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By Abby M. Robinson

Entitled

An Exploratory Study of the Five Cs Model of Positive Youth Development Among Indiana Youth

For the degree of Master of Science

Is approved by the final examining committee:

Levon T. Esters

4/27/2011

Chair

Aryn Dotterer

4/27/2011

Renee McKee

4/27/2011

Mark Tucker

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AN EXPLORATORY STUDY OF THE FIVE Cs MODEL OF POSITIVE YOUTH
DEVELOPMENT AMONG INDIANA 4-H YOUTH

A Thesis

Submitted to the Faculty

of

Purdue University

by

Abby M. Robinson

In Partial Fulfillment of the
Requirements for the Degree

of

Master of Science

May 2011

Purdue University

West Lafayette, Indiana

I would like to dedicate my thesis
to this journey,
the friends I made along the way,
and the people who kept me sane.
Thank you!

ACKNOWLEDGMENTS

I need to thank:

My Heavenly Father

Philippians 4:13

I did it!

My Committee

Dr. Esters,

With tears in my eyes I asked you to be my advisor, and with tears in my eyes I will graduate from Purdue for the last time. It has been a longer than planned and at times bumpy road, but I know I could not have done it without you. I know with certainty that we have both learned from one another, and I'm sure that your second student here at Purdue will reap those benefits 😊!

Dr. McKee,

I am indebted to you. I could not have gone through this program without your support and can only hope that you know how appreciative I am. I will never forget the memories I've made or the trips I was able to take because of your generosity. Thank you for choosing me.

Dr. Tucker,

I hope you know how to use the 3-way chatting system, because Amy and I may not be able to do without your soapbox and open ears! You are one of a kind and I will miss you dearly. I feel fortunate to have learned from and worked alongside you.

Dr. Dotterer,

I began and ended my graduate work with you. From my first graduate-level course to the singing of my thesis, thank you for all your help.

Thank you all for your support and guidance. Your pep talks, words of wisdom, words that made me cry happy tears, and the generous time commitment to this 2-year student on the 1-year plan, will never be forgotten!

My Family

Thank you...

Dad, for knowing, beyond the shadow of a doubt, that I would achieve what I had come to achieve.

Mom, for every e-mail, note in the mail, voicemail, and invitation to come back home to the farm I belong on.

Daniel, for every time you just listened, for half of your closet, and for being a great roommate, but someday you will have to do your own laundry ☺!

Grandma Janet for just staying with me; sometimes I think you did it just because you know how much I need you and finally,

John, for being my very best friend, for never, ever letting me feel like I couldn't do this, for holding me when I cried, for telling me that I had to go back because it wouldn't be much longer.

Thank you all so much for every time you congratulated me, told me never to give up, hugged me, wiped my tears, made sure I knew you were proud and most importantly, NEVER let me stop believing in the places I would go. I love you all so much.

My fellow YDAE'ers:

This program just wouldn't have been the same without you. I won't forget the fun office talks, lunches in the conference room, walks to the Den and decoration sessions we were all able to share. For those leaving with me, we are a select few, and I am proud of us. We've come so far together and I'm excited that we accomplished this together. For those we leave behind, always help each other out, always have tissue nearby, and if your mouse doesn't work, just check to see if someone put tape over the sensor!

A special thanks to:

Amy Jones,

I do not know what I will do without you. I feel as though we are leaving here with a bit of each other, and by that I mean I think I see myself in you, and you in me a little more every day! I can't wait to hear about your first 4-H Fair Cake Decorating debacle! I'm happy to say that I'm confident you're a lifer ☺!

Annie Davis,

I'm so glad you chose Purdue, again. I wish you had been here for the first year; oh what a ride it would have been! Though it was a short year, I know this, too, will be one of those friendships that lasts a lifetime.

Jane, Linda, Mona, Sharon and Terry, thanks for always having the answers!

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ABSTRACT

Robinson, Abby M. M.S., Purdue University, May 2011. An Exploratory Study of the Five Cs Model of Positive Youth Development Among Indiana 4-H Youth. Major Professor: Levon T. Esters.

Positive youth development (PYD) is a research perspective grounded in finding ways to improve adolescent development and to aid youth so that they may reach their full potential. The general focus of the study of PYD is on the characteristics of development that lead to positive rather than negative outcomes for youth. PYD is organized from a framework known as the “5 Cs” of Positive Youth Development: Competence, Confidence, Connection, Character, and Caring. The theoretical framework guiding this study was based on the principles of Developmental Systems Theory (DST) and Developmental Contextualism which is a core feature of DST.

The purpose of this exploratory descriptive study was to investigate the levels of PYD among Indiana 4-H club, 4-H camp and 4-H afterschool participants. The questionnaire used for this study was the short-form version of the original measure of the Positive Youth Development Student Questionnaire (Lerner et al., 2005) which was designed to measure the Five Cs. Questionnaires were collected from a convenience sample of Indiana youth ($n = 453$). Data were analyzed using descriptive statistics including means, standard deviations,

frequencies and percentages. Independent samples t-tests were used to describe mean differences in positive youth development as measured by the Five Cs between 4-H and non 4-H participants as well as gender and a one-way Analysis of Variance was used to describe mean differences among the Five Cs and Total PYD across grade levels. Pearson's correlation coefficients were used to describe the relationships among positive youth development as measured by the Five Cs, 4-H club and 4-H afterschool participation.

Findings indicated that youth who participated in the 4-H program reported significantly higher total positive youth development than those who had never participated in 4-H. Youth who participated in the 4-H program also reported significantly higher scores on four of the Five Cs (Confidence, Connection, Character, and Caring). The findings of this study contribute to Developmental Systems Theory by confirming the role that 4-H has in contributing to positive youth development. Recommendations are provided to guide future research related to the Five Cs aspect of positive youth development among 4-H youth.

