means for all dependent variables.

Table 2

<table>
<thead>
<tr>
<th></th>
<th>DI</th>
<th>SCT</th>
<th>ABT</th>
<th>GPA</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tx</td>
<td>2.5</td>
<td>95.6</td>
<td>64.1</td>
<td>1.54</td>
</tr>
<tr>
<td>SD = 4.6</td>
<td>SD = 19.8</td>
<td>SD = 16.1</td>
<td>SD = .60</td>
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</tbody>
</table>
Results from the 2 x 4 MANOVA showed no significant differences in mean scores between variables at the pretest (DI, $F(1, 23) = .37, p = .545$; SCT $F(1, 23) = .25, p = .62$; ABT, $F(1, 23) = .27, p = .61$; GPA, $F(1, 23) = 1.50, p = .234$). The similarities between pretest mean scores allowed the researcher to rely on using ANOVA to test for any significant differences between scores across assessments.

<table>
<thead>
<tr>
<th>Control</th>
<th>3.5</th>
<th>91.6</th>
<th>68.6</th>
<th>1.85</th>
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<tbody>
<tr>
<td>SD = 3.24</td>
<td></td>
<td>SD = 19.1</td>
<td>SD = 25.5</td>
<td>SD = .57</td>
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**Does participation in a six-week challenge course program affect GPA?**

From pre to post test the average GPA of the study group increased from 1.54 to 1.81 (+.27; SD = .19), with an additional increase to 1.91 measured four months following the program, for an overall increase of .37 (SD = .21) from pre to four months post program. The average GPA of the control group increased from 1.85 to 1.97 (+.12; SD = .08) between pre and post tests, with an additional increase to 2.29 at the follow-up, an overall increase of .44 (SD = .22). While both groups did increase GPA overall, using analysis of variance (ANOVA), the change was not found to be statistically significant.
Does participation in a six-week challenge course program affect DI?

As shown in Figure 4, the number of DI for the treatment group decreased from 2.5 to 1.4 (-1.1; SD = .77) between pre and post tests. However, at four months post-program the average number of DI was 3.8 (an increase of 2.4; SD = 1.2). Using ANOVA, overall mean difference (+1.3) was not found to be statistically significant. The number of DI for the control group decreased from 3.5 to 2.9 between pre and post tests (-0.6; SD = .42), with an additional decrease to 2.1 at the follow-up. Again, overall change (-1.4; SD = .70) was not found to be statistically significant.
While examining data for DI it became apparent that two outliers skewed the results when comparing mean scores. Across assessment periods, two subjects in the study group received far more disciplinary infractions than anyone else in the group. The highest number of DI received during any three testing periods was seven. One outlier in the study group had 15 DI at the pretest and 17 and the four month follow-up. A second outlier recorded 10 DI at the pretest and at the four month follow-up. Mean scores for DI were analyzed without the two outliers to determine how much overall score was affected. Between the pretest and posttest, DI increased from 1.2 to 1.3 (SD = .07), with an overall increase to 1.5 at the four month follow-up (SD = .15). Figure 5 shows the change in mean score when looking at DI without these two outliers.
Figure 5 – Average DI for treatment group with outliers excluded

**Does participation in a six-week challenge course program positively affect social competence and antisocial behavior in the classroom?**

Results from the SSBS-2 were organized into two different categories: social competence total and antisocial behavior total. Social competence is an indicator of positive social behavior in the classroom where higher scores indicate more positive behavior. Antisocial behavior is an indicator of negative social behavior where lower scores indicate fewer anti-social behaviors. Depending on the score, participants were categorized into different levels of social functioning ranging from “average” to “high risk.” These categories will be used to discuss the significance of the SSBS-2 scores for study and control groups.
Total social competence for the treatment group decreased from 95.6 to 93.6 (-2.0; SD = 1.4). This score increased at the follow-up test to 99.7, an overall mean difference of +4.1 (SD = 3.1). Antisocial behavior scores for the treatment group decreased from 64.1 to 49.5 (10.3), with an increase to 57 at the four month follow-up, an overall mean difference of 7.1 (SD = 7.3). Using ANOVA, both categories showed no statistically significant change, and the group remained in the same social functioning level. All scores across each assessment were “average” according to the SBSS-2.

Similar results were obtained for the control group. There was a positive change in social competence from pre to post, with an increase from 91.6 to 98.3 (+6.7; SD = 4.73). Scores on the social competence scale continued to increase at the four month follow-up, with an average score of 107.4 for the control group, resulting in an overall mean difference of +15.8 (SD = 7.9). ANOVA indicated this change was not statistically significant. The control group’s scores for the antisocial behavior sub-scale dropped from 68.6 to 61.4 (SD = 5) with a continued decrease to 57.0 at the four month follow-up, a mean difference of 11.6 (SD = 5.8). While this change showed greater improvement than the study group, there was no statistically significant change in social functioning level: the group’s scores remained in the “average” range. Table 3 summarizes these results.

Table 3

<table>
<thead>
<tr>
<th>SSBS-2 Data</th>
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<table>
<thead>
<tr>
<th>Category</th>
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<th>Antisocial Behavior Total</th>
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<tr>
<td>Test Period</td>
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<td>Post</td>
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</tr>
<tr>
<td>Control</td>
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<td>98.3</td>
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</tbody>
</table>
A two-way repeated measures ANOVA was also conducted to test for interaction effects between groups to determine change by gender and grade level. For each independent variable, similar trends were detected, but sample size limited the power to detect any significant effect. For example, only four of the twelve participants in the control group were females; by the four-month follow-up there were only three female subjects. The mean GPA for females in the control
group increased from 1.66 to 1.93 between pre and post tests (+.27; SD = .19) with a final increase to 2.58, an overall difference of +.92 (SD = .47). This was the highest increase in GPA for any group and was above the targeted academic level for the study. However, all other mean scores, DI and SBSS-2, mirrored the same rate of change as recorded between study and control groups.

Qualitative Data

Focus Group Interview

Focus-group debriefing sessions were held at the conclusion of the six-week program and again four months later. The initial debrief was based on three essential questions: (1) What were the benefits of the program? (2) How did the program help participants realize those benefits? and (3) What were the connections between program benefits and classroom performance? Responses from the interviews were categorized into several themes and subthemes. Definitions of these themes and participants accounts were used to define and explain the benefits and school-related connections after participating in the program. Themes were created when certain trends were identified within participant responses. Themes identified in the interview immediately following course completion were compared to those identified in the interview four months later. This comparison was necessary in order to show whether or not the treatment would have longitudinal implications and will be discussed further at the conclusion of the chapter.
**Social competence and community.** A key area that was identified as a benefit to participants was the idea of building community. Merrell (2002) defines social competence as an individual’s ability to adjust to certain social settings. The social setting created in a challenge course environment requires participants to work together and build trust in order to problem-solve. (Wolfe & Samdahl, 2005). A common benefit was establishing and building a sense of community. A participant was quoted as saying “I don’t know about you guys but every time we would be together as a group at the Adventure Center I would feel comfortable. I could be myself around you compared to other people at school.” Another response focused on the fact that the program allowed everyone to come together as a team: “We had to work together and do things as a group… if you tried to do it by yourself you couldn’t do it. You had to have everyone together, in sync, knowing what you were doing.”

Feedback that dealt with a sense of community focused on using relationships to accomplish a common goal, opening up to others, and working together instead of isolating oneself. This common theme was highlighted by one participant who noted that she “benefited by learning how to work with other people and accomplish things as a group instead of isolating myself and trying to do things on my own.” This sense of community was an integral part of the program, one that the whole group agreed was a fundamental aspect of all activities if the group wished to find success.

