A theatre-based youth development program: Impact on belonging, developmental assets, and risky behaviors

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A THEATRE-BASED YOUTH DEVELOPMENT PROGRAM:
IMPACT ON BELONGING, DEVELOPMENTAL ASSETS, AND RISKY
BEHAVIORS

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A THEATRE-BASED YOUTH DEVELOPMENT PROGRAM:

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This study investigates if Nebraska Improvisational Theatre (Improv) increases a sense of belonging, positive identity, positive values, and decreases risky behaviors in participating youth. Improv is a positive youth development program focusing on health promotion through theatre. Training involves building teamwork skills, theatre skills, and self-esteem building. This work adds to research on youth development programs. It also expands on previous qualitative research on the Improv program (Knox, 1998.)

Youth were surveyed before Improv training, one week later, and six months later. Data is analyzed from three different trainings in 2002 with 50 participants completing all surveys. Participants are ages 14-18, both boys and girls, and of various ethnic backgrounds. Improv administrators previously collected the data. The survey included questions from various instruments, such as developmental assets questions or the Youth Risk Behavior Survey. Data was analyzed using repeated measures ANOVA or repeated measures t-tests, as some data was only collected twice.

Findings were inconclusive, partly due to extremely small sample size. However, some results were significant to the .05 level. Results from one training showed a decrease in sense of belonging while the others showed no change. For positive values,
some individual item scores increased while others decreased. A few positive identity 
individual items scores dropped. One risky behavior item showed a change in a negative 
direction.

In response to the lack of change of scores or decrease of scores in belonging, 
positive identity, and positive values scales, program administrators should find ways to 
help local teams address these issues after training and throughout the year. However, 
because of the inconclusive nature of the results, more research is needed with larger 
sample sizes. The survey instrument should be improved and a control group should be 
used. More research is still needed on youth development programs.
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Chapter 1: Introduction

As adolescents journey toward adulthood, exploring their identities on the way, some experiment with behaviors that endanger their physical and mental health. In response, researchers advocate positive youth development programs to help teens develop their full potential and avoid risky behaviors. These programs take a holistic, positive view to facilitating adolescent growth. One such program—Nebraska Improvisational Theatre—uses theatre as a tool to promote healthy youth development.

Statement of the Problem

The purpose of this study was to investigate if Nebraska Improvisational Theatre (Improv) encourages positive youth development in participating youth, and if so, to what extent. Youth attended trainings in the summer and participated in an Improv team throughout the year. Survey data was collected before the training (pretest), one week after the training (posttest), and six months following the training (follow-up). Using data from these surveys, this study explored any changes in the intensity of participants’ sense of belonging and internal developmental assets (positive values and positive identity). The research also identified any changes in the number of risky behaviors participants in which youth engaged.

Significance of the Research

Add to empirical research in youth development. The body of empirical research evaluating the effectiveness of positive youth development programs is still small. There is a need to investigate the design and effectiveness of individual programs (Hanewald, 2011). This study adds to the evidence about the actual effects of youth development programs.
Benefit to the program. Program administrators have collected data at several trainings, but have only had the resources to do basic analysis on one data set from 1998. Therefore, assumptions that the program was valuable relied mostly on voluntary verbal feedback from participants. This feedback, however, came from a fairly small percentage of participants and did not provide evidence of actual long-term change. Therefore, doing an in-depth analysis of recent data sets shed more light on the actual effects (or lack of effects) of participation in Improv.

Knowing the strengths and weaknesses of the program can help program administrators and training staff members improve specific program aspects. For example, if participants do not show an increase in sense of belonging after participating in the program, perhaps more team-building activities could be added.

If significant results were found, administrators will be better able to justify the need for the program to current and potential funding sources. If the program really is beneficial to youth, then this study will help keep Improv in operation. Keeping the Improv program going, if it is beneficial, allows the program to continue making a positive impact on young people. In addition, if youth are positively impacted by the program, their schools and communities will, in turn, be strengthened.

Description of the Nebraska Improvisational Theatre Program

What is Improv? “Nebraska Improvisational Theatre (Improv) is a peer-led health promotion tool that is designed to raise awareness and generate discussion and solutions to a variety of health issues facing young people” (Hansen & Soukup, n.d., p. 1). Groups of youth are trained to work as a team to prepare Improv scenes and present these scenes for audiences in their schools or communities. They may address any social topic such as
alcohol, tobacco, other drugs, suicide, teen pregnancy, violence, stereotypes, decision making, bullying, gossip, or HIV/AIDS. Team members choose the topic, or a group may request the troupe address a certain issue. These scenes usually last 30 seconds to 2 minutes; they build to a climax and then “freeze” at a point of conflict, leaving the audience wondering what decisions the characters would have made. After the scene, the adult “processor” guides the audience through a discussion of the issues presented. The audience members interact with the characters in the scene by asking questions, giving advice, or expressing their opinions about the character’s decisions. The name of the program, Improv, comes from this part of the performance because the characters dialogue with the audience in a spontaneous way. This dialogue is the most powerful part of the performance because it gives audience members (and youth performers) an opportunity to explore “emotional impact, coping mechanisms, decision-making processes, and community resources” (Hansen & Soukup, n.d., p. 3). The processor follows the audience’s lead as to the direction of the discussion, but also prompts the audience to discuss multiple decisions for each character and explores the community resources available. Krajewski (1999) described experiential drama programs such as Improv as a “safe, creative way to address conflict and improve relations [and an] opportunity to explore value issues [and] leadership growth” (p. 42). See the “youth development using theatre as a tool” section for a further discussion of the value of using drama to address social issues.

Program history. The Improvisational Theatre program began in Salt Lake City, Utah, in 1983 (Buell & Chandler, 1992). Several states around the nation soon adopted the model and initiated the program. One of these states was South Dakota, which began
the program in 1985 (Knox, 1998). A staff member, Jeff Soukup, moved from South
Dakota to Nebraska in 1991, and brought the Improv program idea with him. In 1995, a
team of youth from Nebraska attended training in South Dakota, and they served as a
model team for the first state-wide, five-day training in Nebraska in the summer of 1996
(K. Hansen, personal communication, March 4, 2003). In 1997, the state-wide five-day
training (also called a camp) was held again, with the addition of a three-day Continued
Development Training. This training, which is unique to the Nebraska Improvisational
Theatre Program, helps existing teams refresh their skills or introduce new members to
the team. These two trainings have been held each summer since then, and a total of
forty-eight Improv teams have been trained at least once (K. Hansen, personal
communication, March 4, 2003).

Starting in 1999, trainings have been held each summer at the Youth
Rehabilitation and Treatment Center in Geneva, Nebraska (a treatment facility for female
offenders under age 18). Beginning in 2001, trainings have also been held at the Lincoln
Regional Center’s sex offenders community residential program (serving males under age
18 who have committed sexual offenses), and Hastings Regional Center’s adolescent
substance abuse residential treatment program (serving males under age 18 who have
offended more than once). These three trainings are known as the “on-site” trainings
because youth are not allowed to leave the centers; the trainings are held in the facilities’
normal buildings.

All trainings are free to all participants. They are administered by staff members
in the Division of Health Promotion and Education of the Nebraska Health and Human
Services System. The trainings are paid for by various state and federal funds and grants.
Funding changes each year as different grants or other sources of funding become available (K. Hansen, personal communication, March 4, 2003).

Program goals, objectives, and assumptions. After the first training in Nebraska in 1996, the program directors, Jeff Soukup and Keith Hansen, interviewed adult staff members, youth staff members, and adult advisors to find out how involvement in the Improv program made an impact on them. Answers ranged from improved teaching skill for adult advisors to positive impact on the community. However, in the interest of having a specific focus, Soukup and Hansen decided to concentrate on the impact Improv has on youth participants (J. Soukup, personal communication, February 11, 2003). From this process, they produced the current goals and objectives of the Improv program. The overall goal is to “decrease health risk behaviors in Nebraska adolescents” (Hansen & Soukup, n.d., p. 2). The two objectives are (1) “Each Improv training will develop team and individual skills in order to establish and maintain supportive, positive, well-functioning Improv teams” and (2) “Each training will increase individual resiliency factors that serve as protective factors from negative health outcomes in adolescent-aged Improv team members” (Hansen & Soukup, p. 2).

These objectives, and the program itself, are based on two assumptions. First, staff members assume that “young people can, and often do, make healthy lifestyle decisions with adult guidance, positive peer support systems and strong resiliency skills” (Hansen & Soukup, n.d., p. 1). Second, the program operates under the assumption that “unless information is actively processed, it will not be internalized” (Hansen & Soukup, n.d., p. 1). Therefore, all aspects of training are interactive rather than delivered in a lecture.
State-wide components. Improv teams are comprised of approximately seven to thirteen high-school aged youth and one or two adult advisors. Teams may begin as drug-free groups, leadership clubs, or student councils, etc. However, the program directors encourage advisors to recruit team members from a cross-section of youth (i.e., some from the “sports” cliques, some from the “academic” cliques, and some from other youth subcultures). When teams are school-based, a school counselor or teacher usually serves as the advisor. A few teams originate in community programs or substance abuse intervention programs. Teams are not entirely made up of youth already skilled in theatre. All skills needed for Improv are taught at training, and program leaders stress the fact that anyone can acquire the skills necessary to be involved. Participation is not limited by socioeconomic status because participants attend for free with all meals and lodging provided.

Youth from across the state attend a three- or five-day training, or “camp,” in the summer. Trainings are held at a retreat-style site in central Nebraska (except for the on-site trainings). The retreat-style setting allows participants to “get away” from the normal pressures and distractions of every day life, enabling them to focus on skill building and team bonding during the training.

Trainings are staffed by adults who work with youth programs, teach school, have attended training as campers, or simply care about working with youth. One adult staff member works with each team as a “trainer.” Each team also has a “peer trainer,” an adolescent who has attended training previously and has been accepted to serve as a role model and leader at the current training. All trainings use a similar agenda. The timeline
below is used for five-day trainings, and is modified slightly according to the needs or situations of each training.

At five-day trainings, the teams arrive on a Sunday afternoon and spend Sunday night at the opening show. This show welcomes campers, helps them begin to feel comfortable and meet people from other teams, demonstrates what Improv is, and gives the youth an opportunity to set the “norms,” or community expectations, for behavior for the week.

The second day begins with workshops to build personal skills: communication, stress management, and self-esteem. These workshops are very interactive (based on the second assumption of the program explained above). In the afternoon, a session is held to address group dynamics and diversity. This workshop aims to help youth understand the different needs people have and the different working styles they bring to a group. Through this, youth gain more understanding of and patience for other members of their teams. Then, a team-building activity allows teams to begin to work together. Next, a “team time” is held in the evening, which is a daily time for teams to learn more about one another and how they work together, to process the happenings of the day, and to work on developing their first Improv scene. The day ends with a staff talent show. This gives the campers an opportunity to see the staff members “taking a risk” by showing their talent in front of an audience.

In the morning of the third day, theatre skills workshops teach youth how to put together and perform an Improv scene. In the afternoon, a workshop called “Making A Difference” focuses on empowering youth to go back to their communities and keep the “Improv spirit” alive by working for positive change in their schools and communities. In
the evening, teams attend team time, and then campers take the spotlight in the camper talent show.

The morning of the fourth day, informational breakout sessions are held. This helps each member of a team collect information about different health topics that they may perform a scene on (e.g., if a team wants to perform a scene about HIV/AIDS, knowledge of the basic facts on this topic is essential). Staff members also present a workshop exploring conflict resolution. In the afternoon, the staff members present a role play about family dynamics. This workshop addresses issues of family roles and expectations, as well as substance abuse and its effects on a family. Youth have the opportunity both to see the power of an Improv scene—as youth discuss issues with the characters, they become emotionally involved in the scene—and to explore their own thoughts and feelings regarding family life. This process is discussed in the proceeding team time, giving members an opportunity to learn more about one another’s backgrounds and to support one another.

In the evening of the fourth day, the campers are treated to seeing their advisors perform a “really bad Improv scene,” which allows them not only to see the adults they often know only in a serious setting acting silly, but also to discuss what not to do in an Improv scene. Next, the campers get a chance to put together and receive feedback on several scenes during “reflections.” Campers are grouped with three to five other campers and matched with an advisor. They perform their scenes for a small audience. The audience then lets them know what they did well and offers suggestions for improvement. Finally, the night ends with a celebration of the accomplishments of the week and the friendships made. A dance is held, and then a camper or staff member
traditionally leads the entire camp in a Native American dance. This dance eventually brings the campers out to a campfire site, where campers sing songs together. Finally, they wish one another good night for the last time at camp.

The last day is filled with excitement as the teams get ready to showcase their first Improv scenes. For many youth, it is a great milestone to perform in front of a large audience or act for the first time. The teams work on their scenes all week, and take great pride in the final product. Youth also prepare to leave training and re-enter the “real world.”

The three-day training offers a condensed version of the above schedule. It focuses on re-building and re-energizing existing teams through team time and advanced Improv skills workshops. The informational break-out sessions, personal development workshops, and a few other workshops are left out of the schedule.

*Local implementation.* After being trained, teams return to their communities to use what they have learned. Teams offer performances for all ages and all types of school and community groups. Some teams meet officially only when there is a performance to prepare; other teams meet weekly for rehearsal and team-building. Although teams vary greatly, youth often take the lead in seeking performances, picking scene topics, or developing scenes. Participation in this sort of drama can help young people feel that they are making a difference in their community and world (Dotson, 1996). Youth are more engaged because, rather than coming to Improv practice to hear lectures or just to “hang out,” they come to produce a scene that will be used to educate their peers or other community members.
The power given to youth could be seen as one of the strengths of the Improv program. Styslinger (2000) warned that the use of educational drama may be harmful because teachers or other adults often possess most of the power, picking which youth will play which roles or directing the way a scene progresses. However, Improv allows youth to pick the scene topic, create the content and direction of the scene, and choose who will play which roles. Individual troupes vary in the amount of direction that the adult advisor has, but most of the time the youth have a greater share of the power and responsibility in the scene-making process than they would, for example, in a school play.

**Definition of Terms**

**Improv** - “Nebraska Improvisational Theatre (Improv) is a peer-led health promotion tool that is designed to raise awareness and generate discussion and solutions to a variety of health issues facing young people” (Hansen & Soukup, n.d., p. 1)

**Five-Day Training** - the main training for Nebraska Improvisational Theatre. It is intended for new participants to learn the skills of Improv.

**Three-Day Training** - this training (also called the Continued Development Training) helps existing teams refresh their skills or introduce new members to the team. (K. Hansen, personal communication, March 4, 2003)

**Hastings Regional Center Training (HRC)** - five-day training held at an adolescent substance abuse residential treatment program (serving males under age 18 in Nebraska who have offended more than once); held in the facilities’ normal buildings.
Risky Behaviors - risk factors in the lives of youth that “limit the likelihood of successful development” (Blum, 1998, p. 370) or could potentially compromise health (Wyatt & Peterson, 2005)

Resiliency - “social competence, problem solving skills, mastery, autonomy and a sense of purpose and a future” (Hanewald, p. 19); a resilient child becomes successful even in the face of risks such as poverty or abuse (Benard, 1993)

Pretest – The survey given to participants upon arrival at training

Posttest – The survey mailed to participants one week after training ends

Follow-up Test – The survey mailed to participants six months after training ends

Limitations

The first limitation of this study is the age of the data and literature. The study was begun in 2003. However, due to circumstances in the researcher’s life, the study was put on hold until 2010. The Improv program was discontinued due to lack of funding; therefore, no recent data is available. In addition, some of the literature referenced is somewhat outdated. However, the literature has been updated and the older references are valuable in demonstrating the history of youth development programs.

The largest limitation in this study is an extremely low number of participants. Some analyses were completed with only 14 sets of complete data, and no sets had more than 30 participants. A power analysis showed 28 participants would be needed if the effect size were medium; 163 participants would be needed for a small effect size. Thus, the research was unlikely to result in significant findings. It may be useful to combine data from several different years of Improv trainings. However, due to a shortage of
resources, the agency was not able to gather any other complete data sets in any given year.

Another limitation is the absence of a control group. There is no way to know if an increase in risky behaviors, for example, is higher, lower, or the same as other youths’.

Because the pretest is administered after youth arrive at the training, it may not be a true pretest. They may be affected by the traveling time - most teams travel in a large van for several hours. This ‘bonding time’ may skew their pre-training thoughts. In addition, the teams are greeted in an unusual manner to the training – staff members wear ‘wild’ costumes and greet the participants at their vehicles with loud cheers and celebration. Participants are greeted, welcomed, make ‘fun’ nametags with upbeat music playing, and move in to cabins before taking the pretest. All of this may contribute to an artificially raised sense of belonging, etc. If these scores were artificially high at the pretest, it would be unlikely that scores would increase significantly at the posttest or follow-up tests, even if attitudes had actually changed.