CHAPTER 1. INTRODUCTION

1.1. Positive Youth Development

Positive youth development (PYD) is the current research focus aimed at finding ways to improve adolescent development and to aid students so that they may reach their full potential (Zarrett & Lerner, 2008). Positive youth development is the modern approach of viewing adolescents as resources of the community, rather than problems that must be addressed and fixed (Damon, 2004). Positive youth development provides a rich foundation that will enable young people to become leaders who will contribute not only to their communities, but themselves and others as well (Nail, 2007). The general focus of the study of PYD is on the characteristics of adolescent development that lead to positive rather than negative outcomes for youth (Heck & Subramaniam, 2009). The National Collaboration for Youth Members (1998) maintains that positive youth development is “a process which prepares young people to meet the challenges of adolescence and adulthood through a coordinated, progressive series of activities and experiences which help them to become socially, morally, emotionally, physically and cognitively competent” (as cited in Collins, Hill, & Miranda, 2008, p. 45).

Positive youth development can be understood as a paradigm shift encompassing all fields that include youth interaction. Pittman and Fleming

(1991) suggested that a student appearing to be problem-free was not necessarily an indication that they were fully prepared. In the 1970s and 1980s, prevention science, or research focused on risk or protective factors in child development, took a different approach to understanding adolescent development. The majority of this research was for years looking at a single risk factor that could be remedied with a single protective factor. It was not until the mid-90s that researchers began to see the flaw in the single-problem approach and began to call for a more comprehensive, or developmental systems, approach (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 1998). The assumption was that youth programs existed to repair troubled youth when in reality, youth programs could also exist to develop trouble-free youth (Pittman & Fleming, 1991).

The PYD approach is surfacing in many of today's youth-serving programs including Big Brothers/Big Sisters of America, community-based after-school programs, service-learning programs as well as Job Corps residential training programs (Bradshaw, Brown, & Hamilton, 2008). The 4-H Youth Development Program, as it functions through the Cooperative Extension Service, is another example of programming that is implementing a PYD approach (Lewis, 2008).

The Positive Youth Development approach was developed based on a framework known as the "5 Cs" of Positive Youth Development (Lerner, Lerner, & Phelps, 2009) and includes: Competence, Confidence, Connection, Character and Caring. When youth achieve high levels of each of the Five Cs, a sixth C, Contribution, is demonstrated. Contribution is demonstrated through time spent

on or in that young person's family, community or civil society at large (King et al., 2005). When a young person demonstrates high levels of the Five Cs, as well as Contribution, it is believed that they are on a positive path that will lead to idealized adulthood (Csikszentmihalyi & Rathunde 1998). However, as levels of the Five Cs for an individual decrease, the likelihood that they will find themselves on a negative developmental path increases (Lerner, Lerner & Phelps, 2008; Lerner, von Eye, Lerner, Lewin-Bizan, & Bowers, 2010). The Five Cs have been studied extensively and findings show a connection between 4-H and PYD outcomes (Lerner, et al., 2009). These findings can be useful to land grant institutions and the Cooperative Extension Service in the future as they develop programming for young people.

1.2. The Cooperative Extension Service (CES)

The Cooperative Extension Service (CES) is “a public funded non-formal educational system that links the education and research resources of the United States Department of Agriculture (USDA), land-grant universities, and county administrative units” (Seevers, Graham, & Conklin, 2007, p. 1). The general mission for the CES is to help people make their lives and communities better through partnerships that put knowledge to work. Although the CES began as a program for rural audiences, it is now a program that serves a broader group in all forms of residency (Mincemoyer, Perkins, Ang, Greenberg, Spoth, Redmond, Feinburg, 2008).

The CES maintains four specific program areas, all of which share the goal of educating the public. These areas include: 1) Agricultural and Natural Resources, 2) Consumer and Family Sciences, 3) Economic and Community Development, and 4) 4-H Youth Development. The Agricultural and Natural Resources (ANR) program takes responsibility for addressing public concern about food safety, water quality, agronomy, horticulture and other related issues. The ANR program supports community projects that will benefit citizens locally as well as statewide.

The Consumer and Family Sciences (CFS) program is focused on improving family and economic well-being of citizens in every county. The primary goal of the CFS program is to strengthen the family and home by increasing knowledge and opportunities for educational programs. These programs are created to serve specific audiences and put a forth a substantial effort toward helping at-risk audiences.

The Economic and Community Development (ECD) program encourages leadership, public policy education, and improving the local environment (Seevers et al., 2007). The ECD program also provides educational programming for citizens. These programs provide information to the general public that they can use to increase community vitality, build leadership capacity, enhance public decision-making, and resolve public issues (Purdue University, 2008).

The 4-H program is an “out-of school” organization that provides youth with ‘learning by doing’ experiences through projects they have chosen (Lewis, 2008). 4-H Youth Development’s goals focus on learning, development of life-

skills, and the transformation of youth into productive members of society (McKee, 2008). The 4-H program is very unique in the United States because it is offered in every state through the land grant universities and is the National Institute for Food and Agriculture's (NIFA) "flagship" youth development program (Lewis, 2008; Kahler, 2009). 4-H is open to any and all youth, grades three through 12 and is not only the largest youth serving organization in the United States, but also the 'largest non-formal voluntary educational program in the world' (Seevers et al., 2007, p. 78).

1.3. The 4-H Youth Development Program

The mission of the 4-H Youth Development Program is to empower young people to reach their full potential by allowing them to work, as well as learn, alongside and with the help of caring adults. The 4-H program is also unique with its large base of over one million adult volunteers (Seevers et al., 2007). The 4-H Youth Development program provides many critical elements required of a program to encourage PYD including caring adults, a safe environment and opportunities to master skills and content (National 4-H Impact Assessment Project, 2001).

