Participation in Positive Youth Development Programs and 4-H: Assessing the Impact on Self-Image in Young People

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PARTICIPATION IN POSITIVE YOUTH DEVELOPMENT PROGRAMS AND 4-H:
ASSESSING THE IMPACT ON SELF-IMAGE IN YOUNG PEOPLE

by
Karen DeeAnn Bloomquist

A THESIS

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PARTICIPATION IN POSITIVE YOUTH DEVELOPMENT PROGRAMS AND 4-H:
ASSESSING THE IMPACT ON SELF-IMAGE IN YOUNG PEOPLE

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The purpose of this study was to identify relationships between youth involvement in 4-H and self-image. The study also explored whether there were relations between self-image and development of the 5 C’s (confidence, competence, caring, connection and character) of Positive Youth Development. The study focused specifically on the differences in self-image between youth who participate in 4-H and youth who do not.

Participants included 180 youth from grades eight through twelve in the state of Nebraska. Demographic responses indicated that 47% of respondents were male and 53% were female. Approximately 72% of the respondents were not participants in a 4-H program, while 28% were 4-H participants.

Indices were formed to measure each of the 5 C’s. Three indices were also created in order to measure global self-image and its components, which for the purposes of this study included physical appearance and personality/social acceptance. Descriptive statistics, independent samples t-tests, and Pearson’s correlations were used to analyze the data.
Results of this study did not indicate a significant relationship between participation in 4-H and self-image. Significant correlations were found between Competence and self-image, and between Caring and self-image, but no other significant correlations were found between the 5 C’s and self-image.

Although this study found no significant direct relationship between participation in 4-H and self-image, the results do indicate a relationship between development of the 5 C’s and self-image in young people. The data suggest that 4-H can still be a useful tool in helping to develop a positive self-image in youth, and that it is important to provide program options which emphasize development of each of the 5 C’s and positive self-image.
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CHAPTER 1

Introduction

Many adolescents struggle with the issues associated with a negative self-image. Self-image describes the conception that one has of one's self, including an assessment of physical qualities (i.e. weight, height, beauty), personality, and personal worth. During adolescence especially, one's physical appearance (real or perceived) has a large influence on one's self-image (Levin, 2009). According to ter Bogt, van Dorselaer, Monshouwer, Verdurmen, Engels, and Vollebergh (2006), body image may be the most important aspect of a teen's self-image.

There is a great deal of information available on teen self- and body-image in general, much of which focuses specifically on females. According to Levine and Smolak (2004), “we do know that approximately 40 – 70% of adolescent girls are dissatisfied with two or more aspects of their body. ...In various developed countries, between 50% and 80% of adolescent girls would like to be thinner” (p. 74).

Negative body- and self-image can have serious effects on an adolescent's quality of life (ter Bogt et al., 2006). ter Bogt, et al. (2006) assert that a person's self-image influences the choices that one makes, including the types of social activities one engages in, and that negative self-image can also lead to problems such as depression (p. 29). There is some evidence to suggest that teens with low self-image are more likely to engage in negative behaviors, such as drug abuse (ter Bogt, et al., 2006, p. 30). For this
reason, understanding the factors that surround self-image in teens is of prime importance.

What, then, affects self-image in adolescents? Family life, such as the relationship a child has with his or her parents, siblings and extended family, and the presence or absence of one or both parents have been found to be related to self-image (Zaitsoff, 2009). So has the relationship a youth has with his or her peers, both in and out of a school setting (Zaitsoff, 2009). There are likely many other factors that also influence a child's self-image; one that has not been explored very in-depth is participation in Positive Youth Development programs, specifically 4-H.

4-H is a nationwide organization for youth (defined as young people between the ages of 5 and 19), administered by the Cooperative State Research, Education and Extension Service of the United States Department of Agriculture, with the mission of “engaging youth to reach their fullest potential while advancing the field of youth development”(Ohio State University, 2003). The goal of 4-H is to develop citizenship, leadership, and life skills of youth through mostly experiential learning programs. Though 4-H has traditionally been perceived as primarily an agriculturally focused organization, the program today focuses largely on citizenship, healthy living, and science, engineering and technology (National 4-H Council, 2009).

Participation in 4-H has been shown to have a positive impact on youth, both in terms of development of practical life skills, and in terms of social development.
Specifically, involvement in 4-H and other similar Positive Youth Development programs has been shown to correlate with a development of the “5 C's” (Lerner, 2005). The 5 C's are a set of constructs (Lerner, 2009) which measure various aspects of a person's social development; the 5 C's include:

- Competence
- Caring
- Confidence
- Connections
- Character

A 6th C has also been suggested, which is Contribution (Lerner, 2009). Contribution measures the results of the 5 C's in terms of how one gives back to his or her community as a result of the 5 C's.

Theoretical Model and Significance

The theoretical model for this study was based on a positive youth development approach (Hendricks, 1998). The positive youth development approach states that youth programs, such as 4-H, promote competence, confidence, caring, connectedness and a strong sense of character (the 5 C’s), and contribution to society. By examining the relationship between involvement in 4-H and the 5 C's, along with the relationship between participation in positive youth development programs and self-image, a greater
understanding of how self-image affects the 5 C's and vice-versa can be achieved. (See Figure 1.)

![Figure 1: Positive Youth Development Involvement Model](image)

**Statement of the Purpose**

The purpose of this study is to identify relationships between involvement in 4-H and self-image, and investigate whether involvement in the 4-H program significantly affects adolescents' images of themselves. The study will focus specifically on how the self-image and development of the 5 C's in those students who participate in 4-H differ from those who are not in 4-H.

**Hypotheses**

There are two hypotheses which will be used to guide this study.

$H^1$: 4-Hers will score higher on positive self-image than non-4-Hers.

$H^2$: There is a positive relationship between self-image and each of the 5 C's.
Definition of Terms

For this study terms are defined as follows:

1. Positive Youth Development – development that occurs from an intentional process that promotes positive outcomes for young people by providing opportunities, relationships and the support to promote outcomes of competence, character, caring, confidence, connections, and contribution (Lerner, 2006).

2. Self-image – the conception that one has of one's self, including an assessment of physical qualities (ie. weight, height, beauty), personality, and personal worth.

3. Drive for Thinness – an excessive concern with dieting, preoccupation with weight, and fear of weight-gain.

4. Body Dissatisfaction – the subjective experience of being a bit or much too fat (ter Bogt et al., 2006).

5. Positive Identity – personal power, self-esteem and a positive view on the future including a sense of personal power and attitudes and behaviors that will ensure future skills.


7. Character – a personal values competence demonstrating the evidence of caring and responsibility (Lerner, 2005).


9. Connection - “Positive bonds with people and institutions that are reflected in
bidirectional exchanges between the individual and peers, family, school, and community in which both parties contribute to the relationship” (Lerner, 2005, p. 23).

10. Competence – a positive feeling about one's actions and performance in various areas of one's life, including academic, social, vocational and cognitive areas (Lerner, 2005).

**Statement of Limitation**

This study was conducted as part of a larger, nationwide study by Tufts University and other cooperating state universities. Thus, the Nebraska study was largely limited to using the methods and data collection protocols put forth by Tufts University. The nationwide study did not specifically measure self-image. As such, a theory-based measure for self-image had to be developed for this study based on information culled from the data. Second, the method for selecting and recruiting participants allowed for those who were selected to participate to freely choose whether or not to answer any question or questions in the survey. This may have been a limitation in that, if many participants chose not to answer certain questions, the sample size of data collected from those questions would have been reduced.

Also, ages of participating youth ranged from 11 years to 18 years. This broad age range covers a large developmental span that may have implication for the level of
understanding of the measures. Finally, the sample for this study was primarily limited to rural areas, thus limiting the way the findings could be generalized.
Positive Youth Development

Positive Youth Development (PYD) is defined as:
Development that is healthy and productive for both the youth and their families.
Positive youth development occurs from an intentional process that promotes positive outcomes for young people by providing opportunities, choices, relationships, and the support necessary for youth to fully participate in families and society. Youth development occurs in families, peer groups, schools, neighborhoods and communities (University of California, 2009).

Positive Youth Development programs are programs which are specifically designed to further the development of positive development in adolescents, as defined above. According to the National Conference of State Legislatures (NCSL), PYD programs have several common, defining goals, including:

− promoting positive relationships with peers
− emphasizing youths’ strengths
− providing opportunities to learn healthy behaviors
− connecting youth with caring adults
− empowering youth to assume leadership roles in programs, and
− challenging youth in ways that build their confidence (National Conference of State Legislatures, 2010).

According to Roth and Brooks-Gunn (2003), the definition of “positive youth development” includes programs that prevent adolescents from engaging in risky
behaviors as well as encouraging youth to develop skills and competencies. They also
describe three major characteristics of PYD programs: goals, activities and atmosphere.
Goals of positive youth development programs “promote positive development, even
when seeking to prevent problem behaviors” (Roth & Brooks-Gunn, 2003, p.97).
According to Roth and Brooks-Gunn (2003), activities should not only focus on
preventing negative behaviors, but should also focus on developing positive behaviors in
youth. Activities give the youth a chance to broaden their horizons and to learn to think in
different ways. Leaders of positive youth development programs must also provide an
atmosphere of hope, which “conveys the adults’ belief in youth as resources to be
developed rather than problems to be managed” (p. 97). Roth and Brooks-Gunn (2003)
describe these three characteristics of a positive youth development program as being
crucial to the program's success.

Plenty of research exists on Positive Youth Development programs and their
effects on the adolescents who participate in such programs. A 2005 study by Morrissey
and Werner-Wilson investigated the relationship between out-of-school activities and
Positive Youth Development. The study found that participation in structured
extracurricular activities and youth development programs influenced their social
behaviors, such that youth who were involved in PYD or YD programs tended to show
more “pro-social” behaviors, such as community involvement and volunteerism.
Interestingly, family seemed to have little influence on development of “pro-social” behaviors.

Positive Youth Development programs can take many forms. Some different types of PYD programs include after-school programs, national clubs such as 4-H and Boy/Girl Scouts, and even sports teams and church youth groups (National Conference of State Legislatures, 2010). Below are studies that illustrate the role of these different programs on youth outcomes.