The survey instrument itself may be difficult for participants to understand. Some participants may have reversed the scoring (circling 5, thinking it meant strongly agree, when it actually meant strongly disagree). Also, on some pages, an example was provided at the top to demonstrate how to circle responses. However, in some examples, the circle was not actually drawn around a response. Thus, this discrepancy in directions could have been confusing. In addition, it appeared some respondents got confused on the lines. In other words, they were circling responses above the question, when the directions were to circle responses below the question.
More significant findings may appear after two years of participation in the Improv program. Roth et al. (1998) reported that one youth development program showed no significant results after one year, but did yield positive changes after two years and beyond. Perhaps youth who are involved in Improv longer reap more benefits. No significant results (except for a few individual items) were found in this study using length of involvement. This result is probably because of the low numbers of participants who had been involved in Improv two or more years (n=7 for five-day training, n=17 for three-day training).

Finally, the test may not be a true test of Improv participants. On the follow-up survey, there is no question about whether youth are still participating in their Improv teams. Perhaps youth who attend training but do not continue to participate in the team ‘throw off’ results. These youth, for example, would predictably show a decrease in scores to questions such as “I really feel a part of my Improv team.” However, there is no way to separate these results from the data of youth who are still participating with their teams.
Chapter 2: Review of Literature

In this review, the researcher will explore literature in several areas: characteristics of adolescents, risky behaviors of U.S. youth, resiliency theory, youth development programs, past evaluations of Nebraska Improvisational Theatre, belonging, developmental assets, using theatre as a tool, and the advantage of extracurricular activities. Finally, based on the literature review, a theoretical framework will be proposed. This framework will reflect current research and provide a foundation for the proposed study.

**Adolescent Development**

To understand the problems youth face and possible solutions to these problems, it is first important to understand the characteristics of adolescents. Young people transition physically and psychologically from childhood to adulthood (Inhelder & Piaget, 1958). The Carnegie Council on Adolescent Development (1989) defined five characteristics of an “effective human being” (p. 15). An effective human being is (1) intellectually reflective, (2) enroute to a lifetime of meaningful work, (3) a good citizen, (4) caring and ethical, and (5) healthy. Youth, then, are on their way to a successful transition to adulthood—and therefore a successful adolescent experience—when they begin to display the identified characteristics.

Adolescents commonly experience cognitive changes, and many enter the stage of formal operations. In this stage, “the adolescent differs from the child above all in that he thinks beyond the present. The adolescent is the individual who commits himself to possibilities…In other words, the adolescent is the individual who begins to build ‘systems’ or ‘theories,’ in the largest sense of the term” (Inhelder & Piaget, 1958, p. 339).
With formal operations, adolescents can think abstractly and use metacognition, or knowledge about their own thinking (Inhelder & Piaget).

Erikson (1950) developed a theory that described a series of tasks during life. In this theory, adolescents enter the identity-versus-role-diffusion stage. Adolescents who identify and define their unique characteristics and strengths are building a foundation for the future transition to adulthood. However, adolescents who are unable to form a core sense of self or define the roles they want to play in life are susceptible to psychological distress and may not successfully transition into adulthood.

To study and expand upon Erikson’s work, Marcia (1980) developed a more detailed theory about adolescent identity. He defined identity as

…an internal, self-constructed, dynamic organization of drives, abilities, beliefs, and individual history. The better developed this structure is, the more aware individuals appear to be of their own uniqueness and similarity to others and of their own strengths and weaknesses in making their way in the world. The less developed this structure is, the more confused individuals seem about their own distinctiveness from others and the more they have to rely on external sources to evaluate themselves. (p. 159).

One might assume, then, that adolescents with better-developed identities would be healthier. They must, at least, commit to a sexual orientation, an ideological stance, and an occupational direction (Marcia, p. 160). However, there is more to it than that.

Marcia continued, “the identity structure is dynamic, not static. Elements are continually being added and discarded” (p. 159). Based on the idea that identity is static, Marcia proposed four categories of identity development for youth and adults. In identity
foreclosure, people have a solid identity and firm values but often accept these on the authority of others such as parents. In this category, people have not considered why they hold the opinions they do. People in the identity diffusion category have tried alternative identities, but do not commit to any one identity or set of values. Individuals in the moratorium category are currently struggling to define their identity, and they actively consider alternatives. Once a person chooses an identity and commits to it, he or she moves into the identity achievement stage. Adolescents in this category tend to be more psychologically healthy, have higher achievement motivation, and use higher levels of moral reasoning than others.

According to Feldman (1996), as adolescents explore their identities, they also seek autonomy and begin to question the authority of adults. Teens begin to compare themselves to a reference group of peers and form cliques. Peer pressure becomes a strong force in their lives, driving many adolescents to conform to the expectations of their friends. Sometimes, this can lead youth to make unhealthy choices.

When developing and evaluating programs for youth, it is useful to keep adolescents’ characteristics in mind. To help youth, one must understand they are in a difficult time of transition. The above authors (Erikson, 1950; Marcia, 1980; and Feldman, 1996) emphasize the task of identity development. Youth try out different identities, often under the influence of their peers. One might hypothesize, then, that programs that can offer youth a positive peer culture and safe atmosphere to discuss and explore personal feelings may help them to develop a positive, healthy identity. This, in turn, will help them become “effective human beings” and successfully transition into
adulthood. These programs, in addition, would need to be open and accepting rather than condemning of youth, because of the tendency for youth to rebel against authority.

*Risky Behaviors*

Because adolescents face many challenges, it is not surprising that they often become involved in risky behaviors, such as illegal drug use, alcohol use and abuse, tobacco use, early and unprotected sexual activity, and criminal activity (Feldman, 1997). Wyatt and Peterson (2005) add nutritional behavior, physical inactivity, pathological gambling, and intentional injury to this list. Depression and suicide attempts are also not uncommon in adolescence (Feldman, 1997). These behaviors are considered risk factors in the lives of youth because they “limit the likelihood of successful development” (Blum, 1998, p. 370) or could potentially compromise health (Wyatt & Peterson, 2005).

According to the Centers for Disease Control and Prevention (CDC, 2003a), risky behaviors are major contributors to the leading causes of death for youth.

The Nebraska Health and Human Services System (NHHSS, 2001) reported the results of the Nebraska Youth Risk Behavior Survey (YRBS), a self-report survey of 1,856 high-school youth enrolled in public schools. This survey was developed by the CDC in 1990 and is used by most states. Figure 1 shows the percentage of students (both in Nebraska and nationally) practicing risky behaviors at the time of the 2001 survey. Nebraska high school students have higher than national rates of alcohol consumption and driving or riding in a car after drinking. However, Nebraska high school students have a lower than the national rate of marijuana use and physical fighting. Also note more than half of all high school seniors had a least one drink of alcohol in their lifetime and have had sexual intercourse.
Table and Figure 1. Percentages of youth engaging in risky behaviors in 2001 (NHHSS, 2001; CDC, 2003b).

The most recent results available for Nebraska are summarized from the 2005 survey (NHHSS, 2007). These results are compared to national trends in Figure 2. Since 2001, there were decreases in the rates of drinking and driving, riding with a drinking driver, smoking, binge drinking, and an increase in wearing seat belts for Nebraska high school students.
Figure 2. Percentages of youth engaging in risky behaviors in 2005 (NHHSS, 2007).

**Resiliency**

*From risks to positive potential.* Because of behavior trends like those described above and a societal view of adolescence as a time of irresponsibility, hedonism, and hostility (Brown, 1990), society has taken action. A variety of programs from the 60s to today target youth behaviors in an effort to “fix” kids who had specific problems or were
at risk for these problems. However, the continued presence of risky behaviors reveals the ineffectiveness of these targeted programs. Researchers explained: The sources of these problems overlap, so trying to target one behavior will not reduce other risky behaviors (Barton, Watkins, & Jarjoura, 1997). Other authors argued that risk reduction programs would be lacking even if they were effective in their goals; in other words, risk free youth are not problem free (National Youth Development Information Center [NYDIC], 2000). Larson (2000) argued that even youth who are staying out of trouble and complying with their parents are often bored and unmotivated, and they lack initiative.

The 1990s and 2000s brought an overall shift in thinking by researchers and practitioners: They began to argue society needs to encourage and support youth to lead positive lives (Barton, Watkins, & Jarjoura, 1997). Moore and Glei (1995) summarized this idea: “Surely citizens want children to do more than avoid drugs, violence, and unsafe sex. These goals have proved to be elusive enough, but perhaps part of the difficulty experienced in this society in moving youth to avoid negative behaviors is the lack of a clear sense of the positive behaviors toward which they might strive” (p. 26). In the 1980s, researchers began to investigate the positive potential of youth and change programs accordingly. They asked what characteristics of youth enable them to succeed. The answer has been formed through the study of resiliency.

Resiliency defined. Resiliency refers to the ability to recover from disruptive change or misfortune (Hanewald, 2011). Various authors also define resiliency as “social competence, problem solving skills, mastery, autonomy and a sense of purpose and a future” (Hanewald, p. 19). A resilient child becomes successful even in the face of risks
such as poverty or abuse (Benard, 1993). Early resiliency research sought to find out why a high percentage of children faced with external problems and risks become healthy, competent adults whereas only a small number of these children do not (Garmezy, 1987; Rutter, 1987; Werner, 1989, 1993).

Summarizing foundational work by Garmezy (1974) and Werner and Smith (1982), Benard (1991) developed a list of four overall categories of resilient attributes and the sub-components in each category. The four overarching categories are social competence, problem-solving skills, autonomy, and a sense of purpose and future. See Table 1 for a complete list of the attributes of a resilient child.
Table 1

Attributes of Resilient Children

<table>
<thead>
<tr>
<th>Category</th>
<th>Attribute</th>
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<tbody>
<tr>
<td>Social Competence</td>
<td>Responsiveness</td>
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<tr>
<td></td>
<td>Empathy and caring</td>
</tr>
<tr>
<td></td>
<td>Sense of humor</td>
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<td></td>
<td>Flexibility</td>
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<td></td>
<td>Communication skills</td>
</tr>
<tr>
<td>Problem-Solving Skills</td>
<td>Ability to think abstractly, reflectively, and flexibly</td>
</tr>
<tr>
<td></td>
<td>Ability to attempt alternate solutions for both cognitive and social problems</td>
</tr>
<tr>
<td>Autonomy</td>
<td>Internal locus of control</td>
</tr>
<tr>
<td></td>
<td>Sense of power</td>
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<td></td>
<td>Sense of one’s own identity</td>
</tr>
<tr>
<td></td>
<td>Ability to act independently and exert some control over one’s environment</td>
</tr>
<tr>
<td></td>
<td>Ability to distance oneself from a dysfunctional family environment</td>
</tr>
<tr>
<td>Sense of Purpose and Future</td>
<td>Healthy expectations</td>
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<tr>
<td></td>
<td>Goal-directedness</td>
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<tr>
<td></td>
<td>Success orientation</td>
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<td></td>
<td>Achievement motivation</td>
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<td></td>
<td>Educational aspirations</td>
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<td></td>
<td>Persistence</td>
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<tr>
<td></td>
<td>Hardiness</td>
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<tr>
<td></td>
<td>Belief in a bright future</td>
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<td></td>
<td>Sense of anticipation</td>
</tr>
<tr>
<td></td>
<td>Sense of a compelling future</td>
</tr>
<tr>
<td></td>
<td>Sense of coherence</td>
</tr>
</tbody>
</table>

Researchers identified protective factors as those that shield youth from risks; in other words, these protective factors increase the level of resiliency in youth. Werner (1989) identified three types of protective factors: attributes of the individual (such as internal locus of control); positive support from family; and external support systems (from institutions such as the school). Werner’s 1993 study discovered similar clusters of protective factors. These included social skills, the ability to use skills efficiently, positive care-givers, and supportive adults. Also based on Garmezy (1974) and Werner and Smith (1982), Benard (1991) proposed three domains from which these protective factors could come: the family, the school, and the community. Families can provide consistency, care, support, warmth, and cohesion (Hanewald, 2011). Schools promote resiliency when they have attentive, caring teachers and strong academics (Hanewald, 2011). Community protective factors include social support networks and social service agencies (Hanewald, 2011).

The family, school, and community can also provide caring and support, high expectations, and opportunities for participation to increase resiliency. A family member, teacher, or neighbor provides caring and support unconditionally by giving compassion, by being non-judgmental, and by getting to know the strengths of each youth (Benard, 1996, p. 7). High expectations are conveyed when youth workers believe in youth’s positive potential, challenge them to move toward this potential, provide firm guidance, and respect youth (Benard, 1996, p. 7). Finally, opportunities for participation come in the form of meaningful involvement and responsibility, opportunities to give one’s gift back to the community, decision-making power, and opportunities for reflection and dialogue. This also requires youth workers to give up their control orientations (Benard,
Hanewald (2011) found similar themes in a review of literature: resiliency is encouraged by strong relationships with adults, positive social networks, positive school experiences, and extra-curricular activities. See Figure 3 for an illustration of resiliency theory as proposed by Benard (1991).

**Figure 3.** Resiliency theory (adapted from Benard, 1991).

Burnham (2009) points out how current world issues such as 9/11, natural disasters, terrorism, and war make the world a frightening place. Thus, Burnham recommends fostering resiliency skills to help young people cope. Wong et al. (2006) found teens with higher resiliency scores were less likely to drink at an early age or use other drugs. Thus, resiliency theory was used in developing the Improv program.
Positive Youth Development

In response to and based on the above resiliency research, new practice and research emerged: the positive youth development movement. In fact, Benard (1996) concludes that, based on the body of resiliency research, “successful prevention is youth development” (p. 5). In other words, rather than seeking to “fix” those in need (a deficit-based model), positive youth development programs strive to enhance the innate strengths of all individuals and families (a strength or asset-based model) and encourage their participation in society (Batavick, 1997; Camino, 2000; Jarvis & Shear, 1997; Krovetz, 1999; NYDIC, 2000; Rink & Tricker, 2003). Hanewald (2011) summarized current literature by saying an effective intervention program needs risk-focused methods (which aim to reduce risks), asset-focused approaches (which emphasize accessing resources), and process-focused approaches (which activate systems to support positive development).

This positive involvement serves not only to support development, but also to prevent risky behaviors. A study by Roth, Brooks-Gunn, Murray, and Foster (1998) lent empirical evidence to this approach. Youth who participated in holistic positive development programs showed larger and more long-term change in positive behavior than did youth who participated in programs focused on preventing one or two behaviors. Youth themselves have asked for programs that enhance positive skills rather than reducing negative behaviors (Ginsburg, Alexander, Hunt, Sullivan, Zhao, & Cnaan, 2002). Therefore, providing youth with opportunities to build skills and strengths is the best way to help youth prepare for the transition into adulthood (Batavick, 1997). It
would be helpful, then, to define what programs are characterized as “positive youth development programs.”

Youth development programs are more comprehensive and holistic than deficits based programs (Benard, 1991), and they seek to build “fully prepared youth” that are seen as “community assets and resources” (Kim, Crutchfield, Williams, & Hepler, 1998, p. 6). According to the NYDIC, youth development programs strive to “prepare young people to meet the challenges of adolescence and adulthood through a structured, progressive series of activities and experiences which help them obtain social, emotional, ethical, physical, and cognitive competencies” (2000, para. 9). These programs ideally involve the following elements (adapted from Kim et al., 1998): (1) resiliency, family support and social support (protective factors); (2) high expectations from people in the youth’s social network; (3) opportunities to learn applicable life skills; and (4) opportunities to assume responsibilities, to demonstrate abilities, to contribute to the school, community, and government, and to demonstrate abilities (initiative). The following discussion elaborates on each of these four elements.

First, youth development programs seek to increase the resiliency characteristics and protective factors in the lives of youth (Benard, 1991). Recall that resiliency characteristics (also called internal factors by some authors) include aspects such as social competence, empathy towards others, communication skills, problem-solving skills, positive conflict-resolution skills, autonomy, positive sense of self, taking responsibility for own behaviors, and a sense of purpose and future (Benard, 1991; Rink & Tricker, 2003). Protective factors (also called external factors by some authors) come from outside entities including family, school, and community; they include caring,
support, high expectations, encouragement, and opportunities to participate in school and community activities (Benard, 1991; Rink & Tricker, 2003).

Second, youth development programs place high expectations on youth (Benard, 1992; Kim et al., 1998). Benard (1992) promoted the view that high expectations encourage learning. According to Benard (1996), youth workers must communicate their belief in the inner strengths and resiliency of youth. They must challenge the young people in their programs to work toward achieving this positive potential. They can also use these strengths to develop or reframe needs or concerns (Benard, 1996).