4-H programming functions through many different venues. 4-H clubs are the largest and most popular way youth take advantage of the many educational opportunities and activities 4-H offers. These clubs are organized as many adult clubs would operate. There are officer elections, regular meetings, and projects, or select subject matter areas in which members have an interest to study. Each

4-H member enrolls in his or her own subjects of interest while community service projects or club projects are completed through meetings by all members of the club (Seevers et al., 2007). The projects in which youth enroll are self-directed and content-based, and “afford an opportunity for youth to demonstrate what they have learned” (R. McKee, personal communication, September 2, 2010). In the early years of 4-H, projects included raising animals and vegetable projects and although these still exist today, a wide array of projects are now available (Seevers et al., 2007). For example, a few of the over 100 projects include computer technology, aerospace, photography, fitness and sports, and arts and crafts (Indiana 4-H Report, 2010).

Another way for youth to be involved in 4-H is through short-term programs like school enrichment activities. Through school enrichment activities students have the opportunity to learn new and different things outside of the formal school setting. Typically, 4-H curricula meet guidelines set forth by the Department of Education (Seevers et al., 2007). For this reason, it is common for the 4-H Youth Development Educator to take 4-H curriculum that aligns with class content and use it in a formal classroom setting. Aside from traditional 4-H programs and in-school activities, youth are also regularly involved in 4-H camps and programs after school, and community service clubs (Seevers et al., 2007). Many studies have reported that 4-H Youth Development programming beneficially affects young people, but threats of financial instability will require evidence of effectiveness (Boyd, Herring, & Briers, 1992; Boyd et al., 1992).

1.4. Funding

In 1986, 32% of funding for the Cooperative Extension Service came from federal funds, 47% from state funds and 18% from local funding leaving 3% to be gifted by private donors (Rasmussen, 1989). Although shifts and changes in funding have occurred, the CES still receives financial support from the same primary sources. The division of funds varies by state, but today federal funding comes through a partnership with the United States Department of Agriculture (USDA) and comprises 17% of the CES budget. The state legislature makes a contribution that totals 40% of the budget, with 43% of the budget coming from local funding sources. Of the local funds, 22% comes from the local government, 17% from grant funds for which educators apply, and 4% is from user, or participant fees (Hibberd, 2008).

In 2006, the Joint Taskforce on Managing the Changing Portfolio of the Cooperative Extension System reported that funding for programs would be seeing changes, however, “the system must identify the most attractive opportunities available for enhanced programmatic and resource generation and then proceed in a manner that maintains the quality and integrity of the Extension system as a whole” (p. 5). As such, the Task Force made numerous recommendations that were believed to be positive approaches to more consistent funding. During the past decade, Extension has reached a point at which public funding is no longer growing while the needs for its services are in high demand. In short, “the CES must seek and develop new funding relationships if historic levels of service are to be maintained” (Joint Task Force

for the Changing Portfolio of Cooperative Extension, 2006, p. 7). Realizing that Extension will continue to be asked to provide more services with dwindling financial resources, additional research could benefit an organization that proves to be worth sustaining (Ahmed & Morse, 2010).

1.5. Need for Study

Research shows that 4-H Youth Development programs have beneficial effects on youth by positively affecting development and therefore positively affecting their adulthood (Boyd, Herring, & Briers, 1992). Though research continues to show that participating in constructive leisure activities, like 4-H, is a facilitating mechanism for positive development, more research is needed to strengthen this case (Morrissey & Werner-Wilson, 2005). The case is often made that the relationship 4-H has with a land-grant university provides unique opportunities for youth that few other programs offer, however, in the push for accountability, providing evidence of the effectiveness of youth development programs such as 4-H is essential (Boyd et al., 1992).

As budgets are becoming tighter, demonstrating accountability is becoming of greater importance. With projected funding cuts, it is increasingly important to determine whether or not federally-funded programs, such as 4-H, effectively accomplish their programmatic goals. Hence, more program evaluation is necessary to ensure that Extension programs are indeed making an impact that is both positive and productive (Galloway, Peterson & Dalton, 2006, King, 2008). Further, in this era of dwindling funding it is imperative that

Extension Educators make known the mission of Extension to the citizens they serve, as well as to those at the local, state and federal, levels of government. These individuals, after all, will decide whether or not to fund programs based on the impacts of Extension programming (Lindstrom, 2007).

1.6. Purpose

The purpose of this study was to explore the levels of positive youth development among Indiana 4-H participants.

1.7. Research Objectives

The Research Objectives of this study were to:

1. Describe the levels of positive youth development (PYD) as measured by the Five Cs between 4-H and non-4-H participants.
2. Describe differences in positive youth development (PYD) as measured by the Five Cs across 4-H participation, gender and grade.
3. Describe the relationships between positive youth development (PYD) as measured by the Five Cs and 4-H club and 4-H afterschool participation.

1.8. Assumptions

The following assumptions were made throughout this research.

1. Students who are invited to complete the questionnaire have access to a computer.
2. Students who complete the questionnaire will provide honest answers.
3. Students who complete the questionnaire will have done so independently without use of outside help or assistance.

1.9. Limitations

This study was conducted with the following limitations:

1. The results of this study are limited to the state of Indiana, thus the findings cannot be generalized to other states.
2. The data collection method used in this study did not include a randomized selection of the participants and is not generalizable.
3. The researchers cannot control for the effects of students being involved in other youth programs which may impact their responses.
4. Self-reporting is a limitation in this study because the accuracy of these data is reliant upon the honesty and accuracy of the students' opinions of themselves.
5. The data collection method used in this study cannot be described exactly as the researcher did not contact the subjects. Precise dates for initial and follow-up contact cannot be determined.