**Conflict resolution.** A challenge course program relies on a group’s ability to solve problems. As explained above, a group must learn to overcome problems together to find success with the tasks at hand. A common benefit reported was the group’s ability to resolve intra or interpersonal conflicts. A participant reflected that he learned “how to deal with different frustrations.” He also provided a testimonial of a conflict he had at school when dealing with
missing an exam. He had been absent from school and upon returning had to make-up the exam. The student commented that “normally, I wouldn’t have done it…but I did it anyways.”

Several participants commented on their learned ability to be patient with others. This ability was believed to allow them to better “work through things.” Furthermore, it was noted that they “gave each other a chance” even though they were not used to working with each other. This assisted the group in dealing with obstacles or problems that different activities presented. Having the ability to step back and analyze a problem with patience created a sense of comfort that also aided in problem-solving.

Ownership of program. Challenge by choice, a fundamental aspect of any challenge course program, allows participants to define their experience (Rohnke, 1989). Level of participation is determined by their comfort level and if a participant ever feels threatened or if the challenge is too much, they have the choice to opt out. The ownership that participants take over their level of engagement allows them to define their own experience. This weighed heavily in participant feedback. One participant reported that “there wasn’t as much pressure for certain challenges. A lot of places are like you have to do this, but this was challenge by choice. You weren’t forcing us to do it.” If at any time participants were confronted with a situation where they felt the need to step back, as another participant explained, “we weren’t forced to do things that we didn’t want to do.” This relates to the previous subtheme because the group was able to determine when and how they wanted to handle a conflict or obstacle; they determined their own level of participation.

Positive environment. The challenge-by-choice dictum creates an environment where participants’ ability to make their own choice in any given situation can be used as a strength (Rohnke, 1989). This type of encouraging environment is created by a challenge course.
Feedback received during the post test debriefing session shared this common theme: a positive environment where participants felt safe and comfortable. As reported above, the essential components of a challenge course program allowed participants to feel secure in a challenging environment because cooperation, community and ownership were not only encouraged but created by program design. At the onset of the debriefing, a participant stated that:

First of all I learned a lot about working with other people, getting to know other people, and so I’ve learned a lot and I’ve learned how to work together with other people and to just listen and help out and let people help me. And I like how it was a positive environment, I like that. That when I’m going to be here I’m going to be doing something positive. It was encouraging to know that.

The group was encouraged to work together to make informed decisions in a non-threatening environment because they defined the parameters of that environment. As was noted earlier by a participant, there was a certain level of comfort experienced during the program – that he “could be (himself)” – compared to when he was at school. Participants reported the importance of having a place where this type of environment was created, one that “was fun and interactive.”

Following each program session, the researcher documented the events of the day as well as how progress was being made with the group. One experience in particular that was noted and exemplified the benefits participants realized was a tag game the group created. Each day the group met, they would eat lunch together in an adjoining room to the Adventure Center. In this room were chairs set on wheels. At one point, when the researcher left the room to prepare for activities following lunch, the group took it upon themselves to create their own tag game. When the researcher came back to the cafeteria, they had organized themselves and were positively
engaged in cooperative play. They had created a roller-chair tag game. This experience came up in the debrief as well when two participants mentioned what happened:

P₁: It wasn’t an activity that you assigned us, but that day when you ordered pizza and we were in there with the chairs. We were all rolling around trying to tag each other.

P₂: Oh yeah, you weren’t there but we had fun.

F: You guys came up with a new tag game?

P₂: Yeah.

**Risk and decision-making.** The underlying concept of the study was the idea of risk-taking and how risk can positively or negatively influence a person’s decision-making. As established earlier, the risk a person chooses to take is greatly determined by ability. The outcome of any action is what determines the level of risk and the level of comfort with that action will determine a person’s decision to engage or not engage. A challenge course program primarily creates perceived risk, though some real risk is inherent in the activities, in order for participants to realize inter and intrapersonal growth. A benefit reported frequently was the positive decisions made during the program. One participant reflected on her conflict with climbing high on a cargo net:

P: Remember when I made it to the top of the yellow thing?

F: The cargo net? When you climbed the cargo net? That was a highlight for you?

P: I don’t like heights.

F: So you learned you could do something you couldn’t do?

P: When I first did it I didn’t do it, I was like nope, I’m not doing it. But when I saw everyone else go I was like if they can do it then I can do it.
Another participant dealt with the same obstacle of fear when faced with climbing into the bird’s nest, a rope net suspended ten feet in the air that the group must help each other climb into: “It just made me overcome my fear of heights. I just started climbing and made it into the net thing.” Both participants were faced with the choice of facing their fear of heights, and both made the decision to trust themselves and the group.

Another experience shared by a co-facilitator focused on participants’ taking positive risks and making positive decisions:

CF: My highlight today was when I saw (a participant) care enough to try and protect (another participant) from actually falling and getting hurt today. He took his responsibility serious and he was with her all the way down until she hit the ground. I believe he prevented her from getting seriously hurt today. (She) was falling so fast but he was with you the whole time. It was an amazing thing. The second thing was her coming back after the fall.

F: She fell off the ladder?

CF: Off of one of the staples. They were so slippery she slid and she went and he stayed right with her and it was almost like he followed her right down.

The culminating event on the last day of the program was the zip line. Getting on the zip line required climbing fifteen feet up a tree using staples placed in the tree. She slipped and fell climbing up the staples, but another participant was there to keep her safe by spotting her fall. Not only did this participant choose to take his job seriously, but he prevented a serious injury by doing so. Furthermore, the participant who fell chose not to be deterred by this setback and climbed again to complete the challenge.
Transfer of learning. The study sought to find whether the benefits of a challenge course program extended to the classroom. Students were asked to think about what connections they could make between the program and school. As stated previously, one participant acknowledged he found difficulty motivating himself in the classroom after missing any number of days at school. He reported that he made a conscious decision to complete an exam he missed while absent. Most responses reflected this sentiment.

Another example offered by a participant was “deciding whether or not to do (her) work.” She reported being more conscientious about when she was falling behind and finding the motivation to get engaged: “just doing my work, I now do it. I never did it, overcoming the effort of picking up a pencil and writing.” One other member talked about listening in addition to decision-making: “I’m just getting used to listening. People will be talking in class and I’ll be like be quiet. I’m trying to listen. I actually do that now. I actually move my seat now.”

The group found a clear connection between program benefits and classroom performance. They talked about getting around obstacles such as dealing with people at school. Participating in low and high element activities helped the group find value in effort. Referring back to the bird’s nest, a participant reflected on the effort it took to help everyone get into the net, as well as the effort it took to help some participants overcome a fear of heights. Activities like the bird’s nest, the cargo net, and the dangle trio allowed the participants to realize the benefit of working hard to achieve a goal. A participant reported that “instead of (her) going to school and talking to the same old people, (she finds herself) having conversations with people (she doesn’t) normally interact with.” In addition to a concerted effort to work harder in the classroom, the participants talked about their ability to get along better with their peers.
The last significant connection the group reported was finding value in a program run by someone who works directly with them in the classroom. A limitation of the study was that the researcher had a direct relationship with most participants in the classroom. However, it was reported that this was also a benefit taken from the program:

P: Maybe it shouldn’t only be you. More teachers, not just you.

P2: Yeah, more teachers. It seems like most teachers don’t care about us.

F: Does that affect how you do in a class? If a teacher cares about you?

P: You have taken your time out of whatever you have to do, out of your life to come here on Saturdays and do activities and stuff like that with us. We’re just saying other teachers wouldn’t, ya know, we would just like to see more.