*After-school Programs*

After-school programs have been shown to have a positive effect on youth who participate in them, as indicated in a 2003 study done by Greenberg, Weissberg, O’Brien, Zins, Fredericks, Resnik, and Elias. The authors of this study state that a main goal for schools is to educate students to be knowledgeable, responsible, socially skilled, healthy, caring, and contributing members of their community. According to the authors, this mission is supported by the growing number of school-based prevention and youth development programs. However, the authors further state that the impact of these programs is limited because of insufficient coordination with other components of school operations and inattention to implementation and evaluation factors necessary for strong program impact and sustainability (Greenberg et al., 2003).

Another study of interest regarding after-school programs was done by Kahne, Nagaoka, Brown, O’Brien, J., Quinn, and Thiede (2001). In the study, a group of 125
sixth- to tenth-grade African American students were surveyed, as well as groups of students who participated in three other after-school youth development programs. Findings suggested that not all the after-school programs offered many opportunities for youth beyond what they received in the classroom, but that the vast majority of the programs provided a more desirable context for learning than that found in the classroom. This suggests that after-school youth development programs are an important educational tool, in that they provide opportunities for learning above and beyond what youth typically receive in the classroom.

Further studies have shown that, as well as providing additional educational benefits, after-school programs can have a positive impact on how youth view potentially harmful behaviors, such as drug use. This was aptly illustrated in a study done by Tebes, Feinn, Vanderploeg, Chinman, Shepard, Brabham, Genovese, and Connell (2007). This study examined the effectiveness of an after-school PYD program in an urban setting on the prevention of adolescent substance abuse. A comprehensive PYD intervention that included delivery of an 18-session curriculum previously found to be effective in preventing substance use in school settings was adapted for use in urban after-school settings. The intervention emphasizes adolescents’ use of effective decision-making skills to prevent drug use. Assessments of substance use attitudes and behaviors were conducted at program entry, program completion, and at the 1-year follow-up to program entry. The results of the study showed that adolescents who received the intervention
were much more likely to view drugs as harmful at the end of the program, and that they showed less increase in drug and alcohol use one year after beginning the program. Clearly, after-school programs provide important services and opportunities to many youth. However, they are not the only type of Positive Youth Development program. Another type of PYD program is national youth organizations or clubs such as 4-H.

4-H

4-H is a very popular Positive Youth Development program in the United States, and while the effects of 4-H participation on youth were always thought to be positive, the 4-H Study of Positive Youth Development, as described by Jelicic, Bobek, Phelps and Lerner (2007), has made new strides in measuring that impact. The 4-H Study of Positive Youth Development was developed by researchers at Tufts University to look at the effects of youth development organizations, such as 4-H, on the lives of adolescents. The study assesses whether contribution and risk behaviors are influenced by an adolescent’s participation in positive youth development programs. The first two waves of the study focus on fifth- and sixth-graders. The youth were given in-depth questionnaires, asking about their involvement in PYD programs, as well as various other aspects of their lives. Results of the study showed that participation in PYD programs correlated to higher perceived contributions and lower risk behaviors (Jelicic et al., 2007).
While the Tufts study is by far the most comprehensive, other studies of 4-H also exist. For example, in a study by Windsor (1973), a survey of 4-H and non-4-H youth from ten urban and ten rural counties was taken to investigate the extent and predictors of drug use. The study focused on comparing 4-H youth with non-4-H youth, to see whether there was an observable correlation between participation in 4-H and substance usage in adolescents. The result was a negative correlation between participation in 4-H and substance use. This result was later replicated by Gestdottir, Lewin-Bizan, Von Eye, Lerner and Lerner (2009), in which researchers used the 4-H Study of Positive Youth Development to assess the possible connection between participation in PYD programs (in this case, 4-H), and risk behaviors. The study found a negative correlation between participation in Positive Youth Development programs and risk behaviors, which would seem to indicate that youth who are involved in such programs are less likely to engage in risky behaviors, such as drug and alcohol use.

There also exists strong evidence that participation in 4-H not only helps prevent adolescents from engaging in risky behaviors, but also contribute to their becoming productive citizens who contribute to their community. For example, a 1999 dissertation by Spoto looked at “the perceived influence of selected factors on the decision of Louisiana 4-H teens and non-4-H teens to volunteer” (Spoto, 1999). In this dissertation, Spoto observed that volunteerism had never been strong in the parish 4-H program with which he worked. A survey was designed to identify factors
influencing teens to volunteer. Findings from the study paralleled findings from a 1996 survey, conducted for the Independent Sector, that showed that 4-H youth are likely to volunteer in their community.

Further, there is evidence that participation in 4-H can positively affect youth self-esteem. In a 1991 study by J.P. Miller, the author looked at 4-H as a nationwide program, and how the 4-H program evolved from teaching youth about agriculture and home economics to becoming a program that seeks to aid in the development of positive character traits in those youth, to help them become productive members of society. The purpose of the study was to examine the self-perceived competency – “developing knowledge and subject matter skills” (Miller, 1991, p. 68), coping – “dealing with stresses” (Miller, 1991, p. 68) and contributory life skills – “social skills which allow self and others to overcome situational and/or personal barriers” (Miller, 1991, p. 68) in youth. The study also aimed to ascertain whether participation in 4-H had any observable effect on the development of those life skills by comparing 4-H youth with non-4-H youth. Though the study did not find any significant difference in self-perceived competency, coping and contributory life skills between 4-Hers and non-4-Hers, the study did find that participation in 4-H tends to have a positive effect on an adolescent's perceived development of those life skills, and it was also found to have a positive influence on youth self-esteem. No study which specifically measures relationships between 4-H and self-image or body-image in youth has been conducted.
The 5 C's

In the above study by Miller (1991), one of the life skills described was “competency”. At the time that the Miller study was published, competency had not yet been associated as one of the 5 C's of positive youth development, but later R. Lerner and J. Lerner defined the results of positive youth development programs as 5 C’s: caring, character, competence, confidence and connection. In a 2005 article by Lerner and Lerner, they discussed results from Wave 1 of the 4-H Study of Positive Youth Development. In Wave 1 of the study, the focus was on fifth-grade students. Over 1,700 youth from across the country were surveyed, along with 1,117 of their parents. The results of the survey revealed how participation in PYD programs was linked to community contribution and participation in other youth development (YD) programs. The data from the results of the survey were used in structural equation modeling procedures to indicate evidence of five factors (the 5 C’s) of PYD (caring, character, competence, confidence and connection). Results from Wave 1 indicated that youth participating in PYD programs tended to score higher on the 5 C’s than non-participating youth.

Self-Image

Self-image is described by ter Bogt and colleagues (2006) as the conception that one has of oneself, including an assessment of physical qualities (ie. weight, height, beauty), personality, and personal worth. A large part of self-image is body image, which
the authors define as the perception that one has of one’s physical appearance.

Susan Harter's 1985 measure, called the Self-Perception Profile for Children was
one of the first instruments developed to measure self-image in youth. Harter developed
the instrument to measure five different “domains” of self-perception in children age
eight and older. Those domains include:

- scholastic competence – how competent [or] smart a child feels with regard to
  schoolwork;
- athletic competence – how competent the child feels at sports and games
  requiring physical skill [and] athletic ability;
- social acceptance – how popular or socially accepted the child feels in social
  interactions with peers;
- behavioral conduct – how adequate the child feels with regard to behaving the
  way one is supposed to;
- physical appearance – how good looking the child feels, how much one likes
  physical characteristics such as height, weight, face, [and] hair (Harter, 1988).

Harter's instrument was unique in that, unlike earlier self-image measures which used a
“two-choice response” format in which the child would pick one of two possible answers
to each question, the Harter instrument provided a four-choice response format. Youth
would be able to choose between four different responses to each test item, which were
laid out in a way that did not suggest that a certain answer was more positive or desirable
than the others. This format helped reduce the incidence of the respondent marking the
more “socially accepted” answer and allowed a more accurate representation of the
respondent. Since its inception, Harter's scale has been used in studies on self-image and
youth development, including 4-H Study of Positive Youth Development.
Research suggests that an adolescent's self-image is closely tied to happiness and life satisfaction (Valois et al., 2003). Valois et al. discuss a study in which relationships among perceived life satisfaction, perceptions of body weight, and dieting behaviors were examined in a statewide cross-sectional study of public high school adolescents in South Carolina. The Centers for Disease Control (CDC) Youth Risk Behavior Survey and the Brief Multidimensional Students’ Life Satisfaction Scale were utilized for this study. Results of the study found that perceptions of overweight, perceptions of underweight, having dieted to lose weight, having vomited or used laxatives to lose weight, and taking diet pills were significantly related to reduced life satisfaction for adolescents. Differences in dieting behavior and perceptions of weight were demonstrated across gender and race (Valois et al., 2003).

Self-image has also been shown to have an affect on the likelihood of adolescents to engage in risk behaviors, such as drug and alcohol use, and that many factors influence a teen's self-image, including family life (Mouttapa et al., 2009). However, little research has been done on the connections between adolescents' involvement in Positive Youth Development programs and self-image.

Summary

This literature review examined the definitions, characteristics and different types of Positive Youth Development programs, particularly 4-H, and the impact of those programs on development of positive behaviors in young people. It also examined
definitions of self-image, and the psychological effects that positive and negative self-image can have on young people.

This study is based on identifying connections between adolescents' involvement in Positive Youth Development programs and their self-image, and examining the effects that those two factors have on the 5 C's. No previous study has examined the relationship between participation in 4-H and self-image. The methods for analyzing the data will be discussed in the next chapter.
CHAPTER 3
Methods and Materials

Methods

Objectives of the Study

The purpose of this study is to investigate relations between students' participation in Positive Youth Development programs (specifically 4-H) and the development of self-image. The study will focus on students participating in 4-H and how they compared to students who are not 4-H participants.

To achieve this purpose the specific objective was:

- to discover whether a relationship exists between the 5 C's (caring, confidence, connections, competence, character) and positive self-image.

Research Design

The data to be used in this study are derived from the Nebraska results of the sixth Wave of data of the 4-H Study of Positive Youth Development (Lerner, et al). The Sixth Wave of this longitudinal study took place during the 2007-2008 school year with approximately 180 9th and 10th grade youth from across the state of Nebraska. While parents were also surveyed, that data will not be used for this specific project.