Third, youth need to learn a multitude of skills for adulthood. In interviews with involved adolescents, Dworkin, Larson, and Hansen (2003) found adolescents almost always attribute their progress and successes to their own abilities. Therefore, youth workers might be better off to help youth learn how to teach themselves rather than to directly teach youth.

Larson (2000) advised us to encourage youth to develop initiative, the effort put forth over time to achieve a goal (p. 172). Initiative, which involves taking responsibility to make a contribution to communities, would help youth take ownership in and be excited about their lives. It is also a skill required in adulthood. Larson concluded: “Initiative is fostered in youth when they are involved in structured voluntary activities” (p. 178). He also claimed these activities reduce risky behaviors and increase achievement, self-control, and self-efficacy.

Quinn (1995) presented a list of essential characteristics of effective youth development programs. These programs
(1) tailor their program content and processes to the needs and interests of young adolescents, (2) recognize, value, and respond to the diversity of background and experience that exists among young adolescents, (3) specify and evaluate their outcomes, (4) work collectively as well as individually to extend their reach to underserved adolescents, (5) strengthen the quality and diversity of their adult leadership, (6) enhance the role of young people as resources to their communities, (7) serve as vigorous advocates for and with youth, (8) reach out to families, schools, and other community partners in youth development, (9) work to stabilize their funding bases, and (10) establish solid organizational structures.

(p. 290)

To be characterized as a positive youth development program, then, a program must focus on building strengths in youth and involving youth in the community. These factors create a theoretically helpful program, but we cannot assume that these programs are actually helpful to youth. Their effectiveness must be confirmed with research.

Although positive youth development theory has been heralded for almost a decade, relatively little empirical research about the actual effectiveness of these programs has been done (Quinn, 1995; Roth et al., 1998). However, some tentative evidence exists. In a summary of studies of holistic extracurricular positive youth development programs, Quinn (1995) discovered these common themes from existing research: (1) young people—especially minority youth and those in single-parent families—want and value such programs, and so do parents and other adults, (2) young people want more programming to help them build personal and social skills, (3) young people and adult alumni value their participation in non-school youth programs, (4)
participation in overall programming of a comprehensive youth development program can lead to reduction in risky behaviors and promotion of social behaviors, and (5) sustained and comprehensive intervention stands the best chance of effecting real change in the lives of disadvantaged youth.

Roth et al. (1998) reviewed six studies of programs that used all parts of the youth development model. Programs fulfilled the characteristics of “youth development” if they saw youth “as resources to be developed rather than as problems to be managed,” and if they helped “youth become healthy, happy, and productive by increasing youth’s exposure to the external assets, opportunities, and supports” (p. 427). All programs reported positive changes in attitudes, behaviors, or both. Youth participants earned higher grades, skipped school less, had higher graduation rates, had better relationships with their parents and peers, and were more tolerant than control groups. Also, rates of risky behaviors for these youth were lower. The evidence revealed “the value of caring relationships between adults and youths created and supported by the program” (p. 436). In addition, evidence suggested the possibility of cumulative positive effects from longer participation: One program showed no difference between participants and the control group after one year, but positive differences appeared after two years and beyond.

However, these findings must be examined cautiously, as no one program found positive outcomes for all attitudes and behaviors. The above studies lend tentative support to the effectiveness of positive youth development programs, but more work is needed. Morrissey and Wener-Wilson (2005) found youth involved in activities are more likely to exhibit pro-social behavior. However, this study did not investigate a specific program. The authors highlight the need for further research. The proposed study, then,
investigates a positive youth development program in Nebraska. This program, Nebraska Improvisational Theatre (described in the Introduction), uses theatre as a tool to facilitate the promotion of healthy youth development. Some research on the impact of Improv has already been conducted and is described below.

*Nebraska Improvisational Theatre Evaluations*

In an exploration of an Improv program in South Dakota that is similar to Nebraska’s Improv program, Knox (1998) used interviews to explore how participation in Improv trainings affected ten youth participants. Knox’s findings are discussed at length because this qualitative study provides ideas about the actual effect of Improv as described by participants. Also, based on Knox’s research, the quantitative instrument for the proposed study was developed.

Participants in Knox’s (1998) study described the impact Improv had on them and the ways they benefited from the program. Knox grouped these responses into several themes, including belonging, risky behaviors, confidence and autonomy, problem solving, and contributing to the community. Each is discussed below.

*Belonging.* Knox’s main finding was that Improv training and continued membership on an Improv team provided a strong sense of belonging and total acceptance. This team became a support group to back members up on the decisions they made. Participants felt close to other members and felt they could be themselves. Every interviewee stressed the importance of this closeness. Youth who had kept to themselves before training had a new genuine and significant web of relationships. These new friendships, as youth described them, buffered against pressure to drink alcohol or use drugs and boosted confidence. Because many teams were made up of students from a
cross-section of youth (i.e., “jocks,” “drama kids,” and “math nerds” might all interact on the same team), several youth talked about learning to respect other types of people and their diverse ideas. One young man had a life-changing experience at Improv: “For the first time in my life, I could be me and not worry about what anyone thought of me…at camp they liked you for who you are, not the clothes you wore….it was the gradual feeling of being accepted” (p. 81).

These relationships were the foundation for the formation of other protective factors. As Knox described it, “The primary theme that surfaced during the coding of the data was what participants described as a sense of connection to others. This ‘web of relationships’ seemed to be crucial in laying the groundwork for other resiliency factors, including autonomy, the development of a critical consciousness, problem solving skills, and a sense of hope” (p. 121).

**Risky behaviors.** For those participants who did not have a supportive family (e.g., they reported alcoholic parents) prior to training, their Improv troupes became their supportive group, which helped them decide not to start drinking alcohol or to stop drinking. Even those interviewees with positive support networks reported that support from Improv helped them resist peer pressure to participate in risky behaviors. All interviewees indicated that, as a result of attending Improv training, they were less likely to participate in risky behaviors and more able to make healthy decisions.

**Confidence and autonomy.** Improv helped youth believe they could accomplish their goals and boosted their confidence levels. One young woman declared she “would no longer walk down the hallways of her school with her head down looking at the floor…I guess I learned how strong I was….Now I am the only girl in a computer
programming class” (pp. 82, 85). One interviewee stated that Improv gave her the hope she needed to graduate high school rather than giving up on this goal. Many students said the theatre skills workshops helped them go from thinking they would never be able to perform in front of an audience to being amazed at themselves and what they could do without fear.

*Contributing to the community.* When asked what they liked most about being involved in an Improv team, three participants said performing in their schools made them feel important because younger students saw them as role models. Their experiences helped them see themselves as “agents of change” who could “impact others in positive, supportive ways” (p. 121).

One young woman’s words captured the essence of why positive youth development programs like Improv are more effective than targeted intervention or prevention programs:

‘You know Improv really isn’t about alcohol and drug prevention….We all know we shouldn’t use this or do that. But just getting the information isn’t enough….I’ll tell you what Improv is about. I had been dating a boy for a year and a half and what I learned at camp was that I didn’t have to have a boyfriend to think I was okay. I learned from talking to my troupe and sharing stuff about myself that I could be okay just by myself. That I was enough…just me. That’s it! I’m enough!….I don’t have to be dependent on anyone else right now. I’ve been single for a year and it’s been the best year of my life!’ (p. 89).

From the participant responses, Knox concluded that Improv did indeed help build resiliency skills among participants. Participants spoke of feeling connected, a
greater sense of respect for self and others, an ability to “be themselves,” feeling stronger, a greater understanding of compassion, and a greater ability to cope with pressures in their lives.

Following Knox’s (1998) study, staff in the Nebraska Improv program developed a quantitative survey to evaluate the program. At each training, they collect survey data from participants on the first day of training, one week after training, and six-months after training. An analysis of data from the 1998 five-day training (NHHSS, n.d.) showed a statistically significant positive change in youth answers to questions about resiliency factors. Youth reported they felt more a part of their school, community, or other group, felt more confident about speaking in public, had more self-knowledge about personal stress limits, and felt more like they had an adult outside their family that they could go to for help. However, more research is needed to draw any final conclusions about Nebraska Improv. None of the data from the six-month follow-up surveys has been analyzed, and data sets collected since 1998 have not been analyzed. This study, then, involved more detailed analysis of the data.

Nebraska Improvisational Theatre: Research Base

Following Knox’s (1998) study, Improv administrators examined the literature in belonging and developmental assets. They developed a survey instrument based on these bodies of knowledge. Therefore, it will be useful in the proposed study to understand belonging and developmental assets.

Belonging. As proposed by Knox (1998), the most important aspect of Improv to participants may be an increased sense of belonging. Close friendships have often been described as “the most rewarding and satisfying of all human relationships” (Savin-
Williams & Berndt, 1990, p.277). These relations are especially important for adolescents, helping them grow psychologically and socially. Friendships are also seen as “crucial for a full and rich adolescence” (Savin-Williams & Berndt, 1990, p.277). In fact, research suggests adolescents with harmonious friendships tend to have higher self-esteem, understand the feelings of others, are not lonely, see themselves in a positive way, display advanced social skills, earn high grades, behave appropriately in school (Savin-Williams & Berndt, 1990, pp. 288-290), adapt more easily, are more socially competent overall (Hartup, 1996), and are more resilient (Henderson, 2003). On the other hand, young people with few friends show higher rates of aggression, dropping out of school, and criminal behavior (Savin-Williams & Berndt, 1990). In addition, alienation from peers is linked to risks such as teen pregnancy, school failure, depression, and drug use (Benard, 1991).

Native American culture suggests belonging is one of the most important aspects of youth development (Brendtro, Brokenleg, & Van Bockern, 1990). According to these authors, interpersonal belonging is a powerful force, helping youth learn to live with good will and avoid the disharmony in life that can lead to tragedy.

Research tentatively suggests that a sense of belonging can boost protective factors and reduce risk factors (Anderson-Butcher & Conroy, 2002; Benard, 1993). A study by Resnick, Bearman, Blum, Bauman, Harris, Jones, et al. (1997) revealed that school connectedness (meaning a student feels treated fairly by teachers, feels close to people at school, and feels a part of their school) reduced the rate of emotional distress, suicidal involvement, violence, cigarette use, alcohol use, marijuana use, and early age of sexual activity. A study by Youniss, Yates, and Su (1997) suggested youth who are
involved in activities that are adult-facilitated do more community service and use marijuana at lower rates than non-involved youth. This may be because consistent peer groups that come from organized activities foster common values and the pursuit of common goals (p. 260).

Finally, in several resiliency studies, youth reported how important the sense of belonging was in programs they wanted to stay involved in: “Youth continually refer to the programs that engaged them as being like ‘family’ or ‘community’” (Benard, 1996, p. 8).

Taken together, the above research suggests a sense of belonging is important to healthy adolescent development. In fact, the need to foster a sense of belonging is directly supported by resiliency research, which documents “that successful development in any human system is dependent on the quality of relationships and opportunities for participation that exist” (Benard, 1996, p. 6). It makes sense, then, for youth development programs to foster a sense of belonging in youth (Anderson-Butcher & Conroy, 2002).

*Developmental assets.* Knox (1998) concluded that participation in Improv increased the resiliency factors youth possess. Rather than using direct resiliency research in practice, however, many community programs choose to use the developmental assets framework. The developmental assets were proposed by Search Institute, which grounded its work in resiliency research with the goal of bolstering resiliency in youth (Search Institute, 2001). From 1990 to 1995, researchers at Search Institute surveyed 350,000 youth in grades 6 through 12 from 600 communities in the U.S. They asked youth what helped them overcome deficits and thrive in life (Search Institute, n.d., a). From these studies, researchers created a list of 40 developmental assets. These assets “represent the
positive relationships, opportunities, skills, and values that promote the positive development of all children and adolescents” (Search Institute, 2001, The Framework section, para. 1). External assets are elements in the community and family that appear to protect young people from trouble (Benson, 1990), whereas internal assets are the “internal qualities that guide choices and create a sense of centeredness, purpose, and focus” (Search Institute, n.d., b, Internal Assets section, para. 1). Appendix C lists all 40 assets.

Data from Search Institute shows “the more assets a given teenager reports being present in his or her life, the fewer the at-risk behaviors that teenager displays” (Benson, 1990, p. 12). For example, 61% of youth who engage in violence have zero to ten assets and only 7% of these youth have 31-40 assets. On the other hand, for youth who succeed in school, 47% have 31-40 assets while only 8% have ten or fewer assets (Search Institute, n.d., c).

Additional Theoretical Support for Nebraska Improvisational Theatre

The above discussion highlighted two major bodies of knowledge that contributed to the development of the Improv survey instrument: belonging and developmental assets. However, these are not the only bodies of research that may help explain and support the Improv program. Research also suggests Improv may be effective because it uses theatre as a tool and because it is an extracurricular activity. Although the proposed study does not investigate these issues, it is still helpful to understand other factors that may explain Improv’s potential effectiveness.

Youth development using theatre as a tool. Several authors propose using theatre as a tool to facilitate character development in youth (Basourakos, 1999; Halverson,
2010; Krajewski, 1999; Winston, 1999). Because theatre is more interactive (Basourakos), more visual (Winston), and more life-like (Brook, 1993) than reading or class lectures, students can identify with and explore the emotions and thoughts of characters. Halverson (2010) argues drama gives youth a chance to explore many “possible selves” which helps them develop their identity. According to Basourakos, theatre exposes the complexity of decision-making as a struggle to reflect upon and decide among several possible “correct” answers. Especially when theatre productions portray adolescent characters, youth have the opportunity to expand their awareness of the dynamics among people and the costs of making a decision (Basourakos). These dynamics are more obvious in theatre than in real life, and theatre allows youth to “stand in” through the actors, or imagine themselves in the positions of the characters (Wilshire, 1982). As Winston puts it, theatre “has the power to provoke, to move, to engage us in a critical re-examination of our social and moral values” (p. 467).

If, as these authors argue, a play can heighten young people’s moral awareness and decision-making skills, then Improv, which allows direct interaction with characters, has an even greater potential to involve students in the decision-making processes of the characters. Dotson (1996) argues, in fact, that drama can be a tool to start discussions about social issues. For example, a student may be intrigued by a production of “The Diary of Anne Frank,” but imagine the possibilities if he or she could engage in a dialogue with a character like Anne, asking her questions about her deeper feelings and offering suggestions about what decisions she should make!

In fact, these dialogues are the heart of an Improv team’s purpose in a community: “Within a social support system, the audience-character interaction can lead
to better understanding; help define problems or behavior; generate better solutions; allow discussion of solutions; and enhance compromise on a mutually acceptable solution” (Krajewski, 1999, p. 43). In Knox’s interviews of youth Improv participants, one young woman said, “‘Improv packs a punch. Getting information to kids in a way they can relate to is more effective than just handing somebody a piece of paper or a book…We’re all tired of being lectured to. But doing Improv is different. The scenes are powerful…It helps get people to talking about what’s really happening’” (1998, p. 107).

Improvisational theatre corresponds to a model discussed by Glik, Nowak, Valente, Sapsis, and Martin (2002) called entertainment-education. These presentations “purposely seek to explain, demonstrate, define, and/or compare consequences of different life choices…[They] deliver health information in an audience-friendly manner, provide role models, and demonstrate decision-making strategies and outcomes” (pp. 40-41). Glik et al. found these programs provide a forum for youth to develop their communication skills, leadership skills, group facilitation skills, self-confidence, and self-efficacy. In addition, for some of the youth participants, the entertainment-education program provided a “surrogate family or social support system for youth participants” (p. 50). The authors hypothesized that these programs are powerful in part because information is presented in a personal way by peers rather than the impersonal mass media. Indeed, Wilshire (1982) argues that theatre resonates with individual audience members in a way that is unique to each person.

Participation as an actor in theatre can be powerful because the actors become involved in their characters and the situation—a memorable experience (Winston, 1999). In preparing for and participating in these performances, the youth performers are pushed
to consider issues such as stereotypes, biases, prejudices, social issues, and personal feelings. By portraying characters, the youth must consider the issues from multiple viewpoints (Knox, 1998). As a player in a scene about a current issue, youth have an opportunity to learn about such experiences as “pity, admiration, indignation, [and] repulsion by feeling them in particular contexts” (Winston, 1999, p.470). Actors can interpret their characters and the situation in the play or scene in many different ways; therefore, they experience higher levels of understanding, empathy, observation, and sensitivity (Styslinger, 2000). Drama also provides the actors opportunities for collaboration with other actors and problem solving practice (Styslinger, 2000).