The group seemed to deeply value the recognition of being selected to participate in a program such as this one. The attention and care from a teacher was meaningful and provided them a place to really think about their lives at school.

Four Month Follow-up Interview

Four months following the conclusion of the Youth Leadership Program (YLP), a second focus-group debrief was held. Participants were asked to reflect on their experience from the previous year. Feedback was centered on three central questions: (1) What was the experience? (2) What were the benefits of the program? and (3) What are the long-term effects of the program? Again, themes remained the same except for ownership of the experience, which changed due to the timing of the assessment. At the post follow-up they had just completed the program, but four months later they were removed from the experience. To help assess the
study’s longitudinal effect, the group was asked to think about what affected their ability to recall the benefits of the program.

**Defining the experience and identifying benefits.** The group reported that for six weeks they engaged in “team work activities” with which they were otherwise unfamiliar. Participating in fun, team-building activities allowed them the opportunity to grow in various ways. They remembered climbing up walls, hanging onto wires and having “group discussions” that enabled them “to form a special bond that (they could) not develop in school.” The benefits they realized from the interactive games, initiatives, and group debriefs were thematically similar to the post debrief data. The following subthemes take a closer look at how participants remembered the experience.

**Social competence and community.** A common theme reported by the group was “working together and getting along with each other” in order to realize a common goal. Similar to what was reported at the conclusion of the program, participants discussed how they had to come together as a group in order to be successful. In order for this to happen, they had to exhibit socially competent behavior to work effectively within the group. Communication was a key determinant. One participant shared that he learned the benefit of “communicating with people we don’t normally communicate with…so we could accomplish our goal.” Their ability to learn the value of communicating effectively allowed them to “use everybody’s strengths and focus it on something to become one strength.”

By working on communication the group was able to break down barriers in order to build community. They had to work with each other despite the fact that they may not have been familiar with each other. This was reported as a benefit because it allowed them to find value in building and shaping community. A participant reported that:
Another thing we worked on is leadership, being a leader or a better leader. I realized that I always wanted to be with the cool crowd. I always wanted to be in that kind of environment. But I have caught myself a couple of times talking and associating with different people. On the cheer team there are girls I would never talk to, but now we have a good bond.

Another participant mirrored this sentiment when she stated “I always think that I have the best opinion and whatever I say goes, but I learned that everyone has their own opinion.” Group cohesion through listening and communicating was reported as a clear benefit. Another member stated that the program allowed them to realize this: “It gave us a chance for somebody to step up and take control of the activities that we did. Everybody wanted to be a part of it and I pushed myself to help everyone to complete the activity.” She explained that not only was the group able to realize the benefit of effective communication and community, but also they were able to put those ideas into practice.

**Conflict resolution.** The next theme, conflict resolution, coincides with building community. As stated earlier, a fundamental component to a challenge course program is solving problems. The benefits that participants realized pertaining to community allowed them to learn positive ways to solve problems and resolve interpersonal conflicts while solving those problems. A participant stated that “there were various types of obstacles we had to get through using each other’s help, like that one obstacle where we had to use two planks of wood to get to the end.” Another added that they “had to listen to each other and cooperate.” The sense of community that was established empowered the participants to effectively solve problems to find success by using each other’s strengths to overcome weaknesses.
Responses were not just focused on group cohesion. A participant reported that he “doesn’t give up nearly as easily as (he) used to.” In addition, another stated that she felt “less tense about certain problems. Instead of pushing them aside I actually get rid of them instead of pushing them deeper.” A benefit the group realized was the capacity to handle difficult problems. Not only were they learning how to handle problems within the group, but they were able to apply those principles to their own lives outside of the program.

**Positive environment.** Another recurrent theme was that participants valued having a positive, unthreatening place to go. They reported on the benefits of an environment that made them feel comfortable. More than one described the experience as “positive fun,” while another participant stated that “those six weeks I went somewhere positive that improved me.” Growth from the program was directly attributed to a positive environment. Another statement made by a participant testified to the growth caused by an encouraging atmosphere:

> The adventure had something to with to do with it…It was something that I was doing. I didn’t have anything to do on Saturdays and going there was something I could do and I enjoyed and part of me growing up had something to do with that. The discussions we had and it just made me think.

Similar to the post debrief, participants were affected by the opportunity to be involved with a positive program in a positive setting. The same participant quoted above spoke about the problems she was having outside of school and how they prevented her from feeling motivated to attend the last day of the program. However, after a push to attend, she could attest that “she had a good time. It was nice to have a cookout with everyone and I was glad that I went.”

**Risk and decision-making.** The initial interview found that the group was learning the value of taking positive risks and the connection to decision-making. Participants must take real
or perceived risks in order to successfully complete problem-solving initiatives. They reported a lasting benefit of learning the value of positive risk and positive decision-making. One example that participants shared in the follow-up debrief was that they were pushed outside of their comfort zone. A participant shared the following:

I was actually able to get a job because of the training…At my job I was able to get out of my comfort zone, to stop being uncomfortable around people. I was able to work better with everyone else faster, on the first day.

This particular participant was one of the quieter and more reserved members of the group. He could attest to the fact that being pushed outside of his comfort zone, learning to go beyond his normal range of experience to take a positive risk, could positively affect him. Most group members could relate to this example because they all felt challenged to move outside their personal boundaries. Participants said at times their “emotions held (them) back,” but activities in the program helped them to push that comfort level and take positive risks. The same young woman who spoke about learning to respect others’ opinions also shared the following:

I am very conscious of my surroundings so I had to step back and watch how everyone was and everyone applied themselves in different ways, different challenges and everyone made it their own instead of me taking it and making it my own. I became successful by learning to step back, taking it in, and then applying myself to it.

Again, the group was learning to approach situations in a different way; the choices they made in dealing with problems reflected a new understanding of positive risk. A female participant spoke about her experience on the zip line:

That zip line, I was ready to go up there, but when I got up there I was nervous and I was going to get down but (the facilitator) was saying you can do it and in my head I was like,
no I’m not going to get down because it looked fun and I wanted to experience it. So, I just went ahead and it was fun. I was acting tough with it like I’m going to go on it, but when I got up there and he was like go ahead, you push off any time, I was like I don’t know.

She had to make a conscious choice to step outside of her comfort zone in order to gain a positive experience. It was a risk because she felt uncomfortable and uncertain about the outcome, but she stayed focused on the overall experience and eventually chose to take the risk. She was challenged to adjust her attitude in order to make a positive choice. These were common themes in the feedback given, “not (being) afraid” and “taking chances.”

The group repeatedly reflected on being challenged to climb high and to push themselves beyond their normal boundaries. All participants shared a common sense of accomplishment after completing activities like the bird’s nest, the wall, the dangle trio, all activities that require participants to climb off the ground. The obstacles challenged their fears, and they made the choice to face those fears, to push their limits, in order to find success.

**Long-term Effects and Confounding Influences**

A key aspect of the study was to find any long-term implications of such an experience. Participants were asked to think about their experience four months after its completion and whether or not any of the benefits stayed with them. There were common themes in both the immediate and four month follow-up debrief, but what came up in the final reflection was the clear presence of outside variables that interacted with the resiliency of the program. The group’s reflections focused on the positive variables of the program. However, there were still negative
variables in their day-to-day experiences at school as well as in their home lives. This affected the long-term outcomes of the program.

An example of an outside variable was grade promotion. All participants in the study group advanced to the next grade, and this showed a direct effect on maturity level. A participant shared that she was “closer to graduation and (was) getting older.” This could have been a factor in her academic improvement, so any direct connection between her progress and the program can be questioned. She may have chosen to focus harder on her academics because she matured on her own outside the challenge course experience.