The nationwide study began during the 2002-2003 school year, with data collected from fifth grade students and their parents. The 2007-2008 school year was the first year in which the state of Nebraska took part in the study.
Population and Sample

Up to Wave 6 of the nationwide survey, universities across the United States had recruited approximately 4000 youth, beginning with 5th grade students in the 2002-2003 school year, and their parents (or primary caretakers). As of the 2007-2008 school year, the nationwide study had followed these youth for 5 years, and had added new youth to the sample each year. Youth were to be the primary focus; however, part of the study asked their parents about basic demographic information (e.g., parent socioeconomic status, ethnicity) and some basic information regarding the child (e.g., child’s birth date; health). Parents and youth were asked to give their consent for the duration of the study, however, they were free to discontinue participation in subsequent years. As the standard in the nationwide study, youth were to be followed each year at their schools, and youth in clubs were to be contacted for future participation through the mail or online.

In Nebraska, the goal was to recruit two hundred youth from ten counties across the state. The actual number of youth from across the state who participated in Wave 6 was one hundred eighty (180). Youth were recruited from schools and 4-H clubs around the country in order to reflect the racial/ethnic and socioeconomic diversity of the nation. African American, Latino, Native American, European American, and Asian American youth from different communities are participants for this study. Those who were responsible for coordinating the collection of data from youth in the state of Nebraska
strove to attain an accurate representation of the various racial, ethnic and socioeconomic groups in the state during the data collection process as well.

The primary method for obtaining participants involved the recruitment of youth in schools, after school programs, and youth organizations (e.g., 4-H). School districts provided the main method of accessing a large, diverse sample of mid-teenage adolescent youths (age 14-16); therefore, a large portion of the participants were recruited from school classrooms.

Recruitment information that was sent or given out to youth and their parents included a flier describing the study and inviting participation and consent forms for both parents and youth. (See Appendix A.) This information was distributed through school and site staff (e.g., participating after-school programs) to youth and their parents. The parent consent form also included the questions for parents regarding their demographic background. When necessary, parents who agreed to have their children participate were also be contacted by phone to verify eligibility criteria, to answer potential questions regarding the study, and to supplement basic demographic data.

Eligibility for study participation in Wave 6 required that the person (1) had parental consent to participate (2) was proficient in English; (3) and was between 11-18 years of age. Because many of the youth programs were included in after-school programs (as is often the case for 4-H) it was important to obtain participation commitment from youth and their parents before they stopped participating in such
programs. Data collectors and facilitators made an effort to achieve a balanced
distribution of female and male participants; equally, a representative distribution by SES
and ethnicity was desired.

Data Collection

The main method of data collection was via the administration of self-report
measures (health behaviors, child’s activities, peer network, school achievement) that are
used in the study of risks and positive behaviors among adolescents. Youth were invited
to complete the study questionnaire at conveniently scheduled times at their after-school
program, 4-H sites, or schools. Staff at these sites and/or researchers were present to
administer the survey in one-to-two hour sessions (including breaks); participants could
either be tested individually or in groups. Given the number of participants in the study
and the need to schedule assessment within a common time period, the period during
which testing occurred spanned several weeks.

In addition, parents were given a brief survey to obtain demographic information
about themselves and the participating child. Parents received this survey together with
the consent/assent forms and were asked to return the survey, after completing it in the
privacy of their home, via mail. Completing the parental version of the survey usually
took approximately 15 minutes or less.
Participants

Demographic Characteristics of Youth Participants

The demographic characteristics that were examined in respondents included gender, grade level, race/ethnicity, and 4-H participation. These demographic characteristics were considered the most relevant to the study. Other demographics not used in this study included religion and primary spoken language.

Male and female youth participated in the study; of the 179 youth who recorded their sex in the survey, 84 identified themselves as male (46.9%) and 95 identified themselves as female (53.1%). One participant did not respond (0.6%) (See Table 1).

Table 1

Gender of respondents

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<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
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<td>Male</td>
<td>84</td>
<td>46.7</td>
<td>46.9</td>
</tr>
<tr>
<td>Female</td>
<td>95</td>
<td>52.8</td>
<td>53.1</td>
</tr>
<tr>
<td>Total Responses</td>
<td>179</td>
<td>99.4</td>
<td>100</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

One hundred seventy eight youth from grades 8 through 12 participated in the study (see Table 2). Of those 178 students, nine were in 8th grade (5.1%), 82 were in 9th
grade (46.1%), 79 were in 10th grade (44.4%), seven were in 11th grade (3.9%) and one was in 12th grade (0.6%). Two students did not respond to this survey item.
Table 2

What is your current grade in school?

<table>
<thead>
<tr>
<th>Grade</th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>8th Grade</td>
<td>9</td>
<td>5</td>
<td>5.1</td>
<td>5</td>
</tr>
<tr>
<td>9th Grade</td>
<td>82</td>
<td>45.6</td>
<td>46.1</td>
<td>51.1</td>
</tr>
<tr>
<td>10th Grade</td>
<td>79</td>
<td>43.9</td>
<td>44.4</td>
<td>95.5</td>
</tr>
<tr>
<td>11th Grade</td>
<td>7</td>
<td>3.9</td>
<td>3.9</td>
<td>99.4</td>
</tr>
<tr>
<td>12th Grade</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
<td>100</td>
</tr>
<tr>
<td>Total Responses</td>
<td>178</td>
<td>98.9</td>
<td>100</td>
<td></td>
</tr>
<tr>
<td>No Response</td>
<td>2</td>
<td>1.1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

One hundred seventy nine youth answered the survey item, “what is your race/ethnicity?” (See Table 3). Of the 179 youth who responded, the majority (89.4%) identified themselves as “White, Caucasian, not Hispanic.” A little less than ten percent of the students (9.5%) identified themselves as “Hispanic or Latino.” One student (0.6%) identified him/herself as “Multiethnic or multiracial,” and one student (0.6%) identified him/herself as “Other.”
Table 3

What is your race/ethnicity?

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Percent</th>
<th>Valid Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>White, Caucasian, Not Hispanic</td>
<td>160</td>
<td>88.9</td>
<td>89.4</td>
</tr>
<tr>
<td>Hispanic or Latino</td>
<td>17</td>
<td>9.4</td>
<td>9.5</td>
</tr>
<tr>
<td>Multiethnic or Multiracial</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Other</td>
<td>1</td>
<td>0.6</td>
<td>0.6</td>
</tr>
<tr>
<td>Total Responses</td>
<td>179</td>
<td>99.4</td>
<td>100</td>
</tr>
<tr>
<td>No Response</td>
<td>1</td>
<td>0.6</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>180</td>
<td>100</td>
<td></td>
</tr>
</tbody>
</table>

One hundred forty three youth recorded their participation in 4-H, either as a member of a 4-H club or a 4-H after-school program (see Appendix B). One hundred two respondents were not 4-H members (71.3% of respondents), and 42 youth were 4-H participants (28.7% of respondents).

Selection and Preparation of Instruments

Content of Questions

This research involved youth who were between the ages of 13 and 18 years. During the written survey, the youth were asked to answer questions about themselves,
their views, and their experiences. A primary goal of the 4-H Study of Positive Youth Development (PYD) is to develop indices of PYD and to examine the relationship between an index of PYD and youth involvement in “problem” behaviors (i.e. substance use, school underachievement and failure, delinquency and violence). Thus, it was important to include questions concerning such behaviors. The need to investigate adolescent risk behavior is strongly supported by the findings of national studies. For example, it has been documented that a wide range of substances are used by adolescents (i.e. Monitoring the Future, National Household Survey on Drug Abuse, PRIDE Surveys). These studies not only indicate that initiation of substance use in some youth begins prior to 6th grade, but also that peak onset of use for some drugs (i.e. cigarettes) occurs in early adolescents, 10-11 years-old. A large number of prevention and intervention programs are aimed at reducing substance use by targeting children and adolescents under the age of 10 (i.e., D.A.R.E. & Health Rocks!).

In all cases, the items used in the Wave 6 Nebraska survey were either identical to or derived from extensive past research, involving thousands of youth, of the age and demographics characteristics to be involved in this study. Accordingly, while some of the items deal with topics such as the youth’s feelings, physical development, relationships, views and experiences regarding “problem behaviors”, e.g., substance use and delinquent behaviors, no item to be used has been associated with participant harm or distress in the studies wherein these items have been employed. Thus, the item set and methodology
and stringent confidentiality procedures used in the study are standard ones in the field of adolescent development and protective of study participants. Moreover, all items have, in these past studies, received parental consent, as well as IRB approval, by universities and colleges across the nation. As a consequence, items are believed to (1) assess the risks and positive behaviors of youth; (2) be standard measures in the field; (3) have proven safe and appropriate for participants of the ages to be studied; and (4) represent, therefore, no risk of harm or distress to participants.

Procedure for Dealing with Potential Safety Concerns

If the responses received from participants indicated that the respondent was either him or herself in immediate danger or intended to endanger others, it would be reported to the appropriate authorities or parties. If, for example, the measures of depression and stress revealed high levels, comparable to those found in clinical samples, the parents of the respondent in question would be notified.

Confidentiality

In order to ensure participants’ confidentiality, any data obtained were handled in the following manner: questionnaires had a cover sheet that contained the identifying information. Upon receipt of the completed questionnaire, the surveys were given a code number and the cover sheet was separated from the questionnaire. The PI and PD maintained a list that links code numbers with participants’ names. Only the PI, the PD and their staff assistants had access to this list, the list and data were kept separately.
Data Analysis

Scales were developed to measure the variables in this study, as follows. Participation in 4-H was determined using question items which asked about membership in “4-H clubs” and “4-H after-school programs”. “NO” on both questions was classified as a non-4-Her (see Appendix B). Scales were developed for each of the following variables:

5 C’s Scales

Scales for measuring each of the 5 C’s were created using items from the 4-H Study of Positive Youth Development student questionnaire (see Appendix C). Scores for each of the 5 C’s were examined individually.

The Confidence score consisted of the mean of the “Self-Worth” sub-scale from the What I Am Like (Harter) scale. The Competence score consisted of the overall mean of scores from the “Scholastic Competence”, “Athletic Competence”, “Job Competence”, and “Social Acceptance” sub-scores from the What I Am Like (Harter) scale. The Caring score was comprised of the mean of scores from questions 26 and 27 in the About Me 3 section of the survey. The Connection score was comprised of the mean score from the Peer Support (TAP) scale. Finally, the Character score consisted of the mean score of the “Conduct/Morality” sub-score from the What I Am Like (Harter) scale, as well as items 9-12 of the Social Responsibility scale, and mean scores from questions in the About Me 2 section of the survey.
Self-image Scale

The self-image score was comprised of the mean of relevant items from the student questionnaire (see Appendix D). The construct of Self-image was broken down into two different components, which were Physical Appearance and Personality/Social Acceptance.