As demonstrated by the above discussion, youth development using theatre as a tool can boost the potential to develop the following developmental assets in youth participants: caring, peaceful conflict resolution, planning and decision making, and interpersonal competence. These assets are translated into the following resiliency traits: responsiveness, empathy and caring, communication skills, ability to think abstractly, reflectively, and flexibly, and ability to attempt alternate solutions for both cognitive and social problems.

*The advantage of extracurricular activities.* Researchers have proposed that youth accrue more skills, a higher sense of accomplishment, a better sense of community, and learn problem solving skills when they are involved in structured activities outside of school rather than doing unstructured, unsupervised things like watching T.V. (Eccles & Barber, 1999). Moore and Glei (1995) found youth involved in clubs were more likely to be satisfied with life, show low or no depression, be involved with the community, feel close to their parents, and place importance on correcting social and economic
inequalities. In another study, Eccles and Barber (1999) found youth involved with church or volunteer activities engage in less risky behavior over time, have higher academic achievement, and are more likely to enroll and stay in college than their non-involved peers. In addition, youth who participated in drama or marching band in 10th grade were compared to students who were uninvolved in 10th grade. The involved students participated in risky behavior less often than the others. They concluded participation in extracurricular activities was a protective factor in the lives of youth: “Being a member of one of these crowds helps structure both what one does with one’s time and the kinds of values and norms one is exposed to. [These activities]…can shape the nature of one’s pathway through adolescence” (1999, p. 29).

In cases of dysfunctional families, supportive groups at school or in the community may be youth’s only source of positive social interaction: “Families, schools, and communities that have protected children growing up in adversity are characterized by (1) caring and support, (2) positive expectations, and (3) ongoing opportunities for participation” (Benard, 1993, p. 45).

These extracurricular groups, then, can satisfy youth’s needs for social connectedness (belonging) and help them feel like valuable members of the community. In fact, Eccles and Barber (1999) found the positive peer groups in church and volunteer groups provide protective value. These effects were most prominent for youth engaged in church and volunteer groups, but less prominent for the other groups, such as students involved in drama. It would appear, then, that combining elements of each program might have an even larger potential to develop protective factors in youth. For example, Improv combines elements of volunteer organizations with drama clubs.
This research provides evidence that Improv, which can be described as an extracurricular activity, might help youth increase the following developmental assets: support, school engagement, positive values, and positive identity. The assets relate to the following resiliency factors: protective factors, educational aspirations, empathy and caring, and self-esteem.

Theoretical Framework

To summarize, research has explained how youth work to develop their identities and that some youth experiment with risky behaviors as they explore their possible identities. One way to help youth navigate successfully toward adulthood is to increase their resiliency skills. Positive youth development programs seek to do just this, and these programs are theoretically supported by resiliency research (Benard, 1996). In fact, research shows that “meeting these needs [for support, connectedness, challenge, and meaningful involvement] must be the primary focus of our work with youth. Only when those needs are met can we engage their innate capacity and natural motivation for learning, health, compassion, and hope” (Benard, 1996, p. 9). Guerra and Bradshaw (2008) advocate for combining positive youth development with the prevention of risky behaviors. One youth development program, Improv, is based on the idea that meeting the needs of youth (by building developmental assets and a sense of belonging) will contribute to healthy development and resiliency skills. The ideas discussed (adolescent development, risky behaviors, resiliency, youth development, developmental assets, and belonging) all contribute to our understanding of youth, but it is important to understand how they interact.
As discussed in the literature, the major task in adolescence is developing a positive identity. Figure 4 illustrates: as youth engage in developing an identity, society offers encouragement and support in the form of youth development programs, such as Improv (A). Involvement in the Improv program may give youth an opportunity to develop a sense of belonging with a group of peers (B) and helps youth increase the intensity of their developmental assets (C). A strong sense of belonging and a high amount of developmental assets contribute to an increase in number of and magnitude of resiliency traits or skills (E and F). These resiliency traits then help youth avoid risky behaviors (G). Connection D allows for the possibility that
Figure 4. Model of how youth development programs influence adolescents.

some factor(s) other than belonging and developmental assets may help decrease risky behaviors in youth. Both resiliency traits (strengths) and the absence of risky behaviors help youth achieve overall successful youth development (H and I). Successful development includes the development of a committed, positive identity that will help youth make a smooth transition into adulthood.
Chapter 3: Methods

The purpose of this study was to investigate whether or not Improv encourages positive youth development, and if so, to what extent. Based on the above research model, a specific model for this study was developed (see Figure 5). Data was collected at the beginning of Improv training (pretest), one week after training (posttest), and six months after training (follow-up).

Hypotheses

The following were null hypotheses:

1. For Improv participants, there would be no change in sense of belonging over time.
2. For Improv participants, there would be no change in the intensity of developmental assets (positive values and positive identity) over time.
3. For Improv participants, there would be no change in the number of risky behaviors over time.
4. For Improv participants, there would be no difference in scores between the five-day training and three-day training scores for first-time participants.

The researcher hypothesized the following effects:

1. For Improv participants, there would be an increase in sense of belonging over time.
2. For Improv participants, there would be an increase in the intensity of internal developmental assets (positive values and positive identity) over time.
3. For Improv participants, there would be a decrease in the number of risky behaviors over time.
4. For Improv participants, there would be a difference between the five-day and three-day training scores for first-time participants.

The researcher predicted that for hypotheses one and two, the youth’s scores would be significantly higher at the posttest, and these higher scores would be maintained six months later at the follow-up test. For hypothesis three (which was not measured at the one-week posttest), it was predicted that youth’s scores would be significantly lower at the six-month follow-up test.

The hypothesized directions were based on Knox’s (1998) findings that Improv boosted belonging and developmental assets (positive values and positive identity) and decreased risky behaviors in adolescents. The research about positive youth development programs also suggests that programs such as Improv would impact youth in the above ways.
Although the five-day and three-day trainings are different in length and intensity, there are some similarities. The five-day training is meant for new members, whereas the three-day training is meant for experienced members. However, both trainings have a large number of first-time participants, and both have some experienced participants. Therefore, it may be useful to compare the scores of the two trainings, especially for first-time participants. This analysis can determine if one training or the other is particularly useful for new participants. The three-day training is unique to Nebraska’s program, so Knox (1998) would not have been able to investigate this issue in her previous Improv study.

*Figure 5.* Theoretical model for this study with hypothesized effects.
Role of the researcher

The researcher has been involved in the Improv program as a participant, peer trainer, adult trainer, or advisor for more than ten years. Because of this experience, the researcher was interested in discovering the actual effects (or lack of effects) of the program. Because the data had already been collected, and because only quantitative methods were used, the potential for bias was low. However, in analyzing the data, the researcher was open to the possibility that significant differences might not exist.

Participants

This study analyzed three different data sets from 2002: the five-day training, the three-day training, and the on-site training at Hastings Regional Center (HRC). The first two were voluntary trainings, which youth attended in teams from schools or community groups. Some youth sought membership and applied or tried out for the team. Others were recruited or encouraged to join by friends or the adult advisor. Team members were usually encouraged, but not required, to attend training. Therefore, training attendance was on a self-selection basis. The data consists of the same survey administered three different times. The pretest is administered once youth arrive at training. The posttest is mailed to participants’ homes one week after training. Participants voluntarily return the survey with no compensation. The follow-up test is mailed six months after training and is also voluntarily mailed back.

The third data set came from the HRC youth rehabilitation center training, where it was part of each youth’s program to participate in Improv. These youth neither continued Improv participation as team members, nor could six-month follow-up surveys
be mailed to them due to confidentiality protection. For these youth, then, only pretest and one week posttest data was collected. Only males participated in this training.

All youth who attended Improv training were asked to complete the pretest survey and were mailed posttest and follow-up surveys. Males and females of several ethnicities participated, and they ranged in age from 12 to 18. Youth attended the trainings for free, so the program had potential to reach youth in limited-resource (or low-income) families. However, no information about socioeconomic status was collected. About 30 participants from each voluntary training returned all three surveys and about 25 participants from the HRC training returned both surveys.

Instrument

The survey was developed by program administrators in 2000. They combined questions from different sources: the CDC’s Youth Risk Behavior Survey; Search Institute’s developmental assets survey; and a group belonging study. This study analyzed only the subscales related to this study, as well as demographic information. See Appendix D for a copy of the full instrument and Appendix E for a list of the survey questions organized according to the research hypotheses. Because the instrument was developed for the goals of the program rather than for theoretical research, validity and reliability were a concern. See Table one for alpha coefficients of each scale.

Demographics. The survey instrument asked for the following descriptive statistics: age, gender, ethnicity, how many Improv trainings the participant had attended in previous years, and how long the participant had been involved in Improv.

Risky Behaviors. A risky behavior measure was comprised of twelve questions taken from the CDC’s Youth Risk Behavior Survey (CDC, 2003b). Because each
question had different responses, the questions could not be combined into a subscale. For example, “During the past 30 days, on how many days did you have at least one drink of alcohol?” included seven possible responses ranging from zero days to “all 30 days.” Another question asked how many times in the last 30 days the participant drove a vehicle while drinking alcohol. Answers ranged from zero to six or more times. Because these questions could not be combined for analysis, five of them were analyzed individually. This measure was used on the pretest and six-month follow-up test, but not on the one-week posttest (program administrators assumed a one week change in risky behaviors would not be meaningful). According to Brener, Kann, McManus, Kinchen, Sundberg, and Ross (2002), kappa statistics for the five questions to be used in the proposed study ranged from 57.2% (drove after drinking in past 30 days) to 81.9% (smoked cigarettes in past 30 days). These five items had a mean of 70.4%, rated as “substantial” reliability.

**Belonging.** Eleven survey questions asked about team skills and team belonging. Five of these questions specifically addressed a sense of belonging and were used for this study. Items were in the form of statements (such as “I really feel a part of my team.”) with answers on a 5-point Likert scale ranging from strongly agree to strongly disagree.

The source of these questions is unknown. However, a study by Anderson-Butcher and Conroy (2002) reviewed a measure of belonging. They found the following five items had a .98 confidence interval and concluded that they fit the data in the calibration sample: I feel comfortable at the program, I am a part of the program, I am committed to the program, I am supported at the program, and I am accepted at the program. Though these statements are not identical to the ones on the Improv survey,
they are similar. Therefore, Anderson-Butcher and Conroy’s findings suggested the questions on the Improv survey would be useful.

*Internal developmental assets.* The third measure included in the Improv survey investigated internal developmental assets, including commitment to learning, positive values, social competencies, and positive identity. This study focused on two of those subscales, positive values and positive identity.

The survey asked how important each positive value was in the youth’s life. Items were in the form of statements, with answers on a 5-point Likert scale from very important to very unimportant. For the positive identity scale, items were also in statement form, with answers on a 5-point Likert scale from strongly agree to strongly disagree.

The belonging, positive values, and positive identity questions were taken from the developmental assets literature. According to Search Institute (2001), the items have been developed and used extensively in other studies. However, no specific information was provided about validity and reliability. Therefore, a factor analysis was used to determine how well the questions in each measure supported one another. Determining the interrelationship was especially important here because this instrument had not been studied for validity and reliability in the past. Cronbach’s alpha value for each of the three scales was calculated.

Table two shows the alpha coefficients for the state training. Higher alpha coefficient values show increased reliability and internal consistency.
Table 2  
*Alpha Coefficients for Each Scale*

<table>
<thead>
<tr>
<th>Scale</th>
<th>Number of Questions</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up</th>
<th>HRC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>5</td>
<td>.80</td>
<td>.87</td>
<td>.69</td>
<td>.94</td>
<td>.96</td>
<td>.91</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>5</td>
<td>.78</td>
<td>.84</td>
<td>.89</td>
<td>.94</td>
<td>.93</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>5</td>
<td>.70</td>
<td>.84</td>
<td>.94</td>
<td>.94</td>
<td>.90</td>
<td>.90</td>
<td>-</td>
</tr>
<tr>
<td>Positive Values</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>12</td>
<td>.94</td>
<td>.96</td>
<td>.91</td>
<td>.94</td>
<td>.93</td>
<td>.89</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>12</td>
<td>.94</td>
<td>.93</td>
<td>.89</td>
<td>.94</td>
<td>.90</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>12</td>
<td>.94</td>
<td>.90</td>
<td>-</td>
<td>.94</td>
<td>.90</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Positive Identity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Pretest</td>
<td>8</td>
<td>.85</td>
<td>.89</td>
<td>.83</td>
<td>.79</td>
<td>.78</td>
<td>.21</td>
<td></td>
</tr>
<tr>
<td>Posttest</td>
<td>8</td>
<td>.79</td>
<td>.78</td>
<td>.21</td>
<td>.78</td>
<td>.76</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>Follow-up</td>
<td>8</td>
<td>.78</td>
<td>.76</td>
<td>-</td>
<td>.78</td>
<td>.76</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>

*Note.* No follow-up test was possible with the HRC participants.

**Procedures**

The proposed study used survey methodology in a pretest/posttest design. Using quantitative surveys was less threatening than face-to-face interviews, which promoted accuracy. Further, a larger, more random sample of participants was used, which allowed this researcher to test the conclusions of Knox’s (1998) qualitative study (Knox proposed...
Improv participants gained an increased sense of belonging and more developmental assets - positive values and positive identity).

This research used data previously collected by Improv program staff. Participants filled out a pretest survey upon arrival at training. Staff members helped youth read questions, but did not interpret what the questions meant. Youth then completed two envelopes with their names and addresses. These envelopes were used to send the survey one week after training (the posttest) and six months after training (the follow-up test). Instructions asked the youth to complete the survey and return it in an addressed, postage-paid envelope. Staff members and written instructions explained, “The information helps us judge how well the Improv program met its objectives and whether participation in Improv helps individual team members.” Surveys took 15 to 20 minutes to complete. Participants received no compensation for completing the surveys.

*IRB approval.* See appendix A for a copy of the IRB approval letter. Approval was given January 1, 2010. Initial approval was set to expire June 20, 2011. However, the researcher received IRB permission by phone to extend the deadline to December 2011.

*Informed consent.* Because program administrators collected the data for the purposes of the program and not for academic research, informed consent forms for the survey were not used. However, completing and returning the forms implied consent. Although participants were under age 19, the surveys were anonymous and participants cannot be identified.

Parental permission forms were required for participation in the training, but these forms did not mention the collection of survey data. See Appendix B for a copy of this form.
Maintaining confidentiality. The survey asked only for participants’ birth dates (in order to match participants across the three surveys). The researcher did not have access to a list of participants or their birth dates. No names or other identifying information was included. Therefore, the researcher could not identify participants; they were completely anonymous.

The researcher had access to the raw data only for the duration of this research. Then, the data sets were returned to the administrators of the program at the Division of Health Promotion and Education in the Nebraska Health and Human Services System.

Analysis

For this study, the researcher analyzed data from the 2002 five-day training, the three-day training, and the on-site HRC training. The five-day training included mostly new participants. The three-day training was for returning teams with some new members. Both of these trainings were voluntary. The HRC training included males at a youth rehabilitation center who were required to participate. Descriptive statistics are reported first to add to the understanding of the make-up of the samples.

With this analysis, the researcher aimed to determine whether there was any difference in risky behaviors, belonging, and internal assets for youth after Improv participation. The researcher hypothesized that Improv participants would show an increased sense of belonging, an increased amount of internal developmental assets (positive values and positive identity), and a decreased number of risky behaviors. All hypotheses were analyzed with the same statistical tests.

For the three-day and five-day trainings, three tests were used (pretest, posttest, and follow-up). Therefore, repeated measures Analysis of Variance (ANOVA) tests were
used to find any overall differences among participant scores on each subscale. A Least Significant Difference follow-up test was then used to find any pair-wise differences. See Figure 6 for a visual representation of this test.

<table>
<thead>
<tr>
<th>Training</th>
<th>Time</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Pretest</td>
</tr>
<tr>
<td>Five-day</td>
<td>Test score mean</td>
</tr>
<tr>
<td>Three-day</td>
<td>Test score mean</td>
</tr>
<tr>
<td>HRC</td>
<td>Test score mean</td>
</tr>
</tbody>
</table>

*Figure 6. Statistical design.*

The posttest did not include the risky-behavior questions (administrators assumed a difference in behavior one week later would not be meaningful because it would probably not be long-lasting change). Therefore, a repeated measure t-test was used for the risky behavior items.

The HRC training only provided pretest and posttest data. Therefore, a repeated measures t-test was used.

Although the five-day and three-day trainings are different in length and intensity, there are some similarities. The five-day training is meant for new members, whereas the three-day training is meant for experienced members. However, both trainings have a large number of first-time participants, and both have some experienced participants. Therefore, differences between the total scale scores were compared using ANOVA tests for belonging, positive values, and positive identity.
Finally, confounding variables (covariates) were considered. However, neither age nor ethnicity were able to be used as control variables, as the ages and ethnicities were not evenly distributed among participants. Although gender would be a useful factor to examine, gender groups were not evenly distributed to use gender as a factor in this study. Therefore, this study investigated the overall impact of Improv participation.