Another variable that weighed heavily was home life. One participant spoke about “stuff with (his) dad” and how a strain on that relationship was affecting his ability to focus and work hard in school. Another shared this reflection: “I think it is sometimes just your personal problems get in the way of school. You don’t think about it.”

Group members reflected on stressors in their lives outside of school that came into direct conflict with their ability to perform well academically. They stated that these outside variables impacted the long-term effects of the program. As a participant shared earlier, even her ability to participate consistently in the program was affected. Personal problems at home became an obstacle and affected her level of motivation: “I still had stuff going on at home, relationship problems, school problems; home wasn’t going good, school wasn’t going good…I just wanted to lay in bed.”

Another variable reported as a hindrance to progress was the stress felt at school. Two participants shared a common sense of frustration:

But as far as the program goes, yeah, it teaches you how to deal with stuff but you can only deal with stuff so quickly and then it keeps getting piled on top of it and you start
falling behind so that is what is going on. You just keep falling behind and you try to get through it as fast as you can but it just isn’t working.

Another responded by saying “that’s how I felt last year, with my grades I was starting to feel like that. I was behind a lot and I felt like giving up. It is what it is.” Clearly, participants were affected by conflicts outside of school and inside of school. The combination of these conflicts affected their academic progress and motivation decreased. They reported that these outside influences impacted the benefits of the program and their ability to maximize those benefits outside of the program.

The group also spoke about what each of them brought with them to the program. They attributed this variable to one’s mindset and how it impacts performance and benefits. A participant shared that “everyone is going to take it their own way. Some people may benefit, some people may not benefit, so you can’t say that everyone will benefit from the program.” She went on to add:

It’s all about your mind setting. If you come to the program and say I really care, I’m doing it because I had nothing better to do than you could care less about it, but if you say I had fun or I wonder what is next for today then you might take from it. If your attitude is that you don’t care then you are not going to care.

Thus, a major variable was personal motivation. If outside influences weighed heavily on participants, then their outlook on the program was thereby affected. Responses to the experience depended on what participants brought to the program, and this directly affected whether that participant benefited.

Outside variables can also affect the outcome of the experience in a positive or negative manner. Furthermore, association of any positive or negative change to program benefits
depended entirely on a participant’s ability to recall those benefits at all. As one participant shared:

It is still there, if something comes up, if something triggers a memory than I remember it, but everyday I’m not going to think of it, I’m not going to think about it every day, but if something reminds me of it than I say, oh, I went to this place at this time in my life. Another mirrored this response:

I’m not saying that it didn’t, but when I see that I did improve, starting this year and a little last year, but when I am doing school work, I don’t know if I should, but I don’t really think about my time at the Adventure Center. Once it was over I didn’t really think about it. Maybe it did help me, but not consciously. Maybe I did just grow up on my own. A major factor, as seen in these responses, was a participant’s ability to recall the experience and then to associate that experience with present actions and decision-making.

Participants reported on the benefits of the program and that those benefits were in some way still with them. As one participant shared, “over the summer before school started, I set goals for myself…I realized a lot doing the leadership program.” However, outside variables factored heavily according to participant reflection: “I have to make this year better than what it was last year…but there is still some stuff, I still have days when I don’t feel like doing this or I don’t feel like doing that.”

Summary

Data collected showed a positive trend in change for the study group. While there was no statistical significance when comparing GPA, DI and SBSS-2 results, there was a positive
change in scores across assessments. This is contradicted by the same trend seen in the data from the control group because they received no treatment. Scores increased at relatively the same rate for both groups.

The qualitative data showed that the study group had a positive, learning experience. They reflected on being challenged in a positive environment, and a sense of community and group cohesion allowed the group to overcome the challenges. Furthermore, participants reported an increased sense of encouragement and motivation to perform better in school. This trend was interrupted, as reported in the follow-up debrief, by the cessation of the program coupled with the affect of outside and/or negative variables. The group reported that while the program itself was effective, any long-term effects were determined by the individual.
Chapter 5

FINDINGS, DISCUSSION, AND CONCLUSIONS

The problem of this study was to determine the long-term effects of the YLP on urban youth’s performance in the classroom. After participating in a challenge course program, it was hypothesized that participants would improve academically and socially in the classroom. The YLP hoped to foster this growth and empower participants to take positive risks and make positive decisions. This chapter provides a discussion of the results of the study, including implications and recommendations for further research.

Summary of Procedures

Twelve ninth and tenth graders from an urban high school participated in a six-week challenge course program designed to promote the skills necessary to make informed and effective decisions at school. The YLP was held during the last six weeks of the fourth quarter. Participants met on five Saturdays from nine to one o’clock and on one Wednesday evening from four to eight o’clock. Participants engaged in team-building activities designed to help them learn the value of positive risk-taking and positive decision-making. Assessments were administered before, immediately after, and four months following the program to determine the program’s effect on academic and social behavior and whether those benefits persisted beyond
the terminus of the program. Academic records, behavioral progress reports, the School Social Behavior Scale (SSBS-2), and two focus-group sessions provided this information.

Academic and social progress was charted using the school database system. Overall grade point average and number of discipline infractions were recorded over three academic quarters: just prior to the start of the program, immediately following completion of the program, and four months following program completion. The SSBS-2 provided data related to participants’ social competence and anti-social behaviors in an academic setting. Surveys were completed by cooperating teachers, and no teacher evaluated the same student more than once in order to limit any biased opinion held toward a participant. Results of the surveys provided an indication of social functioning based on academic and social behavior. As per the SSBS-2, participants were categorized into a specific social functioning level: 1) high functioning, average, at-risk or high risk for social competence; and 2) average, at-risk or high risk for antisocial behavior. Because the surveys were administered over a period of time, the researcher was able to determine if there were any changes in academic or social behavior. Focus-group interviews provided a personal, first-hand account of the YLP. Participants were given the opportunity to reflect on their experience, and this provided a more intimate assessment of the experience.

Discussion of Findings

The study aimed to determine if the YLP could help participants improve their academic and social behavior in the classroom. Students selected for the program were performing at or below a 2.5 grade point average and had one or more discipline incidents. Academic progress
reports, the SBSS-2, and the focus-group interviews held at the conclusion of the program and four months following the program provided useful data for overall benefits of the program. The data collected from progress reports and the survey showed how school performance was affected. The interviews served as a reflection period for participants to share their thoughts about the outcomes achieved and how they were achieved. Participants were encouraged to reflect on the YLP, and this supplemented the quantitative data because it reflected a personal perception of the program and its benefits.

While no statistically significant evidence was found when analyzing quantitative data, positive trends for academic and social change were recorded. For example, participants in the study group did not improve GPA to a level higher than when they began the program, but at each assessment there was improvement. Mean average increased by almost half a point, suggesting that participants were beginning to make improvements in classroom performance; academic change was moving in a positive direction.

It is noteworthy, however, that overall GPA of the control group increased at the same rate as the study group. Subjects in the control group received no treatment but showed similar academic improvement. This suggested the presence of outside variables affecting student performance. Students may be maturing when advancing between grade levels, or they may be finding other sources of motivation to work harder academically. The rate of improvement for the control group implies that variables outside of the treatment program may have also influenced the rate of change for the study group.

The SSBS-2, in measuring any behavioral changes in the classroom, supported the same positive trend. While both the study group and control group showed no statistically significant change in scores on either subscale and did not change social functioning level, there was
evidence of positive social change. Similar findings were obtained for the antisocial behavior subscale, in that both groups scored lower on the antisocial behavior subscale, indicating a decrease in negative behaviors. While no statistically significant change was found in any scores or social functioning level, there was a steady increase in scores. The same trend present for academic change was true for behavioral change. The YLP provided a beneficial experience for participants in the study group, but because the control group showed similar results, the presence of outside or confounding variables seemed evident.