The Physical Appearance component consisted of parts of the Eating Disorder Inventory-Drive for Thinness (DT) and Body Dissatisfaction (BS) subscales (Garner, Olmstead, & Polivy). Some items from these Eating Disorder Inventory sub-scales were dropped from the analysis, because they did not conform with the other items during the preliminary analysis of the data. Items in the Personality/Social Acceptance component included the “Social Acceptance” and “Romantic Appeal” sub-scales from the What I Am Like (Harter) scale.

Each of these components was scored individually, and the results were also compiled into an overall composite self-image score, known as Global Self-image. Preliminary analysis was conducted to examine the reliability of this composite score.

Development of the Indices

As mentioned previously, scales for measuring each of the 5 C’s (see Appendix C) as well as for measuring self-image (see Appendix D) were created using the 4-H Study of Positive Youth Development Wave 6 Student Questionnaire. Preliminary analysis was conducted to measure the reliability of each of these scales.

5 C’s Scales

As in R. M. Lerner’s (2005) study, the Self-Perception Profile for Children
(SPPC) (Harter, 1982) was used to create indices for several of the 5 C’s. Harter (1982) devised a structured alternative response format, in which respondents were first asked to choose between two types of people; for example, “some teenagers have a lot of friends BUT other teenagers don’t have very many friends.” After the participant chose which type of person he or she was most like, the respondent had to choose whether the statement was “sort of true for me” or “really true for me.” In this study, all of the items in Harter’s Self-Perception Profile for Children were arranged in this style.

The Confidence index was created using five items which were part of Harter’s “Self-worth” scale (used to measure feelings of self-esteem). This Confidence index had a Chronbach alpha of .92. The Competence index was created by taking the mean of 20 items in Harter’s “Scholastic competence”, “Athletic competence”, “Job competence” and “Social acceptance” scales. The Chronbach alpha for this Competence scale was .91.

Finally, the Character index was created in part by using five items from Harter’s “Conduct/Morality” scale. The other factors used in creating the Character scale included four items from the Teen Assessment Project (TAP) Survey Question Bank (Small & Rodgers, 1995), and twelve items in the About Me section of the 4-H Study of Positive Youth Development Student Questionnaire. Items from the TAP Survey Question Bank were used to assess responsibility in respondents, and were worded in the form of statements, such as, “it is important to me to contribute to my community and society”. Answers ranged from one (strongly disagree) to five (strongly agree). The items from the
About Me section of the 4-H Study of Positive Youth Development Student Questionnaire assessed morality, integrity and responsibility by asking how important various things were to respondents, such as “helping other people”. Responses ranged from one (not important) to five (extremely important). The Character index had a Chronbach alpha of .89.

Another index that was created based on Lerner’s (2005) study was Connection. As in Lerner’s study, the connection index was created using the four items of the Peer Support Scale (Armsden & Greenburger, 1987). The Peer Support Scale assessed relationships with friends, and examples of items included, “I trust my friends”. The response format ranged from zero (never true) to four (always true). For this data set, the Chronbach alpha was .95.

The index for Caring was created using 15 items from the About Me and Caring About Other People’s Feelings sections in the 4-H Study of Positive Youth Development Wave 6 Student Questionnaire. The items in these sections of the questionnaire asked students to record how much they agreed with statements such as, “It makes me sad to see a person who doesn’t have friends.” Youth were asked to rate such statements on a scale of one to five, with one being low and five being high in regards to how well the student related to the statement. The Chronbach alpha for the Caring index was .86.
Table 4

Sources and Reliability of 5 C’s Indices

<table>
<thead>
<tr>
<th>Index</th>
<th>Source</th>
<th># of Items</th>
<th>Reliability*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Confidence</td>
<td>SPPC Self-worth scale</td>
<td>5</td>
<td>.92</td>
</tr>
<tr>
<td>Competence</td>
<td>SPPC Scholastic competence scale</td>
<td>5</td>
<td>.91</td>
</tr>
<tr>
<td></td>
<td>SPPC Athletic competence scale</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPPC Job competence scale</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td></td>
<td>SPPC Social acceptance scale</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Character</td>
<td>SPPC Conduct/morality scale</td>
<td>5</td>
<td>.89</td>
</tr>
<tr>
<td></td>
<td>TAP Survey question bank</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td></td>
<td>4-H Study of PYD About Me section</td>
<td>12</td>
<td></td>
</tr>
<tr>
<td>Connection</td>
<td>Peer Support scale</td>
<td>4</td>
<td>.95</td>
</tr>
<tr>
<td>Caring</td>
<td>4-H Study of PYD About Me section</td>
<td>6</td>
<td>.86</td>
</tr>
<tr>
<td></td>
<td>4-H Study of PYD Caring About Other People’s Feelings section</td>
<td>9</td>
<td></td>
</tr>
</tbody>
</table>

*Chronbach Alpha

Self-image Scales

The Global Self-image scale was created by calculating the mean of two self-image sub-scales, or indices, which were created for this study. The two sub-scales included Personality/Social Acceptance, and Physical Appearance (see Appendix D).

The Personality/Social Acceptance index was created using the ten items in Harter’s (2005) “Social Acceptance” and “Romantic Appeal” scales. The Chronbach alpha for the Personality/Social Acceptance index was .83.

Nine items that, in part, make up the Drive for Thinness and Body Dissatisfaction...
sub-scales of the Eating Disorder Inventory (EDI) (Garner, Olmstead & Polivy, 1983) were used to create the Physical Appearance index. The Eating Disorder Inventory asked respondents to consider various statements, such as, “I am preoccupied with the desire to be thinner” and check the appropriate numbered response, from one to six, where one was “Never,” and six was “Always.” The Chronbach alpha for this measure was .83.

The nine items in the Physical Appearance index and the ten items in the Personality/Social Acceptance index were combined to create the Global Self-image index. For this data set, the Chronbach alpha was adequate, at .73.

Table 5

Sources and Reliability of the Global Self-image Index and Sub-Indices

<table>
<thead>
<tr>
<th>Index</th>
<th>Source</th>
<th># of Items</th>
<th>Reliability*</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global Self-image</td>
<td>Personality/Social Acceptance</td>
<td>10</td>
<td>.73</td>
</tr>
<tr>
<td></td>
<td>Physical Appearance</td>
<td>9</td>
<td></td>
</tr>
<tr>
<td>Personality/Social Acceptance</td>
<td>SPPC Social acceptance scale</td>
<td>5</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>SPPC Romantic appeal scale</td>
<td>5</td>
<td></td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>EDI Drive for thinness sub-scale items</td>
<td>6</td>
<td>.83</td>
</tr>
<tr>
<td></td>
<td>EDI Body dissatisfaction sub-scale items</td>
<td>3</td>
<td></td>
</tr>
</tbody>
</table>

*Chronbach Alpha

Summary

This chapter focused on the methods to be utilized in this study. Data were collected from one hundred eighty 4-H and non-4-H youth from ages 11 to 18 in Nebraska. A questionnaire published by Tufts University was administered by local UNL
Extension staff in 10 Nebraska counties. Data analysis (descriptive statistics, independent sample t-test, and Pearson's correlation test) will be discussed in the next chapter.
CHAPTER 4

Results

The objective for this study was to examine the relationships between participation in Positive Youth Development programs, specifically 4-H, and the 5 C’s of positive youth development and self-image in young people. The study tested the following hypotheses:

$H^1$: 4-Hers will score higher on positive self-image than non-4-Hers.

$H^2$: There is a positive relationship between self-image and each of the 5 C’s.

Description of the Sample

The study utilized data collected in Nebraska from Wave 6 of the 4-H Study of Positive Youth Development. Detailed descriptions of the larger study and data set can be found in several publications (Lerner, 2005; Lerner, et al., 2006; Lerner, et al., 2009).

Response Rate

The total number of Nebraska youth who participated in Wave 6 of the 4-H Study of Positive Youth Development was 180. The original goal had been to recruit 200 youth from across the state of Nebraska.

The number of youth who participated was due to the recruitment efforts of the Nebraska county Extension personnel across the state who actively sought out youth to participate in the survey. The Extension staff in the participating counties recruited young people from schools and 4-H clubs and, in most cases, personally collected the youth and
parental consent forms (see Appendix A) and also were present when the youth surveys were administered. Without such efforts, it is doubtful that the sample size would have been as large.

Analysis of Relationships

To test Hypothesis 1, an independent samples t-test was conducted comparing 4-Hers and non-4-Hers on scores of self-image. Table 6 summarizes mean scores. Self-image was broken down into two categories: Personality/Social Acceptance and Physical Appearance. Global Self-image measured the composite score of both Personality/Social Acceptance and Physical Appearance. There was no significant difference on Global Self-image ($t(141)=1.15, SE=0.07, p>0.05$); on Personality/Social Acceptance ($t(141)=0.54, SE=0.10, p>0.05$); and on Physical Appearance ($t(140)=1.20, SE=0.11, p>0.05$).

Table 6

Mean self-image scores for 4-H vs. Non-4-H (N=143)

<table>
<thead>
<tr>
<th></th>
<th>4-H Participation</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Global self-image</td>
<td>non-4H</td>
<td>1.72</td>
<td>.37</td>
</tr>
<tr>
<td></td>
<td>4-H</td>
<td>1.64</td>
<td>.43</td>
</tr>
<tr>
<td>Personality/Social Acceptance</td>
<td>non-4H</td>
<td>2.80</td>
<td>.55</td>
</tr>
<tr>
<td></td>
<td>4-H</td>
<td>2.74</td>
<td>.59</td>
</tr>
<tr>
<td>Physical Appearance</td>
<td>non-4H</td>
<td>.53</td>
<td>.63</td>
</tr>
<tr>
<td></td>
<td>4-H</td>
<td>.39</td>
<td>.51</td>
</tr>
</tbody>
</table>
To test Hypothesis 2, Pearson's correlations were conducted to examine the relationships between each of the 5 C’s and Self-image. Table 7 summarizes correlations. Significant correlations were found between Self-image and Competence ($r(179)=0.19$, $p<0.05$); and between Self-image and Caring ($r(178)=0.26$, $p<0.01$). No other significant correlations were found between Self-image and the 5 C’s.