Furthermore, repeated measure ANOVA tests were also conducted to examine the differences among participants on the individual items of each subscale. Then a follow-up/post hoc test was used for pair-wise comparison if the overall test was significant.
Chapter 4: Results

This chapter reports results of statistical analyses. Descriptive statistics are given, along with results of the repeated measures ANOVA tests of change in positive values, positive identity, and sense of belonging. Changes in reported risky behaviors are also reported.

Results are reported for three surveys. The pretest was given at the beginning of the training once youth arrive. The posttest was mailed to participants one week later. The follow-up test was mailed to participants six months after the training.

Results are reported for each of the trainings. The five-day state training is attended mostly by youth new to the Improv program. The training is more intense and includes all the basic elements of Improv. The three-day state continued development training is attended by teams of youth in which about half of the members have already participated in the Improv program. The training is shorter and more of a review or refresher. Finally, the HRC training is at the Hastings Regional Center adolescent substance abuse residential treatment program (serving males under age 18 who have offended more than once). These youth neither continue Improv participation as team members, nor can six-month follow-up surveys be mailed to them due to confidentiality protection. For these youth, then, only pretest and one week posttest data was collected. A repeated measure t-test was used for this group. Only males participated in this training.

Descriptive Statistics

Table 3 shows the total number of participants who completed each questionnaire and the numbers of males and females who completed each questionnaire.
Table 3

*Participants Who Completed Each Questionnaire*

<table>
<thead>
<tr>
<th>Training</th>
<th>Pretest</th>
<th>Posttest</th>
<th>Follow-up Test</th>
</tr>
</thead>
<tbody>
<tr>
<td>Five-Day</td>
<td>45</td>
<td>41</td>
<td>20</td>
</tr>
<tr>
<td>Males</td>
<td>14</td>
<td>12</td>
<td>6</td>
</tr>
<tr>
<td>Females</td>
<td>31</td>
<td>29</td>
<td>14</td>
</tr>
<tr>
<td>Three-Day</td>
<td>47</td>
<td>39</td>
<td>28</td>
</tr>
<tr>
<td>Males</td>
<td>11</td>
<td>8</td>
<td>6</td>
</tr>
<tr>
<td>Females</td>
<td>36</td>
<td>31</td>
<td>22</td>
</tr>
<tr>
<td>HRC (Males)</td>
<td>20</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

At the five-day training, 45 participants completed at least two of the questionnaires. The sample consists of 31 girls (68.9%) and 14 boys (31.1%). Ages ranged from 10 to 18, (mean=14.64, median 15.00, sd=1.798). Other descriptive statistics are shown in table four.
Table 4

*Descriptive Statistics for Five-Day Training (n=45)*

<table>
<thead>
<tr>
<th>Camps Attended</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 Day</td>
<td>6</td>
<td>13.3</td>
</tr>
<tr>
<td>Both 5 Day and 3 Day</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>This is My First Camp</td>
<td>38</td>
<td>84.4</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Length of Involvement</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less Than One Year</td>
<td>31</td>
<td>68.9</td>
</tr>
<tr>
<td>One Year</td>
<td>7</td>
<td>15.6</td>
</tr>
<tr>
<td>Two or More Years</td>
<td>7</td>
<td>15.6</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black – non Hispanic</td>
<td>2</td>
<td>4.4</td>
</tr>
<tr>
<td>Hispanic</td>
<td>1</td>
<td>2.2</td>
</tr>
<tr>
<td>Native American or Alaskan Native</td>
<td>4</td>
<td>8.9</td>
</tr>
<tr>
<td>White – non Hispanic</td>
<td>38</td>
<td>84.4</td>
</tr>
</tbody>
</table>

At the three-day training, 47 participants completed at least two of the questionnaires. The sample consists of 32 girls (68.0%) and 15 boys (31.9%). Ages ranged from 12 to 18, (mean=15.36, median 15, sd=1.384). Other descriptive statistics are shown in table five.
Table 5

*Descriptive Statistics for Three-Day Training (n=47)*

<table>
<thead>
<tr>
<th></th>
<th>n</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Camps Attended</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5 Day</td>
<td>4</td>
<td>8.5</td>
</tr>
<tr>
<td>3 Day</td>
<td>16</td>
<td>34.0</td>
</tr>
<tr>
<td>Both 5 Day and 3 Day</td>
<td>4</td>
<td>8.5</td>
</tr>
<tr>
<td><strong>This is My First Camp</strong></td>
<td>23</td>
<td>48.9</td>
</tr>
<tr>
<td><strong>Length of Involvement</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less Than One Year</td>
<td>5</td>
<td>10.6</td>
</tr>
<tr>
<td>One Year</td>
<td>11</td>
<td>23.4</td>
</tr>
<tr>
<td>Two or More Years</td>
<td>17</td>
<td>36.2</td>
</tr>
<tr>
<td>Brand New</td>
<td>14</td>
<td>29.8</td>
</tr>
<tr>
<td><strong>Ethnicity</strong></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Asian</td>
<td>3</td>
<td>6.4</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>2.1</td>
</tr>
<tr>
<td>White – non Hispanic</td>
<td>43</td>
<td>91.5</td>
</tr>
</tbody>
</table>

As shown in table five, 23 participants attended training for the first time. Twenty-four participants attended training in previous years. In addition, 14 participants were new to the Improv program, while 33 had been involved with a local Improv team before the training.

At the Hastings Regional Center training, 20 participants completed the pretests and posttests. All participants were boys. No other descriptive statistics were available
because none of the participants participated in Improv before. Additionally, information on ethic identity was not collected due to the HRC policy. Ages ranged from 15 to 18.

**Findings**

All reported results are significant at the .05 level, which was chosen because this was an exploratory study. Significant results are denoted by a *. Results are reported for each training, and then summarized based on the research hypotheses. The Greenhouse-Giessser results were used with all tests, unless otherwise noted.

*Five-day training findings.* Repeated measures ANOVA tests were performed to determine any change in answers from pretest, posttest, and follow-up test. M1 represents pretest, M2 represents posttest, and M3 represents the follow-up test.

Table six shows the results of the repeated measure tests for the five-day training belonging, positive values, and positive identity scales. There were no significant results.

Table 6

**Five-Day Training Scales – Repeated Measures ANOVA**

<table>
<thead>
<tr>
<th>Scale</th>
<th>n</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td>15</td>
<td>21.13</td>
<td>22.20</td>
<td>20.67</td>
<td>1.59</td>
<td>.225</td>
</tr>
<tr>
<td>Positive Values</td>
<td>15</td>
<td>48.13</td>
<td>53.33</td>
<td>50.53</td>
<td>2.82</td>
<td>.108</td>
</tr>
<tr>
<td>Positive Identity</td>
<td>15</td>
<td>29.50</td>
<td>30.29</td>
<td>31.29</td>
<td>.973</td>
<td>.370</td>
</tr>
</tbody>
</table>

Individual scale items were analyzed using repeated measures ANOVA tests. Table seven shows the results for the belonging scale items. No significant results were found.
Table 7

*Five-Day Training Belonging Scale Individual Items - Repeated Measures ANOVA*

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really feel a part of my Improv team.</td>
<td>4.44</td>
<td>4.69</td>
<td>4.37</td>
<td>16</td>
<td>1.18</td>
<td>.318</td>
</tr>
<tr>
<td>I can freely express my opinion to members of my Improv team.</td>
<td>4.27</td>
<td>4.40</td>
<td>4.27</td>
<td>15</td>
<td>.17</td>
<td>.803</td>
</tr>
<tr>
<td>I feel a strong sense of loyalty to my Improv team.</td>
<td>4.37</td>
<td>4.44</td>
<td>4.13</td>
<td>16</td>
<td>1.26</td>
<td>.299</td>
</tr>
<tr>
<td>My participation in my Improv team will benefit me greatly.</td>
<td>4.31</td>
<td>4.56</td>
<td>4.56</td>
<td>16</td>
<td>1.25</td>
<td>.299</td>
</tr>
<tr>
<td>I can talk to my Improv team if I have personal problems.</td>
<td>3.69</td>
<td>4.00</td>
<td>3.56</td>
<td>16</td>
<td>1.09</td>
<td>.347</td>
</tr>
</tbody>
</table>

Table eight shows the results for the positive values scale items.

Table 8

*Five-Day Training Positive Values Scale Individual Items – Repeated Measures ANOVA*

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping other people.</td>
<td>4.12</td>
<td>4.44</td>
<td>4.37</td>
<td>16</td>
<td>.91</td>
<td>.373</td>
</tr>
<tr>
<td>Helping to make the world a better place in which to live.</td>
<td>4.25</td>
<td>4.69</td>
<td>4.25</td>
<td>16</td>
<td>3.55*</td>
<td>.043</td>
</tr>
<tr>
<td>Giving time or money to make life better for other people.</td>
<td>3.94</td>
<td>4.31</td>
<td>4.19</td>
<td>16</td>
<td>1.44</td>
<td>.253</td>
</tr>
<tr>
<td>Helping to reduce hunger and poverty in the world.</td>
<td>4.00</td>
<td>4.50</td>
<td>4.19</td>
<td>16</td>
<td>2.30</td>
<td>.129</td>
</tr>
<tr>
<td>Helping to make sure that all people are treated fairly.</td>
<td>4.13</td>
<td>4.53</td>
<td>4.33</td>
<td>15</td>
<td>1.39</td>
<td>.263</td>
</tr>
<tr>
<td>Speaking up for equality-everyone should have the same rights and opportunities.</td>
<td>3.75</td>
<td>4.50</td>
<td>4.56</td>
<td>16</td>
<td>4.72*</td>
<td>.033</td>
</tr>
<tr>
<td>Doing what I believe is right even if my friends make fun of me.</td>
<td>3.69</td>
<td>4.56</td>
<td>4.31</td>
<td>16</td>
<td>3.63</td>
<td>.067</td>
</tr>
<tr>
<td>Standing up for what I believe, even when it's unpopular to do so.</td>
<td>3.75</td>
<td>4.50</td>
<td>4.44</td>
<td>16</td>
<td>4.06*</td>
<td>.051</td>
</tr>
<tr>
<td>Accepting responsibility for my actions when I make a mistake or get in trouble.</td>
<td>4.19</td>
<td>4.31</td>
<td>4.19</td>
<td>16</td>
<td>.17</td>
<td>.782</td>
</tr>
<tr>
<td>Doing my best even when I have to do a job I don't like.</td>
<td>4.13</td>
<td>4.37</td>
<td>4.13</td>
<td>16</td>
<td>1.15</td>
<td>.328</td>
</tr>
<tr>
<td>It is against my values to drink alcohol while I'm a teenager.</td>
<td>4.06</td>
<td>4.31</td>
<td>3.94</td>
<td>16</td>
<td>1.08</td>
<td>.335</td>
</tr>
<tr>
<td>It is against my values to have sex while I'm a teenager.</td>
<td>4.33</td>
<td>4.60</td>
<td>4.07</td>
<td>15</td>
<td>2.15</td>
<td>.146</td>
</tr>
</tbody>
</table>
Three items showed significant change. Table nine shows the pair-wise comparison, using the Least Significant Difference test, for the question asking how important it is to help make the word a better place in which to live. Scores increased significantly between the pretest and one-week posttest. However, scores decreased back to original levels between the posttest and six-month follow-up test.

Table 9

“Importance of Helping Make the World a Better Place In Which To Live” – Pair-Wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.25</td>
<td>4.69</td>
<td>.44</td>
<td></td>
<td>.20</td>
<td>.048*</td>
</tr>
<tr>
<td>2</td>
<td>4.25</td>
<td>4.25</td>
<td>.00</td>
<td></td>
<td>.18</td>
<td>1.00</td>
</tr>
<tr>
<td>3</td>
<td>4.69</td>
<td>4.25</td>
<td>-.44</td>
<td></td>
<td>.18</td>
<td>.029*</td>
</tr>
</tbody>
</table>

Table ten shows the pair-wise comparison for the question asking how important it is to speak up for equality. Scores increased significantly from the pretest to the posttest and from the pretest to the follow-up test.
Table 10

"Importance of Standing Up For Equality" – Pair-Wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.75</td>
<td>4.50</td>
<td></td>
<td>.75</td>
<td>.31</td>
<td>.029*</td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td></td>
<td>4.56</td>
<td>.81</td>
<td>.37</td>
<td>.043*</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.50</td>
<td>4.56</td>
<td>.06</td>
<td>.17</td>
<td>.718</td>
</tr>
</tbody>
</table>

Table eleven shows the pair-wise comparison for the question about how important it is to stand up for what one believes, even when it is unpopular to do so. Scores increased significantly between the pretest and posttest.

Table 11

"Importance of Standing Up For What One Believes" – Pair-Wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>3.75</td>
<td>4.50</td>
<td></td>
<td>.75</td>
<td>.32</td>
<td>.035*</td>
</tr>
<tr>
<td></td>
<td>3.75</td>
<td></td>
<td>4.44</td>
<td>.69</td>
<td>.36</td>
<td>.077</td>
</tr>
<tr>
<td></td>
<td></td>
<td>4.50</td>
<td>4.44</td>
<td>-.06</td>
<td>.14</td>
<td>.669</td>
</tr>
</tbody>
</table>

Table 12 shows the results for the positive identity scale items. No significant results were discovered.
Table 12

**Five-Day Training Positive Identity Scale Items - Repeated Measures ANOVA**

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>When things don’t go well for me, I am good at finding a way to make things better.</td>
<td>3.94</td>
<td>4.13</td>
<td>4.00</td>
<td>16</td>
<td>.32</td>
<td>.728</td>
</tr>
<tr>
<td>I have little control over the things that will happen in my life.</td>
<td>3.40</td>
<td>3.47</td>
<td>4.00</td>
<td>15</td>
<td>2.95</td>
<td>.077</td>
</tr>
<tr>
<td>On the whole, I like myself.</td>
<td>4.00</td>
<td>4.20</td>
<td>4.07</td>
<td>15</td>
<td>.45</td>
<td>.535</td>
</tr>
<tr>
<td>At times, I think I am no good at all.</td>
<td>2.94</td>
<td>2.94</td>
<td>3.00</td>
<td>16</td>
<td>.06</td>
<td>.924</td>
</tr>
<tr>
<td>All in all, I am glad I am me.</td>
<td>4.13</td>
<td>4.31</td>
<td>4.19</td>
<td>16</td>
<td>.42</td>
<td>.652</td>
</tr>
<tr>
<td>I feel I do not have much to be proud of.</td>
<td>4.06</td>
<td>4.06</td>
<td>4.19</td>
<td>16</td>
<td>.25</td>
<td>.685</td>
</tr>
<tr>
<td>Sometimes I feel like my life has no purpose.</td>
<td>3.44</td>
<td>3.56</td>
<td>3.75</td>
<td>16</td>
<td>.82</td>
<td>.434</td>
</tr>
<tr>
<td>When I am an adult, I’m sure I will have a good life.</td>
<td>4.00</td>
<td>4.06</td>
<td>4.38</td>
<td>16</td>
<td>1.81</td>
<td>.183</td>
</tr>
</tbody>
</table>

Risky behaviors were also analyzed before training and six months after training.

Data was not collected one week after training, as the researchers assumed the short-term change would not be meaningful. Table 13 shows the individual results. M1 represents the pretest and M2 represents the follow-up. There was no change in risky behavior.

Table 13

**Five-Day Training, Risky Behavior Changes - Repeated Measures ANOVA**

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>M1</th>
<th>M2</th>
<th>Sig.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you wear a seat belt when driving?</td>
<td>12</td>
<td>4.17</td>
<td>4.42</td>
<td>.643</td>
<td>-.48</td>
</tr>
<tr>
<td>How often do you wear a seat belt when riding in a vehicle driven by someone else?</td>
<td>20</td>
<td>3.90</td>
<td>3.65</td>
<td>.330</td>
<td>1.00</td>
</tr>
<tr>
<td>In the past 30 days, how many times did you drive a vehicle after you had been drinking alcohol?</td>
<td>12</td>
<td>1.33</td>
<td>1.42</td>
<td>.851</td>
<td>-.19</td>
</tr>
<tr>
<td>In the past 30 days, how many times did you ride in a vehicle driven by someone who had been drinking alcohol?</td>
<td>20</td>
<td>1.40</td>
<td>1.55</td>
<td>.379</td>
<td>-.90</td>
</tr>
<tr>
<td>During the past 6 months, how many times were you in a physical fight?</td>
<td>20</td>
<td>1.50</td>
<td>1.25</td>
<td>.505</td>
<td>.68</td>
</tr>
<tr>
<td>During the past 30 days, on how many days did you smoke cigarettes?</td>
<td>20</td>
<td>1.05</td>
<td>1.10</td>
<td>.330</td>
<td>-1.00</td>
</tr>
<tr>
<td>During the past 30 days, on how many days did you have at least 1 drink of alcohol?</td>
<td>20</td>
<td>1.15</td>
<td>1.45</td>
<td>.055</td>
<td>-2.04</td>
</tr>
<tr>
<td>During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row?</td>
<td>20</td>
<td>1.00</td>
<td>1.25</td>
<td>.056</td>
<td>-2.03</td>
</tr>
</tbody>
</table>

Note: The number of participants differ because responses of “I don’t drive” were not included in analysis.
The questions about chewing tobacco use showed no change between surveys, as zero participants reported using at either the pre-test or follow-up test.