When examining change in social behavior, according to the SSBS-2, no statistically significant changes were found. Positive trends were present and seemed to validate the positive effects of the YLP, but other determining factors also appeared to be present. However, the data collected for disciplinary infractions provided evidence that the YLP had some positive effect on social behavior in the classroom. The number of DIs reported for the study group decreased while the program was going on, but increased the next school year. The improvement in social behavior, according to the number of disciplinary infractions, indicated that while the program was occurring, participants were making better decisions that impacted their peer relations and transferred to the academic environment. This point is supported by the fact that this trend ceased four months following conclusion of the program.

Number of DI’s for the control group decreased across assessments, but again the change was not statistically significant. This was supported by the average DI across assessments for the study group when two outliers were excluded. In the study group, eighty-three percent had less than two DIs reported across all three assessment periods. This is noteworthy because the presence of two outliers suggests, overall, that the study group had no significant disciplinary conflicts. In contrast, the control group recorded almost four occurrences of disciplinary
infractions at the pretest, showing a steady improvement to only two by the four month follow-up. Again, while overall change is not significant for either group, it does suggest the presence of outside variables impacting student performance. When examining each group by grade level and gender, no major differences were found.

**Discussion of Qualitative Findings**

The focus-group interviews held at the conclusion of and four months following the program provided specific data about the YLP experience. Participants had the opportunity to give personal reflections of their experience, providing a more holistic and individualized perspective of the program. Progress reports and survey results provided statistical data on student performance but could not give any evidence on the intricacies of the program. The interviews allowed participants to think deeply about the complexities and effects of their experience.

The YLP provided participants with an opportunity to work cooperatively with others. Activities they engaged in required them to use teamwork and to build a strong sense of community in order to find success. Participants realized they could not depend on themselves, that in order to build confidence necessary in finding success, they had to rely on each other. They learned to work with each other despite their perceived differences. Whatever weaknesses the group had, the group learned to use their collective strengths to overcome them. The program provided them an opportunity to build positive relationships, share common goals, and use community to realize those goals. The community and group cohesion the participants
established helped them overcome obstacles and resolve conflicts, and as they solved problems together, this sense of community was strengthened.

A main theme that participants reflected on was patience. Participants learned to be patient in order to be successful with the activities of the program. They reported that the tasks presented required them to patiently and cooperatively work through problems in order to find solutions. They shared that the activities empowered them to be patient, calm, and focused to work through obstacles. The YLP helped participants find the ability to face problems effectively, rather than avoid them or respond negatively.

An aspect of the YLP that helped participants become more resilient and resolute was the concept of challenge by choice. Participants were able to find patience and a comfort level necessary to solve common problems because they were not pressured or forced to participate. The fact that they could choose their own level of participation allowed them to define the experience for themselves. This acted as a self-motivator and allowed participants to find confidence in themselves and in the group.

The YLP was a nonthreatening and positive place. Participants reported that cooperation, community and ownership were possible because of this positive, encouraging environment. Participants felt safe. They felt comfortable, and this allowed them to take pride in not only attending but participating as well. Participants could let down their defenses and realize their strengths because they felt encouraged to do so. They valued having the opportunity to participate in the YLP because such a program had never been offered to them before.
A discussion of risk-taking highlights the fact that a person’s sense of control will affect risk-perception. The more a person feels in control, the more willing he or she will be to take risks (Davis-Berman & Berman, 2002). The comfort level created through the participants’ sense of ownership and the positive, encouraging nature of the YLP allowed them to gain this sense of control. One aspect of the program that participants repeatedly discussed was the idea of facing fears. The obstacles they met as a group required them to overcome their fear of heights, their fear of interaction, and their fear of trust. They learned that they were able to push themselves outside of their comfort zone in order to find self-growth though positive risk-taking. The YLP empowered participants to overcome such fears.

In normal environments when something was an emotional or social risk, they averted that experience; but within the program they learned to make effective decisions to overcome whatever risk they perceived to be present. Evidence showed that participants made positive decisions in order to realize their capabilities. Participants learned the value of confronting self-doubt and fear with positive decision-making in order to achieve self-improvement. They learned they had the ability to make effective, positive decisions. Additionally, participants learned to extend this behavior to those around them. Once they were able to make the difficult decision to overcome personal fears, they were able to encourage those around them to take the same risk.

An important aspect of the study was to determine if program benefits could help participants academically. They were, in fact, able to transfer the skills they learned during the program to the classroom. Their ability to take positive risks and make positive decisions helped them think and act constructively while at school. Most notably, participants felt more motivated
to achieve. They felt conscientious about their effort as put forth in the classroom and thus were able to make informed decisions about improving their classroom efforts.

Overall, the positive social, physical and emotional risks participants took to find success and overcome obstacles allowed them to find value in putting forth greater effort in the classroom. This related to their school environment because they were able to develop intrapersonal growth, which created a desire to be more successful and improve peer and teacher relationships in order to manifest that desire. The relationship they formed with the facilitators also instigated this change. They valued the time taken by an adult to provide them an opportunity to think about and maybe improve the decisions they were making in their lives.

**Long-term effects of the YLP**

Participants reported that they did in fact hold on to the values and benefits of the experience. They were able to recall the positive experience and how the experience helped them to grow. However, what they did report as a conflict when recalling the experience were variables in their lives that affected them day to day. They talked about problems at home with a parent, stress from the pressures of school, personal problems with peers or adults, or negative environments; all of these examples served as real-life obstacles that could potentially prevent them from finding success. These variables came into conflict with the benefits taken from the program. While the transfer of learning that took place after the program was in fact a determining variable in decision-making, so too were the outside variables they experienced on a daily basis. Stressors in life seemed to conflict with participants’ ability to maximize the benefits of the program.
An additional variable that determined the longitudinal effects of the program was the level of devotion and motivation a participant brought to the program. The level of individual engagement in the program and what it had to offer determined how much a participant was able to take and remember from the program. Participants could experience the outcomes, they could participate in the outcomes, but how much each participant invested into the outcomes determined how much was retained. The experience was reported as being a subjective one; therefore, any presence of long term effects depended on the individual.

Participants added that the long term effects of such a program depended entirely on how a participant was able to recall the experience. First, it was said that the ability to recollect specific experiences was somewhat random. Something might serve as a reminder, but for the most part individuals were not consciously thinking about the experience on a daily basis. Second, association of any positive or negative change at school or at home to program benefits was subjective. The connection between the program’s outcomes and decision-making outside of the experience was contingent on how much a participant invested. However, it was unclear what determined connecting the challenge course experience to real-life experiences for the individual participant.

**Implications**

The study aimed to determine if an extended challenge course program could benefit urban youth in the classroom. After participating in a six-week challenge course experience, quantitative and qualitative data was collected to understand what progress, if any, was made. Results supported a significant trend: participants did increase academic and social behavior, but
the positive change slowed or stopped once the program ended. Quantitative data, GPA, DI, and the SBSS-2, showed slight change but not enough to have any statistical significance. Qualitative data, through focus-group interviews, provided a different kind of evidence. The experience was a positive one that promoted self-growth. Participants reported multiple benefits that helped them to be more successful in the classroom.

Participants were selected because they were performing academically and socially at a lower level. Both groups did not improve GPA or DI to a level higher than the targeted demographic, but again, scores across all quantitative categories were headed in a steady, positive direction. The highest change in GPA was to a 2.24, which is a C average. The biggest improvement with DI was with the study group, down to 1.4 infractions. The change in DI increased four months following the treatment showing that any progress made slowed or stopped all together. This change suggested the program positively affected participants in the classroom while they participated in the YLP.