1.10. Operational Definitions of Terms

After School Programming – Safe, structured activities that convene regularly in the hours after school that help children learn new skills, and develop into responsible adults (The National Youth Violence Prevention Resource Center, 2007).

Agriculture and Natural Resources (ANR) – Extension program area with varying specialties that offers programs and information on agricultural production and financial management for farmers, food and fiber processors, manufacturers and consumers. Educators also provide expertise in environmental issues, natural resource conservation and land use (Restrepo, 2010).

Economic and Community Development (ECD) – Extension program area that offers programs with goals of increase community vitality, build leadership capacity, enhance public decision-making, and resolve public issues (Cordes, 2009).

Extension Educator – Professional staff capable of providing leadership, determining needs, and developing and implementing educational programs while applying research-based knowledge from the land-grant university (University of New Hampshire, 2003).

4-H Youth Development– Extension program area that helps youth explore their interests, accomplish goals, gain knowledge, and create lasting bonds with friends and mentors. The 4-H program also gives youth and adults the opportunity to work collaboratively (Michigan State University Extension, 2007).

Cooperative Extension Service (CES) – One of the nation's largest providers of scientific research-based information and education. It's a network of colleges, universities, and the U.S. Department of Agriculture, serving communities and counties across America (Purdue University, 2008).

Consumer and Family Sciences (CFS) – Extension program areas with specialists and educators who provide education that helps communities analyze, identify and meet the needs of families, train volunteers and paraprofessionals to assist in areas of critical concern to families, and motivate people to become leaders in address community issues.

Additionally CES staff collaborate with agencies, community organizations, and educational groups to address the needs of families (Purdue University, 2008).

Land Grant University – Institutions of higher education in the United States designated by each state to receive the benefits of the Morrill Acts of 1862 and 1890 (West Virginia University Extension Service, 1999).

National Institute of Food and Agriculture (NIFA; formerly the Cooperative State Research, Education, and Extension Service) – Agency within the U.S. Department of Agriculture (USDA) that is part of the executive branch of the federal government that provides leadership in creating and disseminating knowledge spanning the biological, physical, and social sciences related to agricultural research, economic analysis, statistics, extension, and higher education (NIFA, 2009).

Positive Youth Development (PYD) – Framework which views adolescents as resources to be developed rather than as problems to be managed (Lerner, 2008).

CHAPTER 2. LITERATURE REVIEW

2.1. Introduction

This chapter will provide an overview of the positive youth development (PYD) framework and research related to PYD and 4-H Youth Development Programming. The chapter is divided into five sections. The first section provides an overview of the PYD perspective and related subject matter. The second section focuses on the theoretical framework of the study, Developmental Systems Theory (DST). Section three presents a review of research conducted on the Five Cs portion of the PYD framework with youth enrolled in 4-H Youth Development Programs. Section four provides an overview of the Indiana 4-H program, and the chapter concludes with a fifth section containing a summary of the chapter.

2.2. Positive Youth Development

The positive youth development perspective is becoming the primary framework for researchers and practitioners in youth development (Bowers et al., 2010, King, et al., 2005). The PYD perspective posits that every adolescent has strengths, or at least the capacity to develop strengths, that will enable youth to grow positively (Lerner, 2006). This approach also maintains that

youth are completely capable of learning and developing skills, exploring the world that surrounds them, and then making contributions to that world (Lewis, 2008). This approach has received attention within the PYD literature reviewed in this chapter due to the empirical evidence that put emphasis on Developmental Systems Theory (DST) and the accuracy of the Five Cs: Competence, Confidence, Connection, Caring and Character, in comparison to other components, and the importance of the Five Cs variables in predicting both long- and short-term outcomes for young people (Heck & Subramaniam, 2009). Not only have DST and the PYD perspective come to the forefront of adolescent research, but they have done so as a replacement for the deficit view (Damon, 2004; Lerner, Lerner & Phelps, 2008) or the view that youth are problems in need of repair.

Damon (2004) states that “the positive youth development approach aims at understanding, educating and engaging children in productive activities rather than at correcting, curing or treating them for maladaptive tendencies or so-called disabilities” (p. 15). This type of development is most often seen in environments that enable youth to see the importance of their position and their potential and “addresses the broader developmental needs of youth, in contrast to deficit-based models” (Rembert, 2009, as cited in Collins et al., 2008, p. 46). The features of PYD will emerge when the strengths of youth are aligned across adolescence with the resources available to them in their families, schools, and communities (Balsano, Phelps, Theokas, Lerner & Lerner, 2009). This is further illustrated in the Developmental Systems Theory model (Figure 2.1).

In 1998, the Social Development Research Group from the University of Washington developed criteria along with operational definitions to illustrate what a view of PYD. Through this project 15 criteria were listed and in order for a program to be considered PYD-based, it must list one or more of the following as a goal: 1) promote bonding, 2) foster resilience, 3) promote social competence, 4) promote emotional competence, 5) promote cognitive competence, 6) promote behavioral competence, 7) promote moral competence, 8) foster self-determination, 9) foster spirituality, 10) foster self-efficacy, 11) foster clear and positive identity, 12) foster belief in the future, 13) provide recognition for positive behavior, 14) provide opportunities for prosocial involvement and 15) foster prosocial norms (Catalano, Berglund, Ryan, Lonczak, Hawkins, 1998).

According to Kiely (2010), a great deal of research has been conducted documenting the positive impact of youth development programs. Positive impacts include initiative skills, academic achievement, civic engagement, and an overall positive development (Lerner, et al., 2008). Benson, Leffert, Scales and Blyth's (1998) Developmental Assets Framework set the stage for the birth of many elements that many organizations try to provide today.