The questions about suicide also showed no changes between surveys. One participant reported seriously considering attempting suicide and making a plan to attempt suicide at the pretest while nineteen did not at both the pretest and follow-up test.

_Three-day continued development training findings._ Repeated measures ANOVA tests were performed to determine any change in answers from pretest, posttest, and follow-up test. M1 represents pretest, M2 represents posttest, and M3 represents the follow-up test. Table 14 shows the results of the repeated measures ANOVA tests for the three-day training for the belonging, positive values, and positive identity scales.

<table>
<thead>
<tr>
<th>Scale</th>
<th>n</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>F</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td>19</td>
<td>21.53</td>
<td>21.68</td>
<td>19.84</td>
<td>4.74*</td>
<td>.021</td>
</tr>
<tr>
<td>Positive Values</td>
<td>19</td>
<td>52.26</td>
<td>49.89</td>
<td>51.26</td>
<td>.450</td>
<td>.528</td>
</tr>
<tr>
<td>Positive Identity</td>
<td>19</td>
<td>31.58</td>
<td>30.42</td>
<td>31.00</td>
<td>1.06</td>
<td>.350</td>
</tr>
</tbody>
</table>

Belonging scores showed a significant change, so a post-hoc test was performed. Results are reported in table 15. Scores dropped between the pretest and follow-up, and between the posttest and follow-up test.
Table 15

*Three-Day Training Belonging Scale - Pair-Wise Comparison*

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>21.53</td>
<td>21.68</td>
<td>.16</td>
<td>.50</td>
<td>.757</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.53</td>
<td>19.84</td>
<td>-1.68</td>
<td>.72</td>
<td>.031*</td>
<td></td>
</tr>
<tr>
<td></td>
<td>21.68</td>
<td>19.84</td>
<td>-1.84</td>
<td>.74</td>
<td>.023*</td>
<td></td>
</tr>
</tbody>
</table>

Because few significant results were found, individual scale items were analyzed using repeated measures ANOVA tests. Table 16 shows the results for the belonging scale items.

Table 16

*Three-Day Training Belonging Scale Individual Items - Repeated Measures ANOVA*

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really feel a part of my Improv team.</td>
<td>4.63</td>
<td>4.47</td>
<td>3.95</td>
<td>19</td>
<td>8.97*</td>
<td>.001</td>
</tr>
<tr>
<td>I can freely express my opinion to members of my Improv team.</td>
<td>4.15</td>
<td>4.25</td>
<td>4.30</td>
<td>20</td>
<td>.29</td>
<td>.710</td>
</tr>
<tr>
<td>I feel a strong sense of loyalty to my Improv team.</td>
<td>4.35</td>
<td>4.50</td>
<td>3.60</td>
<td>20</td>
<td>7.56*</td>
<td>.010</td>
</tr>
<tr>
<td>My participation in my Improv team will benefit me greatly.</td>
<td>4.65</td>
<td>4.55</td>
<td>4.25</td>
<td>20</td>
<td>2.69</td>
<td>.089</td>
</tr>
<tr>
<td>I can talk to my Improv team if I have personal problems.</td>
<td>3.75</td>
<td>3.70</td>
<td>3.55</td>
<td>20</td>
<td>.382</td>
<td>.655</td>
</tr>
</tbody>
</table>

Two items showed a significant change. Pair-wise comparisons for “I really feel a part of my Improv team” are shown in table 17. Scores decreased from the pretest to the follow-up test and between the posttest and follow-up test.
Table 17

“I Really Feel a Part Of My Improv Team” – Pair-Wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.63</td>
<td>4.47</td>
<td></td>
<td>-.16</td>
<td>.14</td>
<td>.268</td>
</tr>
<tr>
<td>2</td>
<td>4.63</td>
<td></td>
<td>3.95</td>
<td>-.68</td>
<td>.19</td>
<td>.002*</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4.47</td>
<td>3.95</td>
<td>-.53</td>
<td>.18</td>
<td>.008*</td>
</tr>
</tbody>
</table>

The question about loyalty towards the Improv team also showed a significant change. Pair-wise comparisons are shown in Table 18. Scores dropped from the pretest to the follow-up test and from the posttest to the follow-up test.

Table 18

“I Feel a Strong Sense Of Loyalty To My Improv Team” – Pair-Wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4.35</td>
<td>4.50</td>
<td></td>
<td>.15</td>
<td>.08</td>
<td>.083</td>
</tr>
<tr>
<td>2</td>
<td>4.35</td>
<td></td>
<td>3.60</td>
<td>-.75</td>
<td>.30</td>
<td>.021*</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td>4.50</td>
<td>3.60</td>
<td>-.90</td>
<td>.30</td>
<td>.007*</td>
</tr>
</tbody>
</table>

Table 19 shows the results for the positive values scale items. One item showed a significant change.
Table 19

*Three-Day Training Positive Values Scale Individual Items –*

*Repeated Measures ANOVA*

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping other people.</td>
<td>4.60</td>
<td>4.25</td>
<td>4.65</td>
<td>20</td>
<td>1.08</td>
<td>.317</td>
</tr>
<tr>
<td>Helping to make the world a better place in which to live.</td>
<td>4.30</td>
<td>3.90</td>
<td>4.25</td>
<td>20</td>
<td>1.38</td>
<td>.263</td>
</tr>
<tr>
<td>Giving time or money to make life better for other people.</td>
<td>4.25</td>
<td>4.00</td>
<td>4.20</td>
<td>20</td>
<td>.71</td>
<td>.452</td>
</tr>
<tr>
<td>Helping to reduce hunger and poverty in the world.</td>
<td>4.10</td>
<td>3.60</td>
<td>3.90</td>
<td>20</td>
<td>2.31</td>
<td>.118</td>
</tr>
<tr>
<td>Helping to make sure that all people are treated fairly.</td>
<td>4.30</td>
<td>4.10</td>
<td>4.25</td>
<td>20</td>
<td>.24</td>
<td>.704</td>
</tr>
<tr>
<td>Speaking up for equality-everyone should have the same rights and opportunities.</td>
<td>4.50</td>
<td>4.35</td>
<td>4.25</td>
<td>20</td>
<td>.37</td>
<td>.579</td>
</tr>
<tr>
<td>Doing what I believe is right even if my friends make fun of me.</td>
<td>4.55</td>
<td>4.40</td>
<td>4.60</td>
<td>20</td>
<td>.29</td>
<td>.648</td>
</tr>
<tr>
<td>Standing up for what I believe, even when it’s unpopular to do so.</td>
<td>4.50</td>
<td>4.50</td>
<td>4.45</td>
<td>20</td>
<td>.02</td>
<td>.954</td>
</tr>
<tr>
<td>Accepting responsibility for my actions when I make a mistake or get in trouble.</td>
<td>4.45</td>
<td>4.30</td>
<td>4.45</td>
<td>20</td>
<td>.23</td>
<td>.693</td>
</tr>
<tr>
<td>Doing my best even when I have to do a job I don’t like.</td>
<td>4.30</td>
<td>4.05</td>
<td>4.30</td>
<td>20</td>
<td>.73</td>
<td>.423</td>
</tr>
<tr>
<td>It is against my values to drink alcohol while I’m a teenager.</td>
<td>4.37</td>
<td>4.37</td>
<td>4.32</td>
<td>19</td>
<td>.12</td>
<td>.869</td>
</tr>
<tr>
<td>It is against my values to have sex while I’m a teenager.</td>
<td>4.35</td>
<td>4.50</td>
<td>3.95</td>
<td>20</td>
<td>4.16*</td>
<td>.043</td>
</tr>
</tbody>
</table>

One question, “It is against my values to have sex while I’m a teenager,” showed a significant change. Results of the pair-wise comparison are shown in Table 20. Scores decreased significantly between the pretest and follow-up test and between the posttest and follow-up test. A higher value means the participant is more committed to not have sex – thus a decrease in score means they are less committed to not having sex.
Table 20

“It Is Against My Values To Have Sex While I’m a Teenager” – Pair-Wise Comparison

<table>
<thead>
<tr>
<th></th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>4.35</td>
<td>4.50</td>
<td>.15</td>
<td>.13</td>
<td>.267</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.35</td>
<td>3.95</td>
<td>.40</td>
<td>.18</td>
<td>.042*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4.50</td>
<td>3.95</td>
<td>.55</td>
<td>.26</td>
<td>.045*</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Table 21 shows the results for the positive identity scale items. One item showed a significant change.

Table 21

Three-Day Training Positive Identity Scale Items - Repeated Measures ANOVA

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>When things don't go well for me, I am good at finding a way to</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>make things better.</td>
<td>3.84</td>
<td>3.84</td>
<td>3.89</td>
<td>19</td>
<td>.03</td>
<td>.959</td>
</tr>
<tr>
<td>I have little control over the things that will happen in my life.</td>
<td>3.75</td>
<td>3.80</td>
<td>3.65</td>
<td>20</td>
<td>.28</td>
<td>.734</td>
</tr>
<tr>
<td>On the whole, I like myself.</td>
<td>4.10</td>
<td>4.00</td>
<td>4.05</td>
<td>20</td>
<td>.26</td>
<td>.757</td>
</tr>
<tr>
<td>At times, I think I am no good at all.</td>
<td>3.40</td>
<td>2.85</td>
<td>3.45</td>
<td>20</td>
<td>3.68*</td>
<td>.041</td>
</tr>
<tr>
<td>All in all, I am glad I am me.</td>
<td>4.25</td>
<td>4.10</td>
<td>4.15</td>
<td>20</td>
<td>.77</td>
<td>.457</td>
</tr>
<tr>
<td>I feel I do not have much to be proud of.</td>
<td>4.20</td>
<td>4.20</td>
<td>4.20</td>
<td>20</td>
<td>.00</td>
<td>1.000</td>
</tr>
<tr>
<td>Sometimes I feel like my life has no purpose.</td>
<td>3.85</td>
<td>3.75</td>
<td>3.70</td>
<td>20</td>
<td>.36</td>
<td>.699</td>
</tr>
<tr>
<td>When I am an adult, I'm sure I will have a good life.</td>
<td>4.20</td>
<td>4.15</td>
<td>4.20</td>
<td>20</td>
<td>.07</td>
<td>.923</td>
</tr>
</tbody>
</table>

The question stating “At times, I think I am no good at all,” showed a significant change. Pair-wise comparisons are shown in Table 22. There was a significant drop in
scores from pretest to posttest, but the scores rose significantly from posttest to follow-up test.

Table 22

“At Times, I Think I Am No Good At All” – Pair-Wise Comparison

<table>
<thead>
<tr>
<th>M1</th>
<th>M2</th>
<th>M3</th>
<th>Difference</th>
<th>Std. Error</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.40</td>
<td>2.85</td>
<td>.55</td>
<td>.21</td>
<td>.017*</td>
<td></td>
</tr>
<tr>
<td>3.40</td>
<td>3.45</td>
<td>.05</td>
<td>.29</td>
<td>.863</td>
<td></td>
</tr>
<tr>
<td>2.85</td>
<td>3.45</td>
<td>.60</td>
<td>.23</td>
<td>.019*</td>
<td></td>
</tr>
</tbody>
</table>

Risky behaviors were also analyzed before training and six months after training. Data was not collected one week after training, as the researchers assumed the short-term change would not be meaningful. Table 23 shows the individual results. Fewer participants reported being in the physical fight at the follow-up test.
Table 23

*Three-Day Training, Risky Behavior Changes*

<table>
<thead>
<tr>
<th>Question</th>
<th>n</th>
<th>M1</th>
<th>M2</th>
<th>sig.</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>How often do you wear a seat belt when driving?</td>
<td>21</td>
<td>4.05</td>
<td>4.00</td>
<td>.715</td>
<td>0.37</td>
</tr>
<tr>
<td>How often do you wear a seat belt when riding in a vehicle driven by someone else?</td>
<td>28</td>
<td>4.07</td>
<td>4.07</td>
<td>1.00</td>
<td>0.00</td>
</tr>
<tr>
<td>In the past 30 days, how many times did you drive a vehicle after you had been drinking alcohol?</td>
<td>20</td>
<td>1.35</td>
<td>1.10</td>
<td>.287</td>
<td>1.10</td>
</tr>
<tr>
<td>In the past 30 days, how many times did you ride in a vehicle driven by someone who had been drinking alcohol?</td>
<td>28</td>
<td>1.39</td>
<td>1.32</td>
<td>.573</td>
<td>0.57</td>
</tr>
<tr>
<td>During the past 6 months, how many times were you in a physical fight?</td>
<td>28</td>
<td>1.32</td>
<td>1.11</td>
<td>.031</td>
<td>2.27*</td>
</tr>
<tr>
<td>During the past 30 days, on how many days did you smoke cigarettes?</td>
<td>28</td>
<td>1.21</td>
<td>1.25</td>
<td>.663</td>
<td>-.44</td>
</tr>
<tr>
<td>During the past 30 days, on how many days did you have at least 1 drink of alcohol?</td>
<td>28</td>
<td>1.29</td>
<td>1.32</td>
<td>.769</td>
<td>-.30</td>
</tr>
<tr>
<td>During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row?</td>
<td>28</td>
<td>1.14</td>
<td>1.11</td>
<td>.573</td>
<td>0.57</td>
</tr>
</tbody>
</table>

Note: The number of participants differs because responses of “I don’t drive” were not included in analysis.

The question about chewing tobacco use showed no change between surveys, as zero participants reported using at either the pre-test or follow-up test.

The questions about depression and suicide showed no significant changes, as shown in table 24. The questions asked about the last six months.
Table 24

**Three-Day Training, Changes in Depression and Suicide In the Last Six Months**

<table>
<thead>
<tr>
<th>Item</th>
<th>Pretest</th>
<th>Follow-Up</th>
<th>Chi-Square</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Yes</td>
<td>No</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td>Did you ever feel so sad or hopeless almost every day for 2 weeks or</td>
<td>8</td>
<td>20</td>
<td>7</td>
<td>21</td>
</tr>
<tr>
<td>more in a row that you stopped doing some usual activities?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Did you ever seriously consider attempting suicide?</td>
<td>3</td>
<td>25</td>
<td>4</td>
<td>24</td>
</tr>
<tr>
<td>Did you make a plan about how you would attempt suicide?</td>
<td>3</td>
<td>25</td>
<td>3</td>
<td>25</td>
</tr>
</tbody>
</table>

*Five-day training compared to three-day training.* Although the five-day training is more in-depth in skills, education, and team building, there are many similarities between this training and the three-day training. Thus, scores were compared for first-time participants in each group to determine if one camp is more effective than the other. Results are shown in table 25. No significant differences were found.

Table 25

**Comparison of Five-Day and Three-Day Trainings, ANOVA Within Subjects Results**

<table>
<thead>
<tr>
<th>Scale</th>
<th>5-Day n</th>
<th>3-Day n</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td>13</td>
<td>7</td>
<td>.02</td>
<td>.974</td>
</tr>
<tr>
<td>Positive values</td>
<td>13</td>
<td>8</td>
<td>2.46</td>
<td>.115</td>
</tr>
<tr>
<td>Positive identity</td>
<td>12</td>
<td>8</td>
<td>1.08</td>
<td>.340</td>
</tr>
</tbody>
</table>
Hastings Regional Center findings. At the Hastings Regional Center (HRC) training, it was only possible to collect pretest and one week posttest data. Because participants leave the center at various times and their contact information is confidential, researchers could not collect six-month follow-up data. Therefore, a repeated measures t-test was performed. Results allowed for assumed sphericity were used in this case. Table 26 shows the results for each scale in the HRC training. There was a significant decrease in positive identity scores from the pretest to the posttest.