Data collected from focus-group interviews indicated the presence of program benefits not found in the quantitative data. Participants reflected on an experience that was extremely positive and promoted self-growth through positive peer interaction. The YLP provided a safe environment where participants could engage in positive challenges that helped them learn the value of teamwork, community, and positive risk-taking. These benefits acted as determining factors in how participants chose to act in a school environment. Participants increased self-confidence and self-motivation in the classroom. They were able to avoid conflict and make positive decisions. The positive, non-threatening environment of the challenge course allowed this to happen. Participants worked closely and cooperatively with people they were otherwise
unfamiliar with. By being placed in this situation, subjects in the study group learned to overcome their differences, face obstacles and work cooperatively to solve common problems.

The study offered a clear understanding of what benefits were present after participating in a challenge course program. Participants learned to take positive risks, individually and as a group, to affect positive outcomes. Self-concept, self-confidence and group cohesiveness were improved through positive, effective decision-making. Urban youth who participated in such a program were able to reflect on their behaviors at school and find ways to improve those behaviors. After participating in interactive, problem-solving activities, adolescent urban youth realized their own potential when faced with difficult challenges.

These benefits, however, were conflicted by differences between quantitative and qualitative data. While quantitative results showed certain trends in positive change, it was hard to find any significant change because of the small sample size. The data did not show any direct classroom benefit from a challenge course program. However, participant feedback was in direct contradiction to this. Members of the study group spoke highly of the program and attributed it to an overall improvement in the classroom, as well as outside of school. This discrepancy seems glaring. If participants felt like they were improving, why didn’t the data show that?

The most significant trend was found when comparing both data sets. Quantitative and qualitative data pointed to the presence of multiple determining variables. The control group steadily improved across all categories, suggesting a general trend toward self-improvement. Students were being promoted to the next grade, they were maturing in age and demeanor, and both of these points could explain improvements in the classroom. The study group also showed the same steady rate of improvement. This suggested that while the treatment did have a positive effect, other factors affected academic and behavioral progress. Participants were faced with
balancing an increasingly heavy workload at school, the ever-changing dynamic of peer relationships, the dynamics of unpredictable home lives, and an array of personal problems. Even though the treatment lasted over six weeks, these varying problems persisted, so participants, study and control alike, constantly juggled conflicts at school and at home with academic responsibilities and demands.

The discrepancies between data sets highlighted the presence of these alternative variables and the possibility that they affected the long-term benefits of the program. Maturation, grade promotion, or negative peer influences have the potential to positively or negatively influence an adolescent, in particular urban youth. As was discussed earlier, subjects from the selected demographic deal with life stressors caused by an unstable and unpredictable environment. The data collected for the study implied the influence of variables other than the ones present in the YLP. This was confirmed by a similar rate of academic and social change within the control group. The treatment provided was able to counter the stressors faced by participants at school or at home through positive reinforcement of self-concept, self-confidence and group cohesiveness; however, these benefits were negatively influenced by confounding variables that persisted after the conclusion of treatment.

Limitations

A limitation that arose early in the YLP was participant mortality rate. Fifteen students from an urban high school in Syracuse, NY were chosen for both the study group and the control group from ninth and tenth grades. A list of sixty ninth and tenth graders who were performing at or below a 2.5 average and had multiple discipline issues at school was provided by cooperative
teachers. The study aimed to target this demographic in order to determine if the treatment could raise the subjects to a higher performing academic and social behavior level.

From the study group, three did not complete the program: two never attended and the third moved and, hence, abruptly left the school halfway through the program. Two other participants did not return in the fall of 2011: one dropped out and the other switched schools. One participant from the control group also did not return. Sample size for the study group thus dropped from fifteen to ten. The control group dropped from fifteen to twelve. Consequently, sample size became an issue at the onset of the program. This limited the ability to look for effects of grade and gender on program benefits.

Another variable that limited sample size was the reliability of DI. In examining DI, it became evident that two out of the ten subjects in the study group had a much higher frequency of disciplinary issues. While this discrepancy was not found in the other variables, it limited the reliability of adequately interpreting the change in DI. This outcome further reduced the sample size.

In addition, feedback cooperating teachers provided when filling out the SBSS-2 was potentially biased. Personal experiences and relationships between participants and teachers may have influenced how a teacher responded to items on the survey; when reviewing surveys completed at each assessment, there was an obvious variance in teacher perception based on personal classroom experiences. While one teacher may have had problems with a particular student at any given assessment period, another teacher may have reported entirely different circumstances. Classroom behavior and social competence could be directly related to teacher-student relationship.
Focus-group interviews also posed as a limitation to adequately interpreting data. As mentioned earlier, subjects may have offered scripted responses when reflecting on their experience with the YLP. Because the focus-group interviews were held with the whole group instead of individually, participants may have responded in a fashion they thought desirable by either the facilitator or their peers. To obtain more thorough and honest feedback, individually conducted focus-group interviews could have possibly been more effective.

A final limitation was the relationship between researcher and participants. While the fundamental principles and program procedures are relatively the same for any challenge course program, the personal style and experience of the facilitator can impact not just the delivery of a program but also how the program is received by the participants. The previous relationship the researcher had with the participants may have aided in breaking down barriers, thereby making any realized benefits more easily achieved. Participants may not have had to work as hard to feel comfortable in an environment with which they were otherwise unfamiliar because they knew the facilitator.

**Suggestions/Recommendations**

An extended challenge course program may have helped participants realize positive life skills to help deal with conflicts at home, in the workplace, or in school. Working closely within a peer group to solve common problems in order to accomplish common goals allowed participants to learn and use practical skills necessary in accomplishing success. The tumultuous and dynamic nature of adolescent development necessitates this exact type of program. The study results suggested that a challenge course program, over a longer period of time, might help
participants become exposed to, internalize, and transfer a positive experience that encourages self-growth and positive decision-making through informed, positive risk-taking. However, because this developmental period is unpredictable, a challenge course program would serve a greater purpose fully implemented into a high school curriculum. Integrating the skills practiced and learned in this adventure setting would enhance performance in all academic and social environments.

At the four month follow-up, participants from the study group had clearly made adjustments to their attitudes. Quantitatively, a slight positive trend in academic and social behavior was present. Qualitatively, participants could attest to a positive, beneficial program. In order to maximize this positive change, a future study should lengthen the challenge course experience. Participating in a challenge course program for the duration of an academic semester or even for the entire school year could allow participants to fully and consistently engage in positive decision-making and risk taking. Furthermore, a regular program would ease the transfer of learning. The experience would consistently be accessible for participants and cooperating teachers; in the face of classroom conflict, direct experiences could be referenced or recalled to help mediate the conflict.

Improvements could also be made with sample size. If both study group and control group had greater numbers, quantitative results could have been more definitive. Complete representation of the demographic could have been achieved. Also, offering the treatment to an expanded demographic could allow for more visible data of positive or negative trend. Limiting the program to lower-performing students limited the sample size; if urban youth across all demographics were allowed to participate, rates of change would still apply no matter the academic or social functioning level.
The choice of facilitators could also impact the data taken from treatment. If facilitators had no prior relationship with participants, data could be more authentic. The aim of a challenge course program is for participants to work to break down boundaries. Having facilitators unaffiliated with their subjects would create a more natural environment of boundaries and inhibitions.

Lastly, using multiple means to measure social behavior could have provided a more holistic perspective of student behavior. Examining DI limited the range of disciplinary infractions to those reported by the database system. Using focus-group interviews to discuss student progress could have provided more accurate descriptions of any behavioral changes. Additionally, more specific reports of any negative or positive impacts on classroom behavior could help pinpoint key areas of strengths or weaknesses of a challenge course program or program facilitation.