Table 7

Pearson’s correlations between Self-image and the 5 C’s ($N=179$)

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Global self-image</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Confidence</td>
<td>-.01</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Competence</td>
<td>.19*</td>
<td>.61***</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Caring</td>
<td>.26***</td>
<td>-.01</td>
<td>.20**</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Connection</td>
<td>.12</td>
<td>.12</td>
<td>.13</td>
<td>.26</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>6. Character</td>
<td>-.02</td>
<td>.14</td>
<td>.27***</td>
<td>.57***</td>
<td>.06</td>
<td>-</td>
</tr>
</tbody>
</table>

* $p<.05$, ** $p<.01$, *** $p<.001$

Significant inter-correlations were found among some of the 5 C’s. Competence was correlated positively with Confidence ($r(179)=0.61$, $p<0.001$); Competence also had a positive correlation with Character ($r(179)=0.27$, $p<0.001$). Caring and Competence were positively correlated ($r(178)=0.20$, $p<0.01$), and Caring and Character also had a
positive correlation ($r(178)=0.57$, $p<0.001$). No other significant correlations were found among the 5 C’s.

**Summary**

One hundred eighty youth from the state of Nebraska participated in Wave 6 of the 4-H Study of Positive Youth Development. The sample was nearly evenly split between males and females, and the majority of the respondents were white Caucasian ninth and tenth graders.

Scales for measuring each of the 5 C’s, as well as Self-image, were created in part based on previous studies, such as the Lerner’s 2005 study. Harter’s (1982) Self-Perception Profile for Children figured prominently in developing many of the 5 C’s indices as well as part of the Self-image scale. Other measures that were used in creating the 5 C’s indices included the Teen Assessment Project (TAP) Survey Question Bank (Small & Rodgers, 1995), items from the About Me and Caring About Other People’s Feelings sections in the 4-H Study of Positive Youth Development Wave 6 Student Questionnaire, and the Peer Support Scale (Armsden & Greenburger, 1987). Other measures that were used to created indices for self-image included parts of the Drive for Thinness and Body Dissatisfaction sub-scales of the Eating Disorder Inventory (Garner, Olmstead & Polivy, 1983).
An independent samples t-test was used to test Hypothesis 1, which stated that 4-Hers would have higher positive scores on Self-image than non-4-Hers. The results showed no significant difference in Self-image scores between 4-H youth and non-4-H youth.

Pearson’s correlations were used to test Hypothesis 2, which stated that there would be a positive relationship between Self-image and each of the 5 C’s. Significant correlations were found between Self-image and Competence, and between Self-image and Caring. No other significant relationships were found between self-image and the 5 C’s. However, significant inter-correlations were found between some of 5 C’s. Conclusions and recommendations for future study will be made in the next chapter.
CHAPTER 5

Summary, Conclusions and Recommendations

Summary

The 4-H Study of Positive Youth Development is a nationwide, longitudinal study which was developed by researchers at Tufts University. Its purpose is to examine the impact that Positive Youth Development programs have on the lives of youth. Nebraska took part in the study during Wave 6; 180 Nebraska children from grades eight through twelve participated in Wave 6 of the study.

Current literature on Positive Youth Development programs supports the idea that participation in PYD programs, such as 4-H, has a positive effect on development of caring, character, competence, confidence and connectedness (the 5 C’s) in youth (Miller, 1991; Lerner, 2005; Lerner, et al., 2006; Jelicic, et al., 2007; Lerner, et al., 2009). However, little research exists on the effects that self-image has on the 5 C’s, or on the relationship between participation in Positive Youth Development programs and self-image in young people. Therefore, the purpose of this study was to analyze relationships between participation in 4-H and self-image, and between self-image and the development of the 5 C’s in young people.

Indices were developed to measure each of the 5 C’s, as well as to measure self-image. The indices which were used to measure the 5 C’s in this study were largely developed by researchers who, in previous work with the 4-H Study of Positive Youth
Development, had used them to measure the 5 C’s (Lerner, 2005). The 5 C’s and Self-image indices were formed by statistically combining responses to items from the 4-H Study of Positive Youth Development Student Questionnaire. The 5 C’s indices included: Competence, Confidence, Caring, Connection, and Character. The Self-image indices included: Personality/Social Acceptance, and Physical Appearance. The two self-image indices were also combined into a “Global” Self-image index.

The findings in this study contribute to the body of knowledge that supports the positive effects of 4-H and other Positive Youth Development programs on young people. This study differs from previous research in that it builds on the idea that involvement in 4-H aids in the development of the 5 C’s. In addition, this study focuses on some of the relationships between self-image and Positive Youth Development programs, which have not previously been examined to a large extent. Specifically, this study investigated the differences in self-image between 4-H participants and non-4-H participants.

This study examined the levels of positive self-image, including global (or overall) self-image, personality/social acceptance, and physical appearance in 4-H and non-4-H youth from grades eight to twelve. Hypothesis 1 stated: 4-Hers will score higher on positive self-image than non-4-Hers.

The study also looked at relationships between self-image levels and development of each of the 5 C’s. Hypothesis 2 stated: There is a positive relationship between self-
image and each of the 5 C’s. Descriptive statistics, independent samples t-test, and Pearson’s correlations were used to describe and analyze the data.

When Hypothesis 1 was tested, findings indicated no significant difference between 4-Hers and non-4-Hers with regard to Global Self-image, Personality/Social Acceptance, or Physical Appearance. Findings did indicate that Physical Appearance scores were very low compared to Global Self-image and Personality/Social Acceptance for both 4-Hers and non-4-Hers. Hypothesis 1 was rejected.

Findings for Hypothesis 2 indicated positive correlations between Global self-image and some, but not all, of the 5 C’s. The following statements summarize the findings for Hypothesis 2:

1. There was a significant correlation between global self-image and competence.
2. A significant correlation was found between global self-image and caring.
3. No significant correlations were found between global self-image and confidence, connection or character.

Some significant inter-correlations were found among the 5 C’s. The following statements summarize those findings:

1. A significant correlation was found between competence and confidence.
2. There was a significant correlation between competence and character.
3. Competence and caring were significantly correlated.
4. Caring and character were found to be significantly correlated.
5. No significant correlations were found between any of the rest of the 5 C’s.

Hypothesis 2 was partially accepted, as positive correlations were found between self-image and some of the 5 C’s.

Conclusions and Discussion

In general, the results of this study did not indicate that there were significant differences in self-image between 4-H and non-4-H youth, or that there were many significant relationships between self-image and development of the 5 C’s. However, the results did show that there is some correlation between Confidence and Self-image, and between Caring and Self-image, even if they did not indicate a relationship between all of the 5 C’s and Self-image. Since previous studies (Lerner, 2005; Lerner, et al., 2006; Lerner, et al., 2009) have shown that there is a relationship between participation in Positive Youth Development programs, such as 4-H, and the development of the 5 C’s, it is still possible that there can be relationships between involvement in 4-H and positive self-image through the development of the 5 C’s. This potential relationship can be illustrated in a revised model (see Figure 2).
When considering the past research which suggests that youth who participate in 4-H are more likely to have high self-esteem (Miller, 1991), it is surprising that no significant relationship was found between involvement in 4-H and self-image. Respondents generally reported a low level of self-image (see means and standard deviations in Table 6). This is consistent with research which indicates that the majority of teens do not have a positive self-image, and suggests that the adolescent years are a particularly difficult time to develop a positive self-image (Levine & Smolak, 2004). Thus, the narrow range of scores on self-image limited the ability of the t-test to detect differences. Furthermore, a small percentage of participants were members of 4-H (28.7% of respondents), further limiting the ability to fully test for differences.

Results of the Pearson’s correlation tests between self-image and the 5 C’s did not show significant correlations, likely for the same data analytic challenges mentioned above with regard to the measure of self-image. Findings suggest significant correlations
between Self-image and Competence and between Self-image and Caring. For the purposes of this study, Competence was defined as, “a positive feeling about one's actions and performance in various areas of one's life, including academic, social, vocational and cognitive areas” (Lerner, 2005). This definition seems closely related to the definition of positive self-image, which is, “a [positive] conception that one has of one's self, including an assessment of physical qualities (ie. weight, height, beauty), personality, and personal worth”. Therefore, it seems reasonable that the two should display a significant correlation. In this study, caring was defined as “a sense of sympathy and empathy for others (Lerner, 2005)”. Perhaps when one has a positive self-image and feels good about oneself, it is easier to focus on others and be more sympathetic than when one has a negative self-image.

The lack of significant correlation between Self-image and Connection can possibly be explained by the fact that there were not many responses to the items that made up the Connection scale in the study (N=55). The smaller sample size may have limited the ability of the analysis to detect relationships.

There was no significant correlation between Self-image and Character, which was defined as “a personal values competence demonstrating the evidence of caring and responsibility” (Lerner, 2005). Perhaps the way a teen perceives their physical appearance and personality does not really affect their sense of responsibility. It seems
reasonable to believe that a sense of personal responsibility could exist independently of one’s self-image.

Surprisingly, there was no significant correlation between Self-image and Confidence, which was described as “overall sense of positivity about one's self-worth.” This is particularly interesting due to the fact that some scholars include self-worth as one of the factors contributing to self-image as a whole (Valois, et al., 2003). It is possible that the youth in the study differentiated between how they perceived their physical appearance and their personality and how they viewed their self-worth. Perhaps there were other factors that contributed strongly to the respondents’ sense of confidence and self-worth, such as family life or success in school, a job, or athletics.

The idea of a link between success in various areas of the study participants’ lives and their sense of confidence is actually borne out by the significant correlation between Confidence and Competence. The index for Competence was created from Harter’s (1982) “Scholastic competence,” “Athletic competence,” “Job competence” and “Social acceptance” scales. Not surprisingly, high scores in these areas were linked to high Confidence scores.

Competence was also strongly correlated with Character. It could be that a greater sense of success in various areas of life leads to a greater sense of responsibility and caring for others, and vice versa. It seems likely that teens who feel a greater sense of
caring and responsibility in their lives will be more likely to be successful at school, their job, and/or in other areas.

Similarly, Competence and Caring were positively correlated; so were Caring and Character. Character and Caring are closely related terms in this study, so it is no surprise that they are significantly correlated to each other. As such, it is also unsurprising that they are both positively correlated to Competence.