Table 26

<table>
<thead>
<tr>
<th>Scale</th>
<th>n</th>
<th>M1</th>
<th>M2</th>
<th>t</th>
<th>Sig</th>
</tr>
</thead>
<tbody>
<tr>
<td>Belonging</td>
<td>19</td>
<td>18.11</td>
<td>17.63</td>
<td>.60</td>
<td>.559</td>
</tr>
<tr>
<td>Positive Values</td>
<td>17</td>
<td>41.41</td>
<td>41.65</td>
<td>-.17</td>
<td>.893</td>
</tr>
<tr>
<td>Positive Identity</td>
<td>16</td>
<td>30.44</td>
<td>26.00</td>
<td>3.22</td>
<td>.006*</td>
</tr>
</tbody>
</table>

The individual scale items were analyzed. No individual items on the belonging scale were significant. Results are shown in table 27.
Table 27

*HRC Belonging Scale Individual Items - Repeated Measures t-test*

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>n</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>I really feel a part of my Improv team.</td>
<td>3.75</td>
<td>3.85</td>
<td>20</td>
<td>-.57</td>
<td>.577</td>
</tr>
<tr>
<td>I can freely express my opinion to members of my Improv team.</td>
<td>3.90</td>
<td>3.80</td>
<td>20</td>
<td>.44</td>
<td>.666</td>
</tr>
<tr>
<td>I feel a strong sense of loyalty to my Improv team.</td>
<td>3.42</td>
<td>3.37</td>
<td>10</td>
<td>.20</td>
<td>.848</td>
</tr>
<tr>
<td>My participation in my Improv team will benefit me greatly.</td>
<td>3.70</td>
<td>3.65</td>
<td>20</td>
<td>.271</td>
<td>.789</td>
</tr>
<tr>
<td>I can talk to my Improv team if I have personal problems.</td>
<td>3.30</td>
<td>3.00</td>
<td>20</td>
<td>1.30</td>
<td>.209</td>
</tr>
</tbody>
</table>

The results for individual items on the positive values scales are shown in table 28. The question, “It is against my values to have sex while I’m a teenager,” showed a significant decrease in scores.
Table 28

*HRC Positive Values Individual Items – Repeated Measures t-test*

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>n</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping other people.</td>
<td>3.65</td>
<td>3.75</td>
<td>20</td>
<td>-0.42</td>
<td>0.681</td>
</tr>
<tr>
<td>Helping to make the world a better place in which to live.</td>
<td>3.35</td>
<td>3.55</td>
<td>20</td>
<td>-0.75</td>
<td>0.464</td>
</tr>
<tr>
<td>Giving time or money to make life better for other people.</td>
<td>3.40</td>
<td>3.35</td>
<td>20</td>
<td>0.24</td>
<td>0.815</td>
</tr>
<tr>
<td>Helping to reduce hunger and poverty in the world.</td>
<td>3.37</td>
<td>3.68</td>
<td>19</td>
<td>-1.37</td>
<td>0.187</td>
</tr>
<tr>
<td>Helping to make sure that all people are treated fairly.</td>
<td>3.80</td>
<td>3.70</td>
<td>20</td>
<td>0.37</td>
<td>0.716</td>
</tr>
<tr>
<td>Speaking up for equality-everyone should have the same rights and opportunities.</td>
<td>4.05</td>
<td>3.84</td>
<td>19</td>
<td>0.64</td>
<td>0.531</td>
</tr>
<tr>
<td>Doing what I believe is right even if my friends make fun of me.</td>
<td>3.90</td>
<td>3.95</td>
<td>20</td>
<td>-0.17</td>
<td>0.867</td>
</tr>
<tr>
<td>Standing up for what I believe, even when it's unpopular to do so.</td>
<td>3.95</td>
<td>3.84</td>
<td>20</td>
<td>0.31</td>
<td>0.755</td>
</tr>
<tr>
<td>Accepting responsibility for my actions when I make a mistake or get in trouble.</td>
<td>4.00</td>
<td>4.05</td>
<td>19</td>
<td>-0.22</td>
<td>0.825</td>
</tr>
<tr>
<td>Doing my best even when I have to do a job I don't like.</td>
<td>3.90</td>
<td>4.00</td>
<td>20</td>
<td>-0.46</td>
<td>0.649</td>
</tr>
<tr>
<td>It is against my values to drink alcohol while I’m a teenager.</td>
<td>2.44</td>
<td>2.67</td>
<td>18</td>
<td>-0.72</td>
<td>0.481</td>
</tr>
<tr>
<td>It is against my values to have sex while I’m a teenager.</td>
<td>1.72</td>
<td>2.61</td>
<td>18</td>
<td>2.35</td>
<td>0.031*</td>
</tr>
</tbody>
</table>

Positive identity scales are shown in table 29. Three items showed a significant change.
Table 29

**HRC Positive Identity Individual Items – Repeated Measures t-test**

<table>
<thead>
<tr>
<th>Item</th>
<th>M1</th>
<th>M2</th>
<th>n</th>
<th>t</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>When things don’t go well for me, I am good at finding a way to make things better.</td>
<td>3.58</td>
<td>3.42</td>
<td>19</td>
<td>.72</td>
<td>.482</td>
</tr>
<tr>
<td>I have little control over the things that will happen in my life.</td>
<td>3.65</td>
<td>2.85</td>
<td>20</td>
<td>2.14</td>
<td>.046*</td>
</tr>
<tr>
<td>On the whole, I like myself.</td>
<td>4.26</td>
<td>3.95</td>
<td>19</td>
<td>1.24</td>
<td>.230</td>
</tr>
<tr>
<td>At times, I think I am no good at all.</td>
<td>3.79</td>
<td>2.68</td>
<td>19</td>
<td>3.24</td>
<td>.005*</td>
</tr>
<tr>
<td>All in all, I am glad I am me.</td>
<td>4.15</td>
<td>3.85</td>
<td>20</td>
<td>1.24</td>
<td>.230</td>
</tr>
<tr>
<td>I feel I do not have much to be proud of.</td>
<td>3.84</td>
<td>2.68</td>
<td>19</td>
<td>2.96</td>
<td>.008*</td>
</tr>
<tr>
<td>Sometimes I feel like my life has no purpose.</td>
<td>3.60</td>
<td>2.80</td>
<td>20</td>
<td>1.73</td>
<td>.10</td>
</tr>
<tr>
<td>When I am an adult, I’m sure I will have a good life.</td>
<td>4.06</td>
<td>4.06</td>
<td>18</td>
<td>.00</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Overall Trends**

*Belonging.* No changes were significant for the five-day training. At the three-day training, belonging scale scores decreased significantly between the pretest and one-week posttest and between the posttest and follow-up test six months later. Two individual items showed a significant change. Scores for “I really feel a part of my Improv team,” decreased between the pretest and follow-up test, and between the posttest and follow-up test. Scores for “I feel a strong sense of loyalty to my Improv team,” decreased from the pretest to follow-up test, and from the posttest to the follow-up test. There was no significant change in belonging for the HRC training participants.

*Positive values.* At the five-day training, there was no significant change in the positive values overall scale scores. However, three individual items showed significant changes. Scores for “Helping to make the world a better place in which to live,”
increased from the pretest to the one-week posttest, but then decreased back to the original level at the six month follow-up test. Scores for “Speaking up for equality – everyone should have the same rights and opportunities,” increased from the pretest to posttest and from the pretest to follow-up test. Finally, scores for “Standing up for what I believe in, even when it’s unpopular to do so,” increased from the pretest to the one-week posttest.

At the three-day training, the individual item, “It is against my values to have sex as a teenager,” dropped in scores from the pretest to follow-up test, and from the posttest to the follow-up test.

At the HRC training, scores for the individual item, “It is against my values to have sex as a teenager,” rose from the pretest to the posttest.

*Positive Identity.* No changes occurred in positive identity scores at the five-day training.

At the three-day training, one item showed a change. Scores for “At times, I think I am no good at all,” dropped from the pretest to the posttest, but then rose back to original levels at the follow-up test.

At the HRC training, the positive identity scale showed a decrease in scores from the pretest to posttest. Three individual items showed lower scores on the posttest than on the pretest. These items were “I have little control over the things that will happen in my life,” “At times, I think I am no good at all,” and “I feel I do not have much to be proud of.”

*Risky Behaviors.* For five-day training participants, alcohol use increased at a significant level between the pretest and follow-up test six months later. At the three-day
training, participants reported significantly fewer instances of having been in a recent physical fight. Risky behaviors were not surveyed at the HRC training.

*Differences between trainings.* For first-time participants, there was no difference in scale scores between the five-day and three-day trainings.
Chapter 5: Discussion

The purpose of this study was to investigate if Improv encourages positive youth development, and if so, to what extent. Four specific hypotheses were proposed, based on Knox’s (1998) findings that Improv boosted belonging and developmental assets (positive values and positive identity) and decreased risky behaviors in adolescents. Results will be discussed in relation to each of these three hypotheses.

Several hypotheses were not supported. However, data collection for this study was very challenging, and the sample size is small. Several significant changes were not necessarily meaningful changes (for example, if belonging scores dropped half a point, this may not really be meaningful). In addition, there are many variables that could affect scores, and these other variables could not be controlled in this study.

Hypothesis One: Belonging

The researcher hypothesized there would be an increase in sense of belonging over time. Specifically, it was hypothesized scores would be significantly higher at the posttest, and these higher scores would be maintained six months later. No changes were found at the five-day training or the HRC training. At the three-day training, belonging scale scores dropped significantly, as did scores on two individual scale items.

These findings run counter to Knox's (1998) qualitative findings. Knox concluded Improv boosted participants’ sense of belonging, and this belonging was a foundation for other positive, protective factors. Thus, this researcher hypothesized a sense of belonging was an important component in the overall theoretical framework of this study.

As these results are counter to previous research, perhaps the specific questions used in this survey did not capture the same sense of belonging participants were
referring to in Knox’s (1998) qualitative study. It is also possible the ten youth interviewed by Knox were not a representative sample of all Improv participants, and the majority of Improv participants do not gain the sense of belonging.

One explanation for the drop in scores considers the feelings participants may have before camp. Many of these youth have participated in Improv trainings or have heard about it from team members. These youth may be on an emotional “high” upon arriving at training (when the pretest is taken), and feel artificially connected to team members. The training itself may provide an intense feeling of belonging with team members. However, team members may experience a “crash” one week after training, when the reality of ‘normal’ life is again experienced and they are not staying in constant proximity to team members. Then, as the summer and school year progress, individual differences as well as time constraints may also wear away the sense of belonging originally felt at training. This phenomenon will be referred to as “post-training let-down” for the rest of the discussion.

HRC participants showed no change in belonging. This may explained because participants do not start on a “team,” and do not continue to interact with the same people after Improv or do any Improv activities. Their “team” at training may be completely different within a few days as youth come and go from the program. Thus, it would be difficult to develop any bond with those other youth.

Hypothesis Two: Internal Developmental Assets

The researcher hypothesized there would be an increase in the intensity of internal developmental assets (positive values and positive identity) over time from Improv
participants. It was hypothesized scores would be significantly higher at the posttest, and these higher scores would be maintained six months later.

For positive values at the five-day training, one individual item showed an increase from pretest levels to the posttest, but sank back to original levels at the follow-up test. Thus, there was no long-term change. Two other items, however, do support the hypothesis. The scores for the importance of “Speaking up for equality,” and “Standing up for what I believe in,” both rose from pretest to posttest, and scores did not decrease at the follow-up test. Thus, the five-day training boosts participants’ sense of social justice and this value stays higher over time. This was not a core focus of the Improv program. However, these results could mean program administrators are spending their time well when focusing on the way people treat others.

At the three-day training, there was no change in positive values scale scores. However, one item, “It is against my values to have sex as a teenager,” did show a drop in scores from both the pretest and posttest to the follow-up test. This result does not support hypothesis two.

At the HRC training, the same individual item, “It is against my values to have sex as a teenager,” showed an increase in scores between the pretest and posttest. This result does support hypothesis two. Overall, the results for the positive values scale are contradictory and thus inconclusive.

For the positive identity scale, the five-day training revealed no changes in scores. At the three-day training, one item dropped in score from pretest to posttest, but then rose back to original levels at the follow-up test. At the HRC training, three individual items
showed a significant drop in score from the pretest to posttest. Thus, positive identity results from all three trainings do no support hypothesis two.

Both Quinn (1995) and Roth et al. (1998) had found tentative positive outcomes for youth development programs in both behavior and attitudes. Thus, this research seems to counter their findings. Knox (1998) also found that Improv specifically increased youths’ confidence, autonomy, and sense of contributing to the community. Also, analysis of data from the five-day Nebraska Improv training in 1998 showed positive changes in similar developmental assets (positive values and positive identity).

Because there was no control group, it is impossible to know whether participants’ behavior values (thoughts about having sex during the teen years) changed more or less than other teens’ values would have. Thus, it may be all teens would show a similar decrease in behavior value scores as time passed.

Positive value and positive identity scores may have dropped between the posttest and follow-up test because of the same post-training let-down that could explain drops in belonging scores. Perhaps youth feel motivated to help others and improve the world during training, but upon going back home, they lose hope of making a difference. Perhaps Improv training may influence them to want to make a positive change in the world, but going back to school, which may be a less positive, encouraging, or safe environment, re-emphasizes the need to fit in with other peers and do what’s ‘cool’ rather than doing what is right or helping others.

Hypothesis Three: Risky Behaviors

The researcher hypothesized there would be a decrease in the number of risky behaviors over time for Improv participants. These scores were not measured one week
after the trainings, so the hypothesis was that reported behaviors would decrease six months after the trainings. Data was not collected from HRC participants.

The lack of significant results in this category contradicts Knox’s (1998) finding that Improv participants were less likely to participate in risky behaviors after training. It also contradicts overall research on youth development programs showing a general reduction in negative behaviors for involved youth (Quinn, 1995 and Roth et al., 1998).

**Hypothesis Four: Difference Between Five-Day and Three-Day Training**

No difference was found for first-time participants in belonging, positive values, or positive identity scores between the five-day and three-day trainings. In theory, the five-day training should cause more change because it is longer and involves more time for education, self-reflection, and team building than the three-day training. These results may show the extra time and expense of the five-day training is unwarranted, as it did not yield better results. However, the results are limited by the very small sample size, so further research is needed.

Most pretest means showed little or no participation in risky behaviors before the training. Perhaps youth who already have low levels of risky behavior are more likely to participate in Improv. Thus, it would be extremely difficult for their risky behaviors to decrease significantly. This could explain the lack of significant results.

**Implications**

Many significant results were not necessarily large or meaningful changes. This study had challenging data collection, a very small sample size, and many variables could
not be controlled. While this study may not support the hypotheses, anecdotal evidence and past research does support the hypotheses.

**Belonging.** It is of particular concern that results showed virtually no significant boost in belonging scores, and even revealed decreased belonging scores. A foundation of theory behind the Improv program is that a high sense of belonging can provide other protective factors for youth (Knox, 1998). Thus, program administrators may want to explore different ways to build team unity during trainings.

To counteract decreases in belonging scores after the trainings, teams should be provided with recommendations and strategies to maintain any sense of belonging that may be felt at the training itself. This is a challenge often voiced by Improv teams, as it is difficult for high school and middle school students and teachers or community advisors to find and commit to common meeting time. Perhaps trainers could work with teams during training to establish a rehearsal schedule that allows as many participants as possible to meet regularly. Trainers should also provide adult advisors tools for facilitating team-building activities and discussions to continually foster the bonds between team members.

**Internal developmental assets.** To counteract decreases in developmental asset scores (positive values and positive identity) after the trainings, follow-up strategies may also be needed. Providing team advisors with activity and discussion ideas around the issues addressed in the survey may help improve or maintain attitudes and beliefs. The Search Institute provides a selection of materials designed for building developmental assets. Perhaps program administrators could work with the Search Institute to develop a
plan for increasing or maintaining the internal developmental assets (positive values and positive identity) targeted in the program objectives.

*Risky behaviors.* The overall goal of the Improv program is to decrease risky behaviors in participants. Because results show little change, and some change in a negative direction, it would be tempting to add more specific alcohol-prevention components to the training, for example. However, the theory behind youth development programs hinges on building positive skills rather than targeting specific risky behaviors. Thus, returning to targeting specific risky behaviors would be a return to the ineffective programs of the past. The theory behind this research suggests that the best way to decrease risky behaviors is to find better ways to boost developmental asset and belonging scores.

*Overall implications for Improv program.* Overall, results were inconsistent. While a few positive changes were found, some negative results were discovered. Before any conclusions can be drawn, more research is needed. Administrators need to investigate ways to improve the data collection. Data needs to be collected at all trainings and posttest and follow-up surveys must be mailed out to increase the number of complete data sets collected. It may be possible to mail follow-up surveys, which have the lowest return rate, to advisors so they could administer these tests during a team meeting. Perhaps being given a designated time to complete these surveys would improve the likelihood youth would complete and return the surveys. However, this would raise concern about participants feeling they cannot refuse to participate without any negative consequences. Thus, advisors would need to be directed about how to administer the
survey ethically. It would be ideal to offer compensation for the surveys, but it is beyond the budget of the program to do so.