The 40 Developmental Assets Model provides 40 "building blocks that when present or promoted appear to enhance significant developmental outcomes among youth" (Benson, Leffert, Scales & Blyth, 1998, p.142). These assets are separated into two categories: external and internal assets. Categories of external assets include support, empowerment, boundaries and expectations, and constructive use of time. Categories of internal assets include

commitment to learning, positive values, social competencies, and positive identity.

Similarly, the National 4-H Impact Assessment Project (2001) identified eight critical elements that positive youth development programs should include.

These eight elements include:

1. Relationship with a caring adult
2. Safe physical and emotional environment
3. Opportunities to master skills and content
4. Opportunities to practice service for others
5. Opportunities for self-determination, decision making, and goal setting
6. Opportunities to be a part of an inclusive environment
7. Positive connections with the future, and
8. Opportunities to be engaged in learning

According to Lerner (2005b), specific resources, such as the 40 Developmental Assets or the Eight Critical Elements of PYD programs, are useful in understanding the practical application of developmental systems theory.

2.3. Theoretical Framework: Developmental Systems Theory

Developmental Systems Theory (DST) is a contemporary human development theory and is particularly useful in studies of adolescent development (Kiely, 2010). Developmental contextualism, a core feature of DST, stresses that the mutually influential relations between an individual and his or

her contextual factors will shape that individual across the lifespan (Napolitano, 2010). According to Lewis (2008), the theory of developmental contextualism is “the essential process of youth development as comprised of reciprocal interactions between individuals and the many contexts in which they live” (p. 14). Lerner and Miller (1993) highlight that through developmental contextualism, mutual relationships and dynamic interactions exist between variables such as communication, sociocultural, physical, ecological, and historical elements (Kiely, 2010). Developmental contextualism also posits that an individual can, and will affect his or her context. This is represented as Individual \leftrightarrow Context relationships.

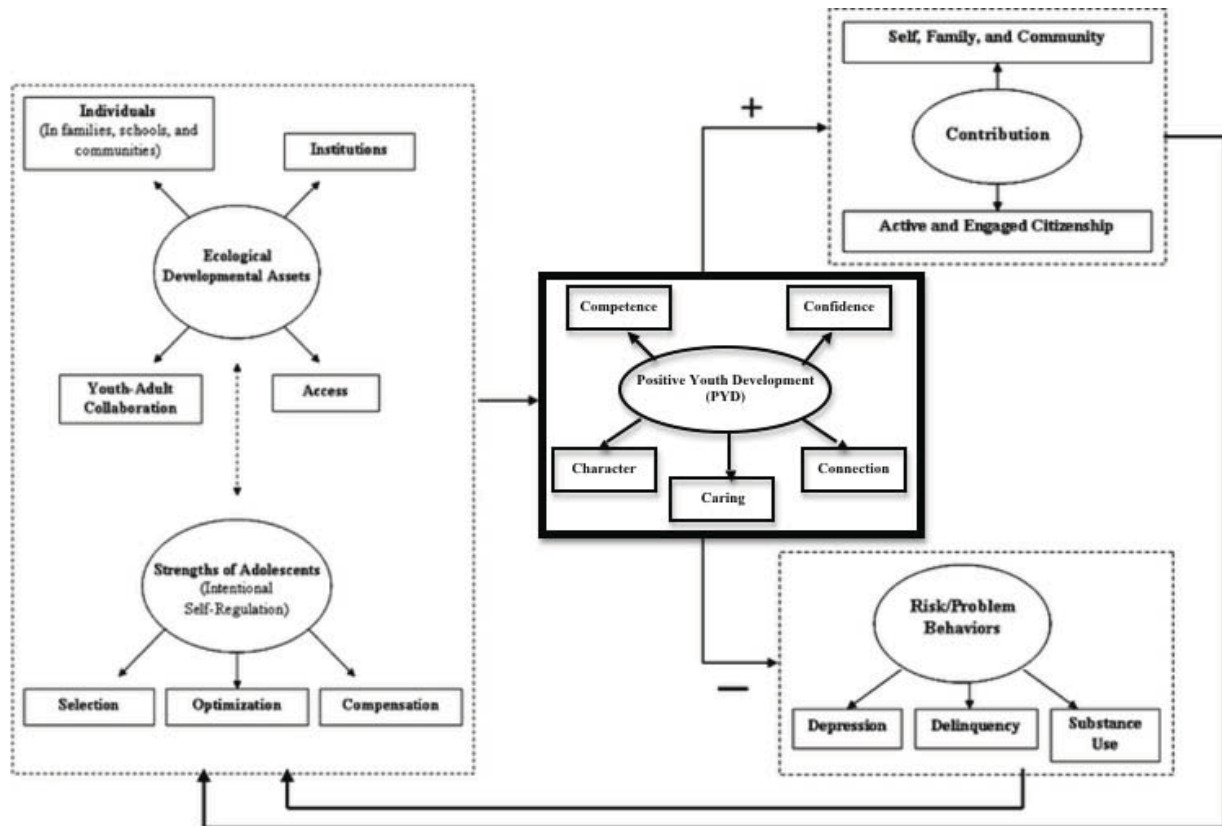
Developmental contextualism emphasizes the basic process of human development, which includes changing relations between individually distinct people and the actual multilevel contexts in which they live (e.g., families, schools and communities) (Trickett, Barone, & Buchanan, 1996). The premise of PYD research suggests that when strengths of adolescents, such as self-regulation skills, are aligned with developmental assets, such as resources, the development of PYD through the Five Cs will transpire. As positive youth development occurs, youth who engage with their surroundings will provide contributions to that context. As youth are engaged within their contexts, PYD should be inversely related to the incidence risk/problem behaviors (Lerner et al., 2010).