Summary

The YLP showed positive trends toward positive risk-taking and decision-making. Data observed during and after the program confirmed the stressors that adolescents from urban environments must face on a consistent basis. Furthermore, these variables determine a young person’s ability to cope, adapt and persevere in the face of conflict. A challenge course experience provides an opportunity for participants to realize their own capability to deal with conflict in a safe and encouraging learning environment. If this learning environment can be provided on a consistent basis, it can help urban youth improve their overall self-concept and ability to function positively and effectively across any academic or social setting.
References


APPENDIX A

Study Group Consent Form
Dear SAS student,

I am currently a teacher at Syracuse Science Academy and a graduate student at SUNY Cortland, where I am working towards my Master’s degree. As part of my schooling I am conducting a study to determine the benefits of participating in a Youth Leadership program that I have created for SAS students and you have been randomly selected to participate in the program. Some parts of this program will include the use of a challenge course. Challenge courses use perceived risk, group cooperation, and physical challenges to help participants develop skills, such as communication and decision-making.

The program will take place on six different Saturdays at the Adventure Center in Liverpool, NY. The last day of the program will be held at Adam’s Eden Camp in Lafayette, NY. Your teachers will complete academic and social progress reports as well as a behavior survey before and after your participation in this program. The results of these reports will help determine if there is any academic and social benefit to participating in such a program. All information will remain confidential.

The program will focus on positive-risk and positive decision-making through a variety of problem-solving activities. You will be working closely with your peers and some situations might be unfamiliar and possibly uncomfortable. Also, you will be climbing anywhere from 2 – 50 feet off the ground, so there is potential for injury. The facilitators running the program are trained professionals in creating a safe environment, so all necessary safety measures will be taken to prevent risk.

By signing this consent form, you indicate that you have read a description of the study and agree to take part in the study. Please be advised that your participation is not mandatory. You do not have to take part if you choose not to. Also, once the program has started if you choose not to finish for whatever reason, you can stop at any time. You may also ask questions at any time about the program.

Your name (Printed):

___________________________________________

Signature:

____________________________________________

Date:

_______________________
APPENDIX B

Control Consent Form
Invitation to Participate in a Research Study on
The Effectiveness of a Youth Leadership Program

Parental Information Sheet

Dear SAS Parent/Guardian:

I am a teacher at Syracuse Academy of Science (SAS) and a current graduate student at SUNY Cortland working towards my master’s degree. For my thesis I am offering a youth leadership program for students at the SAS. The SAS Youth Leadership program is aimed at improving classroom achievement, academically and socially. The program will use adventure activities to teach the importance of taking positive risks and making positive decisions. Participants will learn how to apply these skills to the classroom.

Whether or not this program actually works will be determined by collecting information about participants’ academic and social relationships before and after the program. It will be necessary to collect the same information from a control group in order to see if there are any differences. Although participants in the control group will not go through the program, the information in their progress reports will be compared to those who do go through the program. While your child will not participate directly in the program, his/her involvement is very important in determining if the program is helpful.

A similar, but shorter program will be offered to participants in the control group, including your son/daughter, as long as they have your permission, in June, at the conclusion of the study. If the program is successful, this study could result in a permanent Youth Leadership group at the SAS.

If you decide to allow academic and behavioral information to be collected about your child from his/her teacher before and after the leadership program, please sign the consent form and have your child return it to me at the Syracuse Academy of Science. All information will be confidential. Your child’s involvement is voluntary and if you decide to remove him/her from the study once it has started you may do so. At any time, if you have any questions or concerns about the welfare of your child, you may contact the Institutional Review Board at SUNY Cortland, PO Box 2000, Cortland, NY 13045 (irb@cortland.edu or 753-2511). You may also contact Amy Shellman, assistant professor at SUNY Cortland at the above phone number or at amy.shellman@cortland.edu.

Sincerely,

Nicolas J. Salibrici
(510)685-2136
nsalibrici@yahoo.com
Informed Consent to Participate in Research

I, _______________________________ (Parent/Guardian Printed Name), have read the description of the project for which this consent is requested and the researcher has answered any questions I have at this time. I understand my rights and I hereby consent to participate in this study.

☐ I ALLOW information on my child’s academic and classroom behavior to be collected from his/her teacher.

☐ I DO NOT ALLOW information on my child’s academic and classroom behavior to be collected from his/her teacher.

Your child’s name (please print): ___________________________________________

Your name (please print): ___________________________________________

Relationship to child (please check one):
  Parent: ____
  Legal Guardian: ____

Your Signature: ___________________________________________

Date: ______________________
APPENDIX C

Parent Consent Form
Invitation to Participate in a Research Study on
The Effectiveness of a Youth Leadership Program

Parental Information Sheet

Dear SAS Parent/Guardian:

I am a teacher at Syracuse Academy of Science (SAS) and a current graduate student at SUNY Cortland working towards my master’s degree. For my thesis I am offering a youth leadership program for students at the SAS. The SAS Youth Leadership Program is designed to help students develop the skills necessary to be successful in the classroom. Participants will learn the value of making positive decisions through interactive, teambuilding activities. In addition, we will be gathering information on your child’s academic and classroom behavior before and after the program. This information will allow us to see if the program can actually help students in the classroom.

The study will use academic and behavioral progress reports as well as a behavior survey to measure social and anti-social behavior in the classroom. Progress reports and surveys will be completed by teachers before and after the program, and all results will remain confidential. All participants have been randomly selected but participation is voluntary. If any participant decides not to participate or to drop out of the program they may do so at any time.

The program will be held at the Adventure Center in Liverpool, NY, including one day at Adam’s Eden Camp in Lafayette, NY. I will be lead facilitator along with several other facilitators trained in adventure education. Participants will take on a variety of activities that require group work, problem-solving, and risk-taking in order to be successful. All activities will be facilitated by professionals to ensure participant safety. Because participants will be climbing anywhere from 2-30 feet off the ground, there is the potential for injury. However, all necessary safety measures will be taken and all activities will be facilitated by trained staff.

The program will be held from 9:00 to 2:00 on April 30, May 7, May 14, May 25 and June 4 at the Adventure Center; the last day will be June 11 at Adam’s Eden Camp. Please note that May 25th is a Wednesday and the times are different. Transportation and lunch will be provided; however, participants will need to be dropped off at SAS by 8:30 AM each day the program is held.

Thank you for your time and consideration. Please complete the attached consent form and return it to me at the Syracuse Academy of Science. Feel free to contact me with any questions or concerns at nsalibrici@yahoo.com. If during the study, you have any concerns for the welfare or safety of your child you may contact the Institutional Review Board at SUNY Cortland, PO Box 2000, Cortland, NY 13045 (irb@cortland.edu or 753-2511). You may also contact Amy Shellman, assistant professor at SUNY Cortland at the above phone number or at amy.shellman@cortland.edu.

Sincerely,
Nicolas J. Salibrici
(510)685-2136
Informed Consent to Participate in Research

I, _______________________________(Parent/Guardian’s Printed Name), have read the description of the project for which this consent is requested and the researcher has answered any questions I have at this time. I understand my rights and I hereby consent to allow my child participate in this program.

☐ I ALLOW my child to take part in the Youth Leadership program and agree to allow information to be collected on their academic and classroom behavior.

☐ I DO NOT ALLOW my child to take part in the Youth Leadership program and do not allow information to be collected on my child’s academic and classroom behavior.