To create a more realistic pretest, perhaps these surveys could be mailed to team advisors to administer before arriving at training. Typing/publishing errors need to be eliminated from the survey instrument (e.g. making sure the example question actually shows an answer circled so as not to confuse participants). A question should be added to the follow-up survey to ascertain whether youth are still actively participating in their Improv teams. New questions or scoring systems may be needed to increase the sensitivity of the instrument. Finally, data could be collected from a control group to compare with Improv participant data.

Even considering the low numbers and inconsistent results, there are some tentative conclusions that could be suggested from this data. Because some results were negative, program administrators need to consider the possibility that the Improv program is doing more harm to youth than good. Perhaps the views presented at training are not in the best interest of participants. Maybe trainings are such a sheltered retreat that going back to “real life” at home is even harder for participants. If this high, followed by a crash, creates deflated attitudes in the long term, perhaps training should be made more ‘realistic.’ However, considering the low numbers and inconsistent results of this survey, and Knox’s (1998) positive research results, termination of the program is not justified without further research. In the mean time, administrators can explore ways to improve long-term positive effects.

Specific results may be of some use. For example, sense of belonging decreased after the three-day training, but not at the other trainings. Thus, more team-building
activities could be incorporated into the three-day training. As suggested earlier, perhaps the best way to support and maintain positive long-term results is to provide team advisors with tools and ideas to maintain positive factors in team members. There may be education sessions, team-building activity ideas, and discussion starters to help advisors encourage youth to maintain a strong sense of team belonging and increase positive values, etc.

_Implications for youth development programs._ Previous research on youth development programs showed only tentative support for these programs. This study showed few and inconsistent results. Thus, more research is needed to determine the effectiveness of the programs overall and to discover which types of programs work the best.

_Suggestions for further research._

As stated earlier, Improv administrators need to work to improve their data collection and analysis methods. In addition, more youth development programs need to be evaluated to discover whether the programs overall have long-lasting positive effects and which types of programs or program components are the most successful.


Appendix A

IRB Approval Form
January 22, 2010

Denise Craig
Department of Child, Youth and Family Studies

Julie Johnson
Department of Child, Youth and Family Studies
135 MABL UNL 68588-0236

IRB Number: 20100110308 EX
Project ID: 10308
Project Title: A Theatre-Based Youth Development Program: Impact on Belonging, Developmental Assets, and Risky Behaviors

Dear Denise:

This letter is to officially notify you of the approval of your project by the Institutional Review Board (IRB) for the Protection of Human Subjects. It is the Board’s opinion that you have provided adequate safeguards for the rights and welfare of the participants in
this study based on the information provided. Your proposal is in compliance with this institution’s Federal Wide Assurance 00002258 and the DHHS Regulations for the Protection of Human Subjects (45 CFR 46) and has been classified as exempt category 4.

You are authorized to implement this study as of the Date of Final Approval: 01/22/2010. This approval is Valid Until: 06/20/2011.

We wish to remind you that the principal investigator is responsible for reporting to this Board any of the following events within 48 hours of the event:

- Any serious event (including on-site and off-site adverse events, injuries, side effects, deaths, or other problems) which in the opinion of the local investigator was unanticipated, involved risk to subjects or others, and was possibly related to the research procedures;
- Any serious accidental or unintentional change to the IRB-approved protocol that involves risk or has the potential to recur;
- Any publication in the literature, safety monitoring report, interim result or other finding that indicates an unexpected change to the risk/benefit ratio of the research;
- Any breach in confidentiality or compromise in data privacy related to the subject or others; or
- Any complaint of a subject that indicates an unanticipated risk or that cannot be resolved by the research staff.
This project should be conducted in full accordance with all applicable sections of the IRB Guidelines and you should notify the IRB immediately of any proposed changes that may affect the exempt status of your research project. You should report any unanticipated problems involving risks to the participants or others to the Board.

If you have any questions, please contact the IRB office at 472-6965.

Sincerely,

Becky R. Freeman, CIP

for the IRB
Appendix B

Training Participation Release Form
STATE OF NEBRASKA

IMPROVISATIONAL THEATRE TRAINING 1999

LEADERSHIP CENTER

PARENT OR GUARDIAN AGREEMENT WAIVER

OF LIABILITY AND INDEMNIFICATION

(18 YEARS OLD AND YOUNGER)

________________________________ has my permission to participate in the Improvisational Theatre Training, June 4-10, 1999 and/or June 28-July 2, 1999, Continued Development Training. I understand that transportation to and from the training site is not the responsibility of the Nebraska Department of Health and Human Services.

The undersigned parent and natural guardian or legal guardian does hereby represent that he/she is, in fact, acting in such capacity and agrees on behalf of the participant and his/her executors, administrators, heirs, next of kin, successors, and assigns to:

a. waive, release and discharge from any and all liability including personal injury, property damage or theft, or actions of any kind which hereafter accrue to the participant and his/her estate the Nebraska Department of Health & Human Services and its officers, agents and employees; and
b. Indemnify and hold harmless the Nebraska Department of Health & Human Services and its officers, agents and employees from and against any and all liabilities and claims made by other individuals or entities as a result of the minor’s participation in the above named activity.

Parent or Guardian

Date

Home address:

City & Zip:

Telephone: (H)_________ (W)_________

This release and waiver shall be construed broadly to provide a release and waiver to the maximum extent permissible under applicable law.

PLEASE NOTE

Parents: Students 18 years of age and younger cannot be admitted to camp without having completed this form and the accompanying Health Form.

Students: Once completed, please return these forms as soon as possible to your Improv Advisor.

THANK YOU!
Appendix C

Forty Developmental Assets
Forty Developmental Assets

**External Assets**

Support
- Family Support
- Positive Family Communication
- Other Adult Relationships
- Caring Neighborhood
- Caring School Climate
- Parent Involvement in Schooling

Empowerment
- Community Values Youth
- Youth as Resources
- Service to Others
- Safety

Boundaries and Expectations
- Family Boundaries
- School Boundaries
- Neighborhood Boundaries
- Adult Role Models
- Positive Peer Influences
- High Expectations

Constructive Use of Time
- Creative Activities
- Youth Programs
- Religious Community
- Time at Home

**Internal Assets**

Commitment to Learning
- Achievement Motivation
- School Engagement
- Homework
- Bonding to School
- Reading for Pleasure

Positive Values
- Caring
- Equality and Social Justice
- Integrity
- Honesty
- Responsibility
- Restraint

Social Competence
- Planning and Decision Making
- Interpersonal Competence
- Cultural Competence
- Resistance Skills
- Peaceful Conflict Resolution

Positive Identity
- Personal Power
- Self Esteem
- Sense of Purpose
- Positive View of Personal Future
Appendix D

Complete Survey Instrument
This questionnaire gathers information that helps us see how the Improv program is doing. The information helps us judge how well the Improv program met its objectives and whether participation in Improv helps individual team members.

Please answer all the questions honestly. Your answers are confidential and anonymous. Please, do not put your name on this questionnaire. We ask for your date of birth so the computer can match this questionnaire with the follow-up questionnaires.

You will be mailed a short questionnaire the week following this training retreat, and again in about six months.

It is very important that we get all follow-up questionnaires answered by all Improv participants. When you get the questionnaires in the mail, be sure to return it to us as directed.
Birth date (month/day/year)

_____/_____/________

What is your sex?  
1. Female  
2. Male

How long have you been involved in Improv?
1. Less than a year
2. 1 year
3. 2 or more years
4. I’m brand new

Which Improv camps have you attended?
1. Full training (5 day) only
2. Continued Development training (3 day) only
3. Both the Full training and the Continued Development Training
4. This is my first camp

How would you describe yourself?
1. Asian or Pacific Islander
2. Black - non Hispanic
3. Hispanic
4. Native American or Alaskan Native
5. Other __________
6. White - non Hispanic

How often do you wear a seat belt when driving?
1. Never
2. Rarely
3. Sometimes
4. Most of the time
5. Always
6. I don’t drive

How often do you wear a seat belt when riding in a car or other vehicle driven by someone else?
1. Never
2. Rarely
3. Sometimes
4. Most of the time
5. Always

During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?
1. 0 times
2. 1 time
3. 2 or 3 times
4. 4 or 5 times
5. 6 or more times
6. I don’t drive

During the past 30 days, how many times did you ride in a car or other vehicle
driven by someone who had been drinking alcohol?
1. 0 times
2. 1 time
3. 2 or 3 times
4. 4 or 5 times
5. 6 or more times

During the past 6 months, how many times were you in a physical fight?
1. 0 times
2. 1 time
3. 2 or 3 times
4. 4 or 5 times
5. 6 or 7 times
6. 8 or 9 times
7. 10 or 11 times
8. 12 or more times

During the past 6 months, did you ever feel so sad or hopeless almost every day for two weeks or more in a row that you stopped doing some usual activities?
1. Yes  2. No

During the past 6 months, did you ever seriously consider attempting suicide?
1. Yes  2. No

During the past 6 months, did you make a plan about how you would attempt suicide?
1. Yes  2. No

During the past 30 days, on how many days did you smoke cigarettes?
1. 0 days
2. 1 or 2 days
3. 3 to 5 days
4. 6 to 9 days
5. 10 to 19 days
6. 20 to 29 days
7. all 30 days

During the past 30 days, did you use chewing tobacco, such as Redman, Levi Garrett, Beechnut, or snuff such as Skoal, Skoal Bandits, or Copenhagen?
1. No, I did not use chewing tobacco or snuff during the last 30 days.
2. Yes, chewing tobacco only
3. Yes, snuff only
4. Yes, both chewing tobacco and snuff
The next two questions ask about drinking alcohol. This includes drinking beer, wine, wine coolers, and liquor such as rum, gin, vodka, or whiskey. For these questions, drinking alcohol does not include drinking a few sips of wine for religious purposes.

During the past 30 days, on how many days did you have at least one drink of alcohol?
1. 0 days
2. 1 or 2 days
3. 3 to 5 days
4. 6 to 9 days
5. 10 to 19 days
6. 20 to 29 days
7. all 30 days

During the past 30 days, on how many days did you have 5 or more drinks of alcohol in a row, that is, within a couple of hours?
1. 0 days
2. 1 or 2 days
3. 3 to 5 days
4. 6 to 9 days
5. 10 to 19 days
6. 20 to 29 days

On each scale circle the appropriate response. For example:

- I really feel a part of my team.
- I can freely express my opinion to the members of my team.
- My team has worked out a way to solve conflict within the group.
- The purpose of our team is clear.
- I feel a strong sense of loyalty to my team.
- My participation in my team will benefit me greatly.
- I understand what my team expects of me.
disagree
nor disagree
agree

My team has agreed upon acceptable behaviors for the group.

Our group has a good relationship with our advisor.

I can talk to my team if I have personal problems.

The purpose of our team is important.

At school I try as hard as I can to do my best work.

It bothers me when I don’t do something well.

I don’t care how I do in school.

It is against my values to drink alcohol while I am a teenager.

It is against my values to have sex while I am a teenager.

When things don’t go well for me, I am good at finding a way to make things better.

I have little control over the things that will happen in my life.

On the whole, I like myself.

At times, I think I am no good at all.
All in all, I am glad I am me.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

I feel I do not have much to be proud of.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

Sometimes I feel like my life has no purpose.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>

When I am an adult, I’m sure I will have a good life.

<table>
<thead>
<tr>
<th>Strongly disagree</th>
<th>Disagree</th>
<th>Neither agree</th>
<th>Agree</th>
<th>Strongly agree</th>
</tr>
</thead>
</table>
How important is each of the following to you in your life?

<table>
<thead>
<tr>
<th></th>
<th>Very</th>
<th>somewhat</th>
<th>neither important</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>Helping other people</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Helping to make the world a better place in which to live.</td>
<td></td>
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<td></td>
<td></td>
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</tr>
<tr>
<td>Giving time or money to make life better for other people.</td>
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<td></td>
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<td></td>
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<tr>
<td>Helping to reduce hunger and poverty in the world.</td>
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<tr>
<td>Helping to make sure that all people are treated fairly.</td>
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<tr>
<td>Speaking up for equality (everyone should have the same rights and opportunities).</td>
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<td></td>
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</tr>
<tr>
<td>Doing what I believe is right even if my friends make fun of me.</td>
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<td></td>
<td></td>
<td></td>
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<tr>
<td>Standing up for what I believe, even when it’s unpopular to do so.</td>
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<tr>
<td>Accepting responsibility for my actions when I make a mistake or get in trouble</td>
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<td></td>
<td></td>
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<tr>
<td>Doing my best even when I have to do a job I don’t like.</td>
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<td></td>
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</tr>
</tbody>
</table>
Think about the people who know you well. How do you think they would rate you on each of these?

Thinking through the possible good and bad results of different choices before I make decisions.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
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</tbody>
</table>

Being good at planning ahead.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
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</table>

Caring about other people’s feelings.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
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</table>

Feeling really sad when one of my friends is unhappy.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>

Being good at making and keeping friends

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>low</td>
<td>nor low</td>
<td>high</td>
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<td>high</td>
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</tbody>
</table>

Respecting the values and beliefs of people who are of a different race than I am.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
<td>low</td>
<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>

Knowing a lot about people of other races.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
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<th>very</th>
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</thead>
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<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>

Enjoying being with people who are of a different race than I am.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
</tr>
</thead>
<tbody>
<tr>
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<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>

Knowing how to say “no” when someone wants me to do things I know are wrong or dangerous.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
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<td>high</td>
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</tr>
</tbody>
</table>

Staying away from people who might get me in trouble.

<table>
<thead>
<tr>
<th>People who know me well would rate me…</th>
<th>Very</th>
<th>somewhat</th>
<th>neither high</th>
<th>somewhat</th>
<th>very</th>
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<td>low</td>
<td>nor low</td>
<td>high</td>
<td>high</td>
<td>high</td>
</tr>
</tbody>
</table>

I intend to remain involved with my Improv team when I get home.

<table>
<thead>
<tr>
<th>I intend to remain involved with my Improv team when I get home.</th>
<th>strongly</th>
<th>disagree</th>
<th>neither agree</th>
<th>agree</th>
<th>strongly disagree</th>
<th>agree</th>
</tr>
</thead>
</table>
Appendix E

Research Hypotheses with Survey Items
1. For Improv participants, there will be an increase in sense of belonging.

   1. I really feel a part of my Improv team.
   2. I can freely express my opinion to the members of my Improv team.
   3. I feel a strong sense of loyalty to my Improv team.
   4. My participation in my Improv team will benefit me greatly.
   5. I can talk to my Improv team if I have personal problems.

2. For Improv participants, there will be an increase in the intensity of internal developmental assets.

   I. There will be an increase in positive values.

   Words in parenthesis indicate the specific developmental asset addressed by the question.

   1. Helping other people. (caring)
   2. Helping to make the world a better place in which to live. (caring)
   3. Giving time or money to make life better for other people. (caring)
   4. Helping to reduce hunger and poverty in the world. (equality and social justice)
   5. Helping to make sure that all people are treated fairly. (equality and social justice)
   6. Speaking up for equality—everyone should have the same rights and opportunities. (equality and social justice)
   7. Doing what I believe is right even if my friends make fun of me. (integrity)
   8. Standing up for what I believe, even when it's unpopular to do so. (integrity)
   9. Accepting responsibility for my actions when I make a mistake or get in trouble. (responsibility)
   10. Doing my best even when I have to do a job I don't like. (responsibility)
   11. It is against my values to drink alcohol while I'm a teenager. (restraint)
   12. It is against my values to have sex while I'm a teenager. (restraint)

   II. There will be an increase in positive identity.

   1. When things don't go well for me, I am good at finding a way to make things better. (personal power)
   2. I have little control over the things that will happen in my life. (personal power)
   3. On the whole, I like myself. (self-esteem)
   4. At times, I think I am no good at all. (self-esteem)
   5. All in all, I am glad I am me. (self-esteem)
   6. A feel I do not have much to be proud of. (self-esteem)
   7. Sometimes I feel like my life has no purpose. (sense of purpose)
   8. When I am an adult, I'm sure I will have a good life. (positive view of personal future)
3. For Improv participants, there will be a decrease in the number of risky behaviors.

1. During the past 30 days, how many times did you drive a car or other vehicle when you had been drinking alcohol?
2. During the past 6 months, how many times were you in a physical fight?
3. During the past 6 months, did you ever seriously consider attempting suicide?
4. During the past 30 days, on how many days did you smoke cigarettes?
5. During the past 30 days, on how many days did you have at least one drink of alcohol?