The DST model (See Figure 2.1) is composed of four primary areas. Within DST, the self-regulation skills of youth are manifested through the

Selection, Optimization, Compensation (SOC) component. The SOC component was developed as a tool that would aid in the understanding of human development throughout the lifespan by describing the numerous processes involved in goal setting and the pursuit of that goal across time (Napolitano, 2010; Gestsdottir & Lerner, 2007). The SOC component represents the process of selecting a goal (Selection), pursuing that goal (Optimization), and making the necessary changes due to a circumstance to achieve that goal (Compensation) (Lerner, Freund, De Stafanis & Habermas, 2001). This particular component is important in longitudinal studies of PYD because it gives researchers the ability to predict either positive or risk/problem behaviors (Lerner et al., 2009).

The SOC component has been praised for its consistency as it is applicable in many ways, and can be incorporated into numerous levels of analysis (Baltes & Dickson, 2001; Baltes, Staudinger, & Lindenberger, 1999). Consistently, SOC-related behaviors have been positively linked to successful life outcomes including life satisfaction, a positive demeanor and psychological well-being as well as fewer instances of loneliness (Wiese, Freund, & Baltes, 2000). Younger individuals, such as adolescents, are likely to have fewer resources or more limits in the way of abilities or opportunities than adults who have more control of these things, however, a positive relationship between SOC and PYD is still expected (Gestsdottir & Lerner, 2007). By utilizing the SOC component adolescents would also be able to make the most of their potential (Baltes & Dickson, 2001).

Aligning with the SOC component, the Ecological Risk/Protective component of the DST model focuses on ecological developmental assets, or resources, which are made up through individuals, institutions, youth-adult collaboration and access. Individuals in a young person's life are resources as they demonstrate strengths, skills and abilities that set a good example for youth. Institutional resources include libraries, youth facilities and other arenas in which youth can learn and engage with others. Important youth-adult collaborations can be met through family meals, volunteering in the community or parents investing time in a young person's school. Ultimately these collaborations can happen among community members, adults and youth alike rather than youth and youth interactions alone, or organizations interacting with youth. Access is a final and equally important asset or resource for young people. This concept can refer to a youth's access to an after-school activity, the hours of operation to a community program or simply accessibility to a parent or teacher (Lerner, 2005b).



*Figure 2.1. A Developmental Systems Theory-Based Framework of Thriving in Adolescence. Adapted from “Special issue introduction: The meaning and measurement of thriving: A view of the issues,” by R.M. Lerner, A. von Eye, J.V. Lerner, S. Lewin-Bizan, and E.P. Bowers, 2010, *Journal of Youth and Adolescence*, 39, p. 712. Copyright 2010 by Springer Science+Business Media.*

As a young person’s resources align with their self-regulation process so follows the development of PYD, or the Five Cs. The Five Cs component (Table 2.1) has received the most attention within the PYD literature (Bowers et al., 2010). This is due to the substantially larger base of empirical evidence for the Five Cs in comparison to other components, the validity of the constructs, and the importance of the Five Cs variables in predicting both long- and short-term outcomes as demonstrated through longitudinal research (Heck & Subramaniam,

2009). Research turned to creating a measurement tool when researchers began focusing on some of the reported gaps in the framework.

These gaps included issues such as the following: 1) little data focused on the Developmental Systems Theory framework, 2) lack of longitudinal data, 3) no empirically tested measurement of the Five Cs of positive youth development, and 4) lack of studies that connected the participation in community-based youth development programs and positive youth development (Lerner, 2005a).

The Five Cs component introduces five key characteristics that are the building blocks of PYD. The Five Cs were developed based upon experience and reports of practitioners as well as a review of literature and include:

1) Competence, 2) Confidence, 3) Connection, 4) Character, and 5) Caring (Lerner, 2006; Bowers et al., 2010).

Competence is defined as having a positive outlook on one's own actions in specific areas including social, cognitive, academic, and vocational realms (Phelps et al., 2009). Being socially competent refers to skills such as communication, resistance, and conflict-resolution (Roth & Brooks-Gunn, 2003). To be cognitively competent is to be both logical and analytical, while also having decision-making, planning and goal-setting skills (Bowers et al., 2010). Academic competence refers to attending courses and achieving good grades while vocational competence is the embodiment of positive work ethic and actively explores career options (Roth & Brooks-Gunn, 2003).

Confidence refers to a young person who exhibits a largely positive sense of self-worth and who also exhibits self-efficacy (Phelps et al., 2009). A confident

young person would display overall positive regard for themselves as opposed to confidence in only one specific area (Roth & Brooks-Gunn, 2003). Confidence can be promoted by offering youth both opportunities to be involved in activities and positive feedback for their accomplishments (Jones, 2005).

Connection is manifested through constructive and encouraging relationships with people and institutions such as school, family, and peers. Connection specifically refers to a bi-directional relationship between the youth and his or her peers (Roth & Brooks-Gunn, 2003). Bi-directional relationships indicate that both parties contribute to the positive relationship rather than only one party having a positive influence on the other (Zarrett & Lerner, 2008).