**Implications and Recommendations**

This was an exploratory study which showed no difference in the level of positive self-image between 4-H and non-4-H participants. More in-depth study should be conducted to look at self-image on its own, particularly among youth who participate in 4-H. Since the study did not differentiate between 4-Hers in a club setting and participants in an after-school program setting, further studies should make that distinction between the different types of 4-H programs among their respondents. The type of 4-H participation that youth respondents are engaged in may have an effect on the results of further studies.

Educators, extension staff, and 4-H program leaders could use the data results from this study to try to foster more positive self-image in youth. One possibility would be to set up focus groups with 4-H and non-4-H youth, and ask these young people specific questions about their self-image, and how they think that self-image could be improved. Conducting focus groups could help clarify issues that adolescents might be
having with self-image as well as providing more insight into their involvement in Positive Youth Development programs.

Care should also be taken to ensure that self-image is not inadvertently the focus of activities or meetings in a negative way. For example, if a club is doing activities related to nutrition, the activity director should try to ensure that the activities are not focusing exclusively on the negative aspects of nutrition, such as fat content and calories, but that they are primarily focusing on positive things like creating healthy meals.

Also, 4-H program leaders and staff could use the data results from this study to examine their curricula and programming, and make sure that they are providing learning experiences that will help develop each of the 5 C’s. They could also concentrate on providing activities and learning opportunities that will foster the development of competence and caring, which were both shown to be closely correlated with self-image. Activities such as volunteering or community service should be encouraged.

Limitations and Further Research

This study was based on the 4-H Study of Positive Youth Development, and as such the test material was limited to the items contained in the Wave 6 Student Questionnaire. Further, the indices for the 5 C’s and the contextual definitions for each of those constructs were limited by how they had been identified in previous studies. Further analysis of the Nebraska data set as well as data sets from other states which participated in the 4-H Study of Positive Youth Development could yield meaningful
findings on self-image and the 5 C’s that represent multi-state efforts. Further research should also be implemented to explore self-image and its relationship to risk behaviors in 4-H youth.

The method of recruiting study participants in Nebraska left counties and individuals with the option to not participate. This could represent a limitation. If the counties and individuals who chose to participate did not represent an accurate cross-section of the state’s youth population, it could create a bias in the study.

Study participants also had the option to not answer any question or questions on the survey, which could also be a limitation. If a significant number of study participants chose not to answer a certain question or section of the survey, the sample size for that item would be reduced and the data results could be thrown off.

The sample for this study was mostly limited to rural and smaller city areas. In order to get a complete picture of the impact of 4-H on Nebraska youth, audiences from the major metropolitan areas of the state need to be included in the data set.

This study evaluated young people’s 4-H participation based on both involvement in clubs and in after-school 4-H programs. Since youth may have different experiences in a club setting as opposed to an after-school program setting, further research that focused only on 4-Hers in a club setting or in an after-school program setting might provide more insight into the relationships between 4-H and self-image. Further, the method used to measure participation in 4-H in this study did not give any indication of the youth’s level
of involvement in 4-H. Further research that could measure the quantity and quality of involvement in 4-H in conjunction with self-image would give a better look at the effects that participation in 4-H has on self-image in young people.

Examining the effects of Positive Youth Development programs in general, or of other types of Positive Youth Development programs, on self-image may also be important future research. While this study looked at participation in 4-H, other types of Positive Youth Development programs that could be researched include Boy and Girl Scouts, extracurricular athletic clubs, and church youth groups. Finally, this study mainly examined self-image in ninth and tenth graders. Future research could be conducted to explore the connections between 4-H and self-image in younger youth who have not yet entered middle school, or in older high school youth who are at a later stage of adolescence.
REFERENCES


development to predict contribution and risk behaviors in early adolescence:
Findings from the first two waves of the 4-H Study of Positive Youth
doi: 10.1177/0165025407076439

after-school programs as contexts for youth development [Electronic version].
*Youth and Society, 32*(4), 421-446.

community youth development programs, and community contributions of
fifth-grade adolescents: Findings from the first wave of the 4-H study of positive
youth development. *The Journal of Early Adolescence, 25*(1), 17-71. doi:
10.1177/0272431604272461

Lerner, R.M., Lerner, J.V., Almerigi, J., Theokas, C., Phelps, E., Naudeau, S., Getisdottir,
S., Ma, L., Jelicic, H., Alberts, A., Smith, L., Simpson, I., Christiansen, E.,
adolescence: Theoretical, empirical, and applied bases of a “positive youth
development” perspective. In L. Balter & C.S. Tamis-LeMonda (Eds.), *Child
psychology: A handbook of contemporary issues*. New York: Psychology
Press/Taylor & Francis.

foundations and functions of adolescent thriving within the 4-H study of positive
youth development: A view of the issues [Electronic version]. *Journal of Applied
Developmental Psychology, 30*(5), 567-570.

Group, Inc.

Cash & T. Pruzinsky (Eds.), *Body Image: A Handbook of Theory, Research,

and contributory life skills. *Dissertation Abstracts International, 52*(5-A),
1614.


APPENDIX A

Forms and Letters
YOUTH ASSENT AND SIGNATURE FORM
NATIONAL 4-H STUDY OF POSITIVE YOUTH DEVELOPMENT

What is the study?
You are invited to participate in a national research study. It is conducted by 4-H at the <your university> and Tufts University. We are interested in finding out about the kinds of things that are important to children and teens. More than 4,000 kids ages 10 to 17 are taking part in this study. You will be part of something important and useful to help us understand young people today.

What will you do?
You will fill out a survey online. It takes about 45 to 60 minutes to complete. You may also take some more time if you feel that you need it. You will fill out the survey at your school, after school program, or youth organization.

What will we ask?
There will be questions about you, the kinds of things you do, your school, health, family, and friends. Different kids have different experiences and opinions. We would like to hear about yours. We want you to answer all of the questions honestly. Some of the questions may ask for very personal information about you. For example, we will ask about behaviors such as smoking, alcohol and drug use, and sexual activity. Some of these questions may be uncomfortable to answer. If you don’t want to answer a question, you may skip it and go to the next one. There will be no penalties for leaving a question blank.

What are the benefits?
Being in the study may not have direct benefits to you, but it may help researchers and teachers understand how programs like 4-H impact teenagers’ lives. In addition, it may help program leaders to come up with new curriculums and ideas to improve those programs. Also, if you participate in the study, you will automatically be entered in a drawing for a 1 in 10 chance of winning a $10 gift certificate to Target stores. You will also have a 1 in 40 chance of winning a prize worth $100.

Who will see my answers?
Your responses will be strictly confidential. There will be no way for us to know which responses belong to you or someone else. We may publish a summary of everybody’s responses or present such a summary at a scientific meeting, but your identity and your responses would be totally confidential.

What if I have questions?
If you have any questions, we will try to answer them. If you think of questions after you leave today, ask one of your parents or guardians to call Karen Bloomquist at (402) 472-9087. If you have any questions about your rights in Human Subjects Research, contact the University of Nebraska Institutional Review Board at (402) 472-2851.

If you want to be in the study, please sign and fill in the information below.

CHILD/YOUTH ASSENT:
I have read or had read to me the information above. I have had the opportunity to ask questions. I consent to participate in the described research.

<table>
<thead>
<tr>
<th>Child/Youth’s Signature</th>
<th>Date</th>
<th>PRINT Your Name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Signature of Investigator</th>
<th>Date</th>
<th>Print name</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4-H STUDY OF POSITIVE YOUTH DEVELOPMENT

University of Nebraska – Lincoln Cooperative Extension
Principal Investigators: Kathleen Lodl, Ph.D.; Karen Bloomquist

PURPOSE OF STUDY
You and your child are invited to participate in a research study. The following information is provided in order to help you to make an informed decision whether or not to allow your child to participate. The study is conducted by the University of Nebraska Extension's 4-H Program and Tufts University. The purpose of the study is to learn more about the kind of experiences that help children develop into healthy, productive adults. More than 4,000 children and teens are already part of this study. It is a longitudinal study. This means that researchers will study changes in young people over time. Your child is eligible to participate in the study because he or she is between the ages of 13 and 18. Your child will also be asked if he/she is willing to participate.

DATA TO BE COLLECTED
- Children will be asked to fill out a survey. The survey will be given at your child’s school, after school program, or youth organization. Students will fill out the survey on-line. Questions on the survey will ask children to tell us about their family, friends, and activities at school and after school. Children also will be asked about their physical growth, feelings about themselves, and future goals. It takes about 45 to 60 minutes to complete the online survey. This survey is completely voluntary and your child will not be required to answer any question(s) or part(s) of the survey that he or she does not want to.
- Parents will also be asked to complete a survey. It takes about 20 minutes to complete. You can complete the survey on-line. You may also be contacted in the following years with follow-up questions.

CONFIDENTIALITY
You and your child’s records and identity will be kept confidential, according to State and Federal laws. You or your child will not be identified in any reports that may come from this study. All names and identifying information will be removed from each survey. This information will be replaced by a random identification number. For the on-line survey, you will each have a confidential user name and password. Only members of the research team will have access to the surveys. All information will be used only for research purposes. If you choose to give it, we will only use your address and telephone number to send thank-you cards and follow-up letters. The information obtained in this study may be published in scientific journals or presented at scientific meetings, but your child’s identity will be kept strictly confidential.

VOLUNTARY PARTICIPATION
Participation in the study is voluntary. You and your child do not have to participate in this study. You can also stop participating at any time during the study. There will be NO penalty if you or your child do not participate.

RISKS
There are some risks to participating in this study. For example, some of the questions deal with personal topics such as your child’s health or views about the future. Some questions ask about attitudes toward health related behaviors, such as smoking, drugs and sexual activity. We would like you and your child to answer all the questions. Of course, either of you may skip any question that you do not wish to answer.

BENEFITS
There are many benefits to this study. It will help us learn more about ways to promote children’s positive development. This kind of information is needed to create effective programs for young people. It may also help with policies that benefit children and families.

Additional and immediate benefits:

4-H Study of Positive Youth Development
Parental Consent Form
Page 1 of 3
PARENT OR GUARDIAN CONSENT:
I have read and understood the information described above. I have had the opportunity to ask questions. I have kept a copy of the consent information for my records. I consent to participate in the described research. I give my consent for my child to participate.