Your child’s name (please print): ___________________________________________

Your name (please print):  ___________________________________________

Relationship to child (please check one):

Parent:  ____

Legal Guardian:  ____

Your Signature:

___________________________________________

Date:

_______________________
APPENDIX D

Experimental Treatment
Session 1 – Saturday, April 30

1. 9:00 – 9:30 – Introductions to Facilitators/Facility and purpose (frame the first day using vacationer, prisoner, and leader model); Challenge by Choice

2. 9:30 – 10:30 – Name games/Tag games/Activities (Motion Name game, Toss-A-Name game, Everybody’s It, Partner Tag, Elbow Tag, Blob Tag, Giants, Wizards & Elves, Asteroids, Have you ever?, and Diminishing Universe)

3. 10:30 – 11:30 – Full Value Contract (FVC) (Participants will discuss the definition of a risk and the value of taking risks. Following discussion participants will identify positive and negative risks. Facilitator will write these responses down on a poster. After discussing positive/negative risks, participants will discuss how these actions/decisions can affect our lives in the classroom as well as within the school environment. Facilitators will use the metaphor of gas that fuels a car and sludge that slows a car to better understand the idea of positive and negative risk taking and how it impacts positive progress. Students will then be instructed to bring new ideas to share before the start of each session to put into the gas tank.

4. 11:30 – 12:00 – LUNCH

5. 12:00 – 1:00 – Watch-It, Quayle Hunter’s Delight, Group Juggle

6. 1:00 – 1:45 – Islands or Zig-Zag

7. 1:45 – 2:00 – Closing/Homework (Students will be instructed to bring in new ideas for the group gas tank. These ideas should relate in some way to the Full Value Contract.

Session 2 – Saturday, May 7
1. 9:00 – 9:30 – Warm-up Activities (Peek-A-Who, Boogie Ball, Popcorn)
2. 9:30 – 10:30 – Gas tank model/FVC review (Group adds gas tank model to Full Value Contract; individual ideas are given about how students can make positive decisions or practice positive risk in the classroom. These ideas are put into the gas tank.)
3. 10:30 – 11:30 – Group Initiatives (Trolleys, Key Punch, Turn over a New Leaf)
4. 11:30 – 12:00 – LUNCH
5. 12:00 – 1:15 – Raccoon Circles and Trust Activities (Speed Knot, Inside/Out, Sticky Snake, two-person and three-person Trust Leans, Willow-in-the Wind)
6. 1:15 – 1:45 – Trust Falls
7. 1:45 – 2:00 – Closing/Homework (Bring an object that represents your individuality.)

Session 3 – Saturday, May 14
1. 9:00 – 9:30 – Warm-up Activities (Alaskan Baseball, Circle to Circle, Mouse Traps)
2. 9:30 – 10:30 – FVC review (Students share the object they brought with them. This object will be used to individualize our metaphorical car.)
3. 10:30 – 11:00 – Review spotting techniques (Trust run, Log Roll)
4. 11:00 – 12:30 – Group Initiatives (Nitro, Team Traverse, The Wall)
5. 12:30 – 1:00 – LUNCH
6. 1:00 – 1:45 – Climbing Wall/Belay School (Students learn to boulder and spot on rock climbing wall.)
7. 1:45 – 2:00 – Closing/Homework (Observe one positive risk and one negative risk a peer takes during regular school hours.)
Session 4 – Wednesday, May 25

1. 9:00 – 10:00 – Warm-up Activities (Rock Wall Challenge – Students are challenged to climb mapped out routes within certain time limit.)
2. 10:00 – 10:30 – FVC review (Participants share observations; group discusses/debriefs experience thus far. Are there any advantages/changes observed?)
3. 10:30 – 11:30 – Group Initiatives (Wrist Loops, Bull Ring Mania, PVC architect)
4. 11:30 – 12:00 – LUNCH
5. 12:00 – 1:45 – Low’s and High’s (Bird’s Nest, Cargo Net, Rock Climbing/Belay School; students begin to learn belaying.)
6. 1:45 – 2:00 – Closing/Homework (Apply something you’ve learned to a real-life situation.)

Session 5 – Saturday, June 4

1. 9:00 – 10:00 – Warm-up Activities (Hula Hoop Bouldering Challenge)
2. 10:00 – 10:30 – FVC review (Participants share observations; What can we add to the gas tank?)
3. 10:30 – 11:30 – Group Initiative (Mind Field, Partner Team Traverse blindfolded)
4. 11:30 – 12:30 – LUNCH
5. 12:30 – 1:45 – Dangle Trio, Centipede, Single Line Bridge, Giant Swing)
6. 1:45 – 2:00 – Closing/Homework (Participants must have final thoughts for final session)
Session 6 – Saturday, June 11

1. 9:00 – 10:00 – Warm-up Activities (Popcorn, Alla Board, Team Towers)
2. 10:00 – 10:15 – FVC review (set up closing day goals/objectives)
3. 10:15 – 11:30 – Team Low Element Challenge
4. 11:30 -12:00 – LUNCH
5. 12:00 – 2:00 – Adventure Challenge (Adventure course set up throughout facility and students perform in teams to complete course.)
6. 2:00 – 2:30 – Closing reflections
APPENDIX E

IRB Approval Letter
MEMORANDUM

To: Nicolas Salibrici
    Amy Shellman

From: Amy Henderson-Harr, Chair
   Institutional Review Board

Date: 04-25-2011

RE: Institutional Review Board Approval

In accordance with SUNY Cortland’s procedures for human research participant protections, the protocol referenced below has been approved for a period of one year:

<table>
<thead>
<tr>
<th>Title of the study:</th>
<th>Syracuse Academy of Science Youth Leadership Program</th>
</tr>
</thead>
<tbody>
<tr>
<td>Level of review:</td>
<td>Full-Board</td>
</tr>
<tr>
<td>Protocol number:</td>
<td>101144</td>
</tr>
<tr>
<td>Project start date:</td>
<td>Upon IRB approval</td>
</tr>
<tr>
<td>Approval expiration date*:</td>
<td>04-24-2012</td>
</tr>
</tbody>
</table>

*Note: Please include the protocol expiration date to the bottom of your consent form and recruitment materials.

For more information about continuation policies and procedures, visit www.cortland.edu/irb/Applications/continuations.html

The federal Office for Research Protections (OHRP) emphasizes that investigators play a crucial role in protecting the rights and welfare of human subjects and are responsible for carrying out sound ethical research consistent with research plans approved by an IRB. Along with meeting the specific requirements of a particular research study, investigators are responsible for ongoing requirements in the conduct of approved research that include, in summary:

- obtaining and documenting informed consent from the participants and/or from a legally authorized representative prior to the individuals’ participation in the research, unless these requirements have been waived by the IRB;
- obtaining prior approval from the IRB for any modifications of (or additions to) the previously approved research; this includes modifications to advertisements and other recruitment materials, changes to the informed consent or child assent, the study design and procedures, addition of research staff or student assistants, etc. (except those alterations necessary to eliminate apparent immediate hazards to subjects, which are then to be reported by email to irb@cortland.edu within three days);
- providing to the IRB prompt reports of any unanticipated problems involving risks to subjects or others;
- notifying the IRB of continued research under the approved protocol to keep the records active; and,
- maintaining records as required by the HHS regulations and NYS State law, for at least three years after completion of the study.
In the event that questions or concerns arise about research at SUNY Cortland, please contact the IRB by email irb@cortland.edu or by telephone at (607)753-2511. You may also contact a member of the IRB who possesses expertise in your discipline or methodology, visit http://www.cortland.edu/irb/members.html to obtain a current list of IRB members.

Sincerely,

[Signature]

Amy Henderson-Harr
IRB Chair