Table 2.1

Definitions of the Five Cs of Positive Youth Development

“C”	Definition
Competence	<ul style="list-style-type: none"> • Positive view of one’s actions <ul style="list-style-type: none"> ○ Social Competence: interpersonal skills (i.e., conflict resolution) ○ Cognitive competence: cognitive abilities (i.e., decision making) ○ Academic competence: school performance (i.e., school grades, attendance, and test scores) ○ Vocational competence: work habits, explorations of career choices
Confidence	<ul style="list-style-type: none"> • Internal sense of overall positive self-worth and self-efficacy
Connection	<ul style="list-style-type: none"> • Positive bonds with people and institutions reflected in exchanges between the individual and peers, family, school, and community • Both parties contribute to the relationship
Character	<ul style="list-style-type: none"> • Respect for societal and cultural norms • Possession of standards for correct behaviors • Sense of right and wrong (morality), and integrity
Caring/ Compassion	<ul style="list-style-type: none"> • Sense of sympathy and empathy for others

Character refers to a respect for rules, and a sense of right and wrong (Bowers et al., 2010). Jellicic, Bobek, Phelps, Lerner, and Lerner (2007) state that character is, “respect for societal and cultural rules, possession of standards for correct behaviors... morality, and integrity” (p. 265). Jones (2005) also discusses how an optimal environment for character growth in youth is in the presence of adults. Jones (2005) speaks specifically to youth who are influenced by, or who are able to witness adults who display high moral value, responsibility, and respect.

According to Phelps et al. (2009), Caring is defined as the embodiment of sympathy and empathy for other people. Youth are best able to become sympathetic and empathetic by interacting with adults who display these traits when helping those in need around them (Jones, 2005).

In the event that all five characteristics are at an optimal level for a particular young person, King et al., (2005) report the person is expected to display “idealized adulthood” through a sixth “C”, Contribution. The overarching hypothesis posed by Lerner, Lerner and Phelps (2009) is that young people who throughout adolescence have manifested the Five Cs are on a “developmental path,” or trajectory, that will lead to Contribution. Contribution in a young person is defined as his or her time spent on or in their family, community or civil society at large as an actively engaged citizen (King et al., 2005). Alternatively, youth portraying lower levels of these Five Cs are more likely to find themselves on a developmental path fraught with risk (Lerner et al., 2008; Lerner et al., 2010).

It has been reported that youth exemplifying lower levels of the Five Cs face greater risk of experiencing personal, social and risk/behavioral problems (Lerner et al., 2008). These risk behaviors include depression, delinquency, and substance abuse (Lerner et al., 2010). Lerner, von Eye, Lerner, Lewin-Bizan and Bowers (2010), contended that low levels of the Five Cs and Contribution do not point directly to risk behaviors as originally reported in earlier research. However, research findings are difficult to interpret due to the complexity of nature of the risk behaviors as youth age.

2.4. Selected Correlates and Outcomes of Positive Youth Development

Several variables influence, and are influenced by positive youth development in young people. This section provides a few examples based on empirical research.

2.4.1. Gender

Gender has been found to be the most common variable through which levels of PYD reportedly vary. First, Eccles, Wigfield, Harold and Blumenfeld (1993) compared males and females based on their perceptions of competence. This study revealed that for some domains, such as math and sports, males reported higher levels of competence, while levels of competence in domains such as language arts or instrumental music were higher for females. The overarching result of this research was that levels of competence for youth rely heavily on the different domains that young people participate in. To youth self-reporting levels of competence; Cole, Martin, Peeke, Seroczynski and Fier

(1999) found that not only did gender differences grow over time, but young males tended to overestimate academic competence, while females underestimated academic competence. This finding holds great importance as the same study also reported that underestimation of academic competence and self-reported levels of depression and anxiety were negatively correlated (Cole, Martin, Peeke, Seroczynski & Fier, 1999).

More recent research shows that females report higher scores of PYD (measured by the Five Cs) than their male counterparts but definitive reasoning as to why is lacking. Longitudinal findings show that females reported higher PYD and Contribution levels than males, and that males score higher for risk behaviors than their female counterparts (Lerner, 2005b; Jellicic, Bobek, Phelps, Lerner, & Lerner, 2007; Zimmerman, 2007). Balsano et al. (2007) reported similar findings and added that females actually spent more time participating in out-of-school-time activities than similarly-aged males. However, both males and females who participate in structured out-of-school activities show greater academic performance (Huebner & Betts, 2002).

2.4.2. Grade

Though few studies have been published with a focus specifically on differences in PYD based on grade, many studies have suggested that there are differences. Phelps, Zimmerman, Warren, Jellicic, von Eye, and Lerner (2009) found that students transitioning from grades five, to six, to seven showed slight decreases in levels of PYD as grade levels increased. Similar to the findings

related to gender, females reported higher PYD scores than their male peers. Though these levels were for younger youth, this finding is important as it conflicts with other research.

Gestsdottir, Lewin-Bizan, von Eye, Lerner, and Lerner (2009) indicated that trajectories young people might be on are quite complex since positive trajectories for PYD don't necessarily point to negative trajectories for risk/problem behaviors. However, in terms of grade level differences on PYD, Gestsdottir et al. found that 9th grade youth reported higher levels of PYD than 8th grade and 10th grade students. This study also concluded females consistently reported higher PYD scores than their male peers (Gestsdottir et al., 2009).

Bowers, Li, Kiely, Brittian, Lerner and Lerner (2010) compared youth in grades eight through 10 and found that 8th grade students reported significantly higher scores of Competence, Confidence, and Connection as well as Total PYD than 9th grade students. However, when 8th grade students were compared to 10th grade students, a significant increase in levels of Caring and Character as well as Total PYD was also found. These authors argued that these findings were contributed to transitions into new learning environments. They further suggested that future research pay particular attention to contextual factors that could influence the lives of young people.

2.4.3. Youth Adult Relationships

Holding youth to higher standards naturally results in the availability of opportunities that allow them to contribute to their communities (Benard, 1991).