Parent/Guardian’s Signature: ____________________________
Date: ____________
Please PRINT Your Name: ____________________________
Relationship to Child: ________________________________
Child’s Name: ____________________________ Date: ____________
Signature of Investigator: ____________________________ Date: ____________

☐ Parent/Guardian(s): Please ONLY check this box if you DO NOT CONSENT to your child’s participation in this study.

PLEASE HAVE YOUR CHILD RETURN THIS PAGE AND THE YOUTH ASSENT FORM PAGE TO HIS/HER TEACHER OR PROGRAM LEADER!

(KEEP PAGES 1 & 2 FOR YOUR RECORDS)
Re: IRB Study # 11602L*1  
Title: 4-H Study of Positive Youth Development  
PI: Richard Lerner  
IRB Review Date: 9/23/2007

June 25, 2007

Dear Richard,

The Institutional Review Board (IRB) has reviewed the request for continuing review for the above referenced study.

Your protocol meets the requirements of the IRB and is approved. Approval is valid for a period of one year and expires on 7/11/2008.

Enclosed you will find stamped study materials that show the date through which these materials are valid. Only these stamped materials may be utilized for conducting your study.

Investigators are required to submit continuing review applications prior to the expiration date. Any changes to the protocol or study materials must be submitted to the Office of the IRB for approval by completing the Request for Modification Form. In addition, all adverse reactions and study completion must be reported to the Office of the IRB in a timely manner.

Please review the attached copy of Investigator’s Responsibilities and be advised that according to federal regulations a protocol may be audited at any time.

If you have any questions, please contact the Office of the Institutional Review Board at (617) 627-3417.

Sincerely,

\[Signature\]

Yvonne Wakeford, Ph.D.
IRB Administrator

Office of the Vice Provost
20 Professors Row
Medford, MA 02155
617-627-3417
Fax: 617-627-3673
APPENDIX B

4-H Participation Item in 4-H Study of Positive Youth Development Student Questionnaire
We want to know how often you participate in the following community clubs or activities outside of school. Please mark the answer that best describes your participation during this school year or the upcoming summer. If you never participated or no longer participate in the club, program, or activity please mark “Never.”

**New addition of science, technology items to Wave 6 (w6yact41-w6yact60).**

<table>
<thead>
<tr>
<th></th>
<th>Never</th>
<th>Once a Month or Less</th>
<th>A Couple Times a Month</th>
<th>Once a Week</th>
<th>A Few Times a Week</th>
<th>Every Day</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. 4-H Clubs</td>
<td>w6yact01</td>
<td>[0]</td>
<td>[1]</td>
<td>[2]</td>
<td>[3]</td>
<td>[4]</td>
</tr>
<tr>
<td>2. 4-H After School Programs</td>
<td>w6yact02</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
APPENDIX C

Items from the 4-H Study of Positive Youth Development Student Questionnaire Used to Create the 5 C's Scales
Confidence

WHAT I AM LIKE (HARTER)

Self-Worth: w6yharttnsw (MEAN) F2.3 -- Used for Confidence
Items: w6yharttn09, w6yharttn18, w6yharttn27, w6yharttn36, w6yharttn45;
Reverse code: w6yharttn27, w6yharttn36, w6yharttn45

The following pairs of sentences are talking about two kinds of people. We’d like you to decide whether you are more like the person described in Line A or more like the person described in Line B. Do not mark a box yet. Then we would like you to decide whether that is only sort of true for you or really true for you and then put an X in the box. Again, you will only mark one of the four boxes.

FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.

<table>
<thead>
<tr>
<th></th>
<th>Really True for Me</th>
<th>Sort of True for Me</th>
<th>Sort of True for Me</th>
<th>Really True for Me</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>[ 1 ]</td>
<td>[ 2 ]</td>
<td>[ 3 ]</td>
<td>[ 4 ]</td>
</tr>
<tr>
<td>9.</td>
<td>w6yharttn09</td>
<td>○</td>
<td>Some teenagers are often disappointed with themselves.</td>
<td>BUT</td>
</tr>
<tr>
<td>18.</td>
<td>w6yharttn18</td>
<td>○</td>
<td>Some teenagers don’t like the way they are leading their life.</td>
<td>BUT</td>
</tr>
<tr>
<td>27.</td>
<td>w6yharttn27</td>
<td>○</td>
<td>Some teenagers are happy with themselves most of the time.</td>
<td>BUT</td>
</tr>
<tr>
<td>36.</td>
<td>w6yharttn36</td>
<td>○</td>
<td>Some teenagers like the kind of person they are.</td>
<td>BUT</td>
</tr>
<tr>
<td>45.</td>
<td>w6yharttn45</td>
<td>○</td>
<td>Some teenagers are very happy being the way they are.</td>
<td>BUT</td>
</tr>
</tbody>
</table>
### Competence

**WHAT I AM LIKE (HARTER)**

**Scholastic Competence:** \texttt{w6yharttnsc} (MEAN) F2.3  
**Items:** \texttt{w6yharttn01}, \texttt{w6yharttn10}, \texttt{w6yharttn19}, \texttt{w6yharttn28}, \texttt{w6yharttn37};  
Reverse code: \texttt{w6yharttn01}, \texttt{w6yharttn19}, \texttt{w6yharttn37}

**Social Acceptance:** \texttt{w6yharttnsa} (MEAN) F2.3  
**Items:** \texttt{w6yharttn02}, \texttt{w6yharttn11}, \texttt{w6yharttn20}, \texttt{w6yharttn29}, \texttt{w6yharttn38};  
Reverse code: \texttt{w6yharttn11}, \texttt{w6yharttn29}, \texttt{w6yharttn38}

**Athletic Competence:** \texttt{w6yharttnac} (MEAN) F2.3  
**Items:** \texttt{w6yharttn03}, \texttt{w6yharttn12}, \texttt{w6yharttn21}, \texttt{w6yharttn30}, \texttt{w6yharttn39};  
Reverse code: \texttt{w6yharttn03}, \texttt{w6yharttn12}, \texttt{w6yharttn21}

**Job Competence:** \texttt{w6yharttnjc} (MEAN) F2.3 --  
**Items:** \texttt{w6yharttn05}, \texttt{w6yharttn14}, \texttt{w6yharttn23}, \texttt{w6yharttn32}, \texttt{w6yharttn41};  
Reverse code: \texttt{w6yharttn05}, \texttt{w6yharttn23}, \texttt{w6yharttn41}

The following pairs of sentences are talking about two kinds of people. We’d like you to decide whether you are more like the person described in Line A or more like the person described in Line B. Do not mark a box yet. Then we would like you to decide whether that is only sort of true for you or really true for you and then put an X in the box. Again, you will only mark one of the four boxes.

**FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.**

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>\texttt{w6yharttn01}</td>
<td>Some teenagers feel that they are just as smart as others their age.</td>
<td><strong>BUT</strong> Other teenagers aren’t so sure and wonder if they are as smart.</td>
<td>○</td>
</tr>
<tr>
<td>2.</td>
<td>\texttt{w6yharttn02}</td>
<td>Some teenagers find it hard to make friends.</td>
<td><strong>BUT</strong> For other teenagers it’s pretty easy.</td>
<td>○</td>
</tr>
<tr>
<td>3.</td>
<td>\texttt{w6yharttn03}</td>
<td>○ Some teenagers do very well at all kinds of sports.</td>
<td><strong>BUT</strong> Other teenagers don’t feel that they are very good when it comes to sports.</td>
<td>○</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Some teenagers feel</td>
<td>BUT</td>
<td>Other teenagers feel that they are not quite ready to handle a part-time job.</td>
</tr>
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<td>-----</td>
<td>--------------------------------------------------------------------------</td>
</tr>
<tr>
<td>5.</td>
<td>w6yharttn 05</td>
<td>That they are ready to do well at a part-time job.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>10.</td>
<td>w6yharttn 10</td>
<td>Some teenagers are pretty slow in finishing their school work.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>11.</td>
<td>w6yharttn 11</td>
<td>Some teenagers have a lot of friends.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>12.</td>
<td>w6yharttn 12</td>
<td>Some teenagers think they could do well at just about any new athletic activity.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>14.</td>
<td>w6yharttn 14</td>
<td>Some teenagers feel that they don’t have enough skills to do well at a job.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>19.</td>
<td>w6yharttn 19</td>
<td>Some teenagers do very well at their class work.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>20.</td>
<td>w6yharttn 20</td>
<td>Some teenagers are very hard to like.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>21.</td>
<td>w6yharttn 21</td>
<td>Some teenagers feel that they are better than others their age at sports.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>23.</td>
<td>w6yharttn 23</td>
<td>Some teenagers feel they are old enough to get and keep a paying job.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>28.</td>
<td>w6yharttn 28</td>
<td>Some teenagers have trouble figuring out the answers in school.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>29.</td>
<td>w6yharttn 29</td>
<td>Some teenagers are popular with others their age.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>30.</td>
<td>w6yharttn 30</td>
<td>Some teenagers don’t do well at new outdoor games.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>32.</td>
<td>w6yharttn 32</td>
<td>Some teenagers feel like they could do better at work they do for pay.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
<tr>
<td>37.</td>
<td>w6yharttn 37</td>
<td>Some teenagers feel that they are pretty intelligent.</td>
<td>![image]</td>
<td>![image]</td>
</tr>
</tbody>
</table>
Some teenagers feel that they are socially accepted. \hspace{1em} \textbf{BUT} \hspace{1em} Other teenagers wished that more people their age accepted them.

Some teenagers do not feel that they are very athletic. \hspace{1em} \textbf{BUT} \hspace{1em} Other teenagers feel that they are very athletic.

Some teenagers feel that they are really able to handle the work on a paying job. \hspace{1em} \textbf{BUT} \hspace{1em} Other teenagers wonder if they are really doing as good a job at work as they should be doing.

\section*{Caring}

How well does each of these statements describe you? Caring about other people’s feelings.

\textbf{Reverse code: w6ycare1 and w6ycare5}

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. I don’t feel sorry for other people when they are having problems.</td>
<td>w6ycare1</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2. When I see someone being taken advantage of, I want to help them.</td>
<td>w6ycare2</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3. It bothers me when bad things happen to \textbf{good} people.</td>
<td>w6ycare3</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4. It bothers me when bad things happen to \textbf{any} person.</td>
<td>w6ycare4</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5. When I see someone being treated unfairly, I don’t feel sorry for them.</td>
<td>w6ycare5</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6. I feel sorry for other people who don’t have what I have.</td>
<td>w6ycare6</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7. When I see someone being picked on, I feel sorry for them.</td>
<td>w6ycare7</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>8. It makes me sad to see a person who doesn’t have friends.</td>
<td>w6ycare8</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
9. When I see another person who is hurt or upset, I feel sorry for them.

Think about the people who know you well. How do you think they would rate you on each of these?

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</thead>
<tbody>
<tr>
<td>1. Caring about other people’s feelings.</td>
<td>w6yabme30</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>2. Feeling really sad when one of my friends is unhappy.</td>
<td>w6yabme31</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>3. Being good at making and keeping friends.</td>
<td>w6yabme29</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>4. Respecting the values and beliefs of people who are of a different race or culture than I am.</td>
<td>w6yabme33</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>5. Knowing a lot about people of other races.</td>
<td>w6yabme34</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>6. Enjoying being with people who are of a different race than I am.</td>
<td>w6yabme35</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>
Connection

PEER SUPPORT (TAP)
Peer support scale: w6ypeer (MEAN)

9. How true is each of these statements for you?

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. I trust my friends.</td>
<td>w6ypeer1</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2. I feel my friends are good friends.</td>
<td>w6ypeer2</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3. My friends care about me.</td>
<td>w6ypeer3</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4. My friends are there when I need them.</td>
<td>w6ypeer4</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>

Character

SOCIAL RESPONSIBILITY (Items 9-12, TAP)
TAP items were used for a Social Responsibility scale w6ysocresp (mean of all items)
Reverse code: TAP items no. w6ytap03, w6ytap04

How much do you agree or disagree with the following?
9. I often think about doing things so that people in the future can have things better.

10. It is important to me to contribute to my community and society.

11. It’s not really my problem if my neighbors are in trouble and need help.

12. If I had to choose between helping to raise money for a neighborhood project and enjoying my own free time, I’d keep my freedom.

### ABOUT ME 2 (SEARCH)

24. How important is each of the following to you in your life?

<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>1. Getting to know people who are of a different race than I am. w6yabme15</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>2. Helping other people. w6yabme16</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3. Helping to make the world a better place to live in. w6yabme17</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4. Giving time and money to make life better for other people. w6yabme18</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5. Helping to reduce hunger and poverty in the world. w6yabme19</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6. Helping to make sure all people are treated fairly. w6yabme20</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
25. How important is each of the following to you in your life?

<table>
<thead>
<tr>
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</tr>
</thead>
<tbody>
<tr>
<td>1. Speaking up for equality (everyone should have the same rights and opportunities).</td>
<td>w6yabhme 21</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>2. Doing what I believe is right, even if my friends make fun of me.</td>
<td>w6yabhme 22</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>3. Standing up for what I believe, even when it's unpopular to do.</td>
<td>w6yabhme 23</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>4. Telling the truth, even when it's not easy.</td>
<td>w6yabhme 24</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>5. Accepting responsibility for my actions when I make a mistake or get in trouble.</td>
<td>w6yabhme 25</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
<tr>
<td>6. Doing my best, even when I have a job I don’t like.</td>
<td>w6yabhme 26</td>
<td>o</td>
<td>o</td>
<td>o</td>
<td>o</td>
</tr>
</tbody>
</table>

**WHAT I AM LIKE (HARTER)**

**Conduct/ Morality:** w6yharttncm (MEAN)

**Items:** w6yharttn07, w6yharttn16, w6yharttn25, w6yharttn34, w6yharttn43; Reverse code: w6yharttn07, w6yharttn25, w6yharttn43

The following pairs of sentences are talking about two kinds of people. We’d like you to decide whether you are more like the person described in Line A or more like the person described in Line B. Do not mark a box yet. Then we would like you to decide whether that is only sort of true for you or really true for you and then put an X in the box. Again, you will only mark one of the four boxes.

**FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.**
<p>| | | | | | |</p>
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>7.</td>
<td>w6yha</td>
<td>rttn07</td>
<td>○</td>
<td>Some teenagers usually do the right thing.</td>
<td>BUT</td>
</tr>
<tr>
<td>16.</td>
<td>w6yha</td>
<td>rttn16</td>
<td>○</td>
<td>Some teenagers often get in trouble for the things they do.</td>
<td>BUT</td>
</tr>
<tr>
<td>25.</td>
<td>w6yha</td>
<td>rttn25</td>
<td>○</td>
<td>Some teenagers feel really good about the way they act.</td>
<td>BUT</td>
</tr>
<tr>
<td>34.</td>
<td>w6yha</td>
<td>rttn34</td>
<td>○</td>
<td>Some teenagers do things they know they shouldn’t do.</td>
<td>BUT</td>
</tr>
<tr>
<td>43.</td>
<td>w6yha</td>
<td>rttn43</td>
<td>○</td>
<td>Some teenagers usually act the way they know they are supposed to.</td>
<td>BUT</td>
</tr>
</tbody>
</table>
APPENDIX D

Items from the 4-H Study of Positive Youth Development Student Questionnaire Used to Create the Self-image Scales
Physical Appearance

The Eating Disorder Inventory-Drive for Thinness (DT), Bulimia (BN), and Body Dissatisfaction (BS) subscales (Garner, Olmstead, & Polivy)

Drive for Thinness: \texttt{w6yedidtc} (SUM)
Items: \texttt{w6yedidt2}, \texttt{w6yedidt3}, \texttt{w6yedidt4}, \texttt{w6yedidt5}, \texttt{w6yedidt6}, \texttt{w6yedidt7};

Body Dissatisfaction: \texttt{w6yedibdc} (SUM)
Items: \texttt{w6yedibd1}, \texttt{w6yedibd4}, \texttt{w6yedibd5}

Please read each statement carefully and check the appropriate response.

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
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</thead>
<tbody>
<tr>
<td>Never</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>Always</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. I think about dieting. \texttt{w6yedidt2}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>3. I feel extremely guilty after overeating. \texttt{w6yedidt3}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>4. I am terrified of gaining weight. \texttt{w6yedidt4}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>5. I exaggerate or magnify the importance of weight. \texttt{w6yedidt5}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>6. I am preoccupied with the desire to be thinner. \texttt{w6yedidt6}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>7. If I gain a pound, I worry that I will keep gaining. \texttt{w6yedidt7}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>15. I think my stomach is too big. \texttt{w6yedibd1}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>18. I think my buttocks are too large. \texttt{w6yedibd4}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>19. I think my hips are too large. \texttt{w6yedibd5}</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
</tbody>
</table>
Personality/Social Acceptance

WHAT I AM LIKE (HARTER)

Social Acceptance: \textit{w6yharttnsa} (MEAN) \textit{F2.3}
\textbf{Items:} \textit{w6yharttn02, w6yharttn11, w6yharttn20, w6yharttn29, w6yharttn38};
Reverse code: \textit{w6yharttn11, w6yharttn29, w6yharttn38}

Romantic Appeal: \textit{w6yharttnra} (MEAN) \textit{F2.3}
\textbf{Items:} \textit{w6yharttn06, w6yharttn15, w6yharttn24, w6yharttn33, w6yharttn42};
Reverse code: \textit{w6yharttn06, w6yharttn24, w6yharttn33}

The following pairs of sentences are talking about \textit{two kinds of people}. We’d like you to decide whether you are more like the person described in Line A or more like the person described in Line B. Do not mark a box yet. Then we would like you to decide whether that is only \textit{sort of true} for you or \textit{really true} for you and then put an X in the box. Again, you will only mark one of the four boxes.

\begin{center}
\textbf{FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.}
\end{center}
<table>
<thead>
<tr>
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</thead>
<tbody>
<tr>
<td>2.</td>
<td>w6yhartt n02</td>
<td>Some teenagers find it hard to make friends.</td>
<td>BUT</td>
<td>For other teenagers it’s pretty easy.</td>
<td>○</td>
</tr>
<tr>
<td>6.</td>
<td>w6yhartt n06</td>
<td>Some teenagers feel that if they are romantically interested in someone, that person will like them back.</td>
<td>BUT</td>
<td>Other teenagers worry that when they like someone romantically, that person won’t like them back.</td>
<td>○</td>
</tr>
<tr>
<td>11.</td>
<td>w6yhartt n11</td>
<td>Some teenagers have a lot of friends.</td>
<td>BUT</td>
<td>Other teenagers don’t have very many friends.</td>
<td>○</td>
</tr>
<tr>
<td>15.</td>
<td>w6yhartt n15</td>
<td>Some teenagers are not dating the people they are really attracted to.</td>
<td>BUT</td>
<td>Other teenagers are dating those people they are attracted to.</td>
<td>○</td>
</tr>
<tr>
<td>20.</td>
<td>w6yhartt n20</td>
<td>Some teenagers are very hard to like.</td>
<td>BUT</td>
<td>Other teenagers are really easy to like.</td>
<td>○</td>
</tr>
<tr>
<td>24.</td>
<td>w6yhartt n24</td>
<td>Some teenagers feel that people their age will be romantically attracted to them.</td>
<td>BUT</td>
<td>Other teenagers worry about whether people their age will be attracted to them.</td>
<td>○</td>
</tr>
<tr>
<td>25.</td>
<td>w6yhartt n25</td>
<td>Some teenagers feel really good about the way they act.</td>
<td>BUT</td>
<td>Other teenagers don’t feel that good about the way they often act.</td>
<td>○</td>
</tr>
<tr>
<td>29.</td>
<td>w6yhartt n29</td>
<td>Some teenagers are popular with others their age.</td>
<td>BUT</td>
<td>Other teenagers are not very popular.</td>
<td>○</td>
</tr>
<tr>
<td>33.</td>
<td>w6yhartt n33</td>
<td>Some teenagers feel that they are fun and interesting on a date.</td>
<td>BUT</td>
<td>Other teenagers wonder about how fun and interesting they are on a date.</td>
<td>○</td>
</tr>
<tr>
<td>38.</td>
<td>w6yhartt n38</td>
<td>Some teenagers feel that they are socially accepted.</td>
<td>BUT</td>
<td>Other teenagers wished that more people their age accepted them.</td>
<td>○</td>
</tr>
<tr>
<td>42.</td>
<td>w6yhartt n42</td>
<td>Some teenagers usually don’t go out with the people they would really like to date.</td>
<td>BUT</td>
<td>Other teenagers do go out with the people they really want to date.</td>
<td>○</td>
</tr>
</tbody>
</table>