Research shows that caring and supportive adults who hold high expectations for youth, and encourage their participation in a variety of activities are a key component in the positive development of that young person. Jones and Perkins (2006) reported that positive interactions between youth and adults serve as protective factors for that young person. Often times, however, adults will perceive the lives of the young people they work with in relation to their own personal younger years. Unfortunately, this can cause a great disconnect between the adults and the youth Jones and Perkins are trying to encourage. In their study, which included a majority of adult female volunteers, they found that younger female participants left the program with a more positive view of youth-adult interaction. For this reason, Jones and Perkins suggested that providing young males with male role-models is one possible way to raise young males' perceptions of adults. This could, in turn, increase youth-adult interaction for males as well.

Findings from the same study indicated that youth from rural areas had a much more positive outlook on involvement with adults than youth from urban areas. This was thought to be due to the fact that youth from rural areas had been involved in their local 4-H program. Their participation in 4-H gave them the opportunity to interact with adults for many years, creating more positive youth-adult interactions. Jones and Perkins recommended that youth-serving organizations continue to create opportunities for youth to work closely with adults for prolonged periods of time, particularly in urban areas, to ensure that

they may develop a sense of community and connectedness (Jones & Perkins, 2006).

2.4.4. Out-of-School Time

Researchers recently reported that a PYD intervention carried out in an after-school setting appeared to be an effective venue for preventing substance abuse among adolescents (Tebes et al., 2007). Not only did youth avoid using substances, they were more likely to hold the opinion that drugs were harmful. One year after the PYD intervention had ended, the young participants continued to be involved in substance abuse far less often (Tebes et al., 2007). In addition, Barber, Stone, Hunt, and Eccles (2005) reported that youth who are involved in out-of-school programs are better prepared to manage difficult issues in their personal lives, form healthy relationships, and be accomplished in their work. Tebes et al. (2007) recommended that out-of-school time interventions are appropriate so long as they are developed to meet the specific needs of the audience.

In another study, Dotterer, McHale and Crouter (2007) noted that though out-of-school-activities were not related to a young person's grades, participation in such programs resulted in positive self-esteem as well as school bonding, or their sense of belonging in their school. Dotterer et al. (2007) go on to mention that participation in out-of-school activities encouraged students and left them with a more positive opinion of school as an institution. Participating youth have greater opportunities to create positive relationships with their teachers and friends and in turn feel more important in their schools. Together these findings

paint a picture of overall positive outcomes for youth involved in out-of-school activities compared with youth who were not involved in such activities.

2.4.5. Frequency of Participation

Youth development programs have been recognized as an increasingly important asset for promoting positive youth development among young people. Theokas, Lerner, Phelps, and Lerner (2006) reported that most after school programs have comparable goals for youth such as providing a safe environment and various opportunities for youth to develop skills. Findings from many studies, including those from the first wave of the 4-H Study of Positive Youth Development, indicated that youth who participate in one youth development program will typically be involved in more than just one program (Lerner et al., 2005; Busseri & Rose-Krasnor, 2007). Theokas, Lerner, Phelps, and Lerner (2006) believe that not only is participation in multiple programs common, it is also the most favorable and beneficial for youth. They also note that while participation in many programs is beneficial, it also makes it very difficult for researchers to determine which program had the greatest effect on a young person. Regardless, many researchers maintain that out-of-school activities tend to leave youth with lasting beneficial effects (Roth, 2006).

In 2009, Denault and Poulin studied the intensity, or time spent in, as well as the breadth, or number of activities youth participated in, in accordance with adolescent outcomes by the time they graduated from high school. The expectation was that intensity and breadth of participation in activities would

decline as youth aged. Findings indicated that intensity for youth peaked as underclassmen, but fell significantly as they reached 11th and 12th grade. Additionally, breadth started out relatively high for 7th grade students and fell consistently as youth went on through their high school years. These changes were attributed to an expected change in autonomy, self-discovery and time constraints. Patterns of decreasing intensity and breadth found in this study are believed to be connected to individual trajectories. Researchers found that the more involved a young person was in their middle school years, the more likely they were to be academically oriented as well as civically involved. These findings were even stronger for those who decreased both their breadth and intensity of participation at a slower rate. Denault and Poulin suggest that program participation in middle school can be considered an indicator of positive development for the future.

Lerner, Lerner, Almerigi, Theokas, Phelps, Gestsdottir, and von Eye (2005) sought to identify individual and natural formats of healthy development among youth from across the United States. Focusing on youth specifically between the ages of 11 and 20, the researchers were interested in learning about developmental trajectories. One aspect of the study focused on participation levels of youth in different youth development programs. Lerner et al. (2005) were interested in whether or not the ways in which youth spent their time affected their community productivity as well as contribution to that community. After the first wave of data collection, no significant relationship was

found between participation in youth development programs and positive youth development.

Urban, Lewin-Bizan, and Lerner (2009) report findings from waves one and three of the same study indicating that females from a low-resource neighborhood who reported moderate to high frequencies of activity involvement while in fifth grade were likely to report lower levels of risk behaviors once they were in seventh grade pointing towards a positive outcome due to youth development programming. The opposite, however, was found for males from low-resource neighborhoods (Urban et al., 2009). Gardner, Roth, & Brooks-Gunn (2008) noted that more research is needed on this topic due to the fact that researchers cannot say with confidence that participation in organized activities results in positive outcomes for those youth.

2.5. Empirical Literature on 4-H Youth Development and the PYD Perspective

Recently, a greater focus has turned to the use of the Five Cs with research related to 4-H and PYD (Arnold, Dolenc & Rennekamp, 2009; Bossaer, 2009; Institute for Applied Research in Youth Development [IARYD], 2009). The 4-H Study of PYD is the first longitudinal study of positive youth development (Lerner et al., 2010) with Lerner, et al. (2008) being the first to develop measurements for positive youth development using the Five Cs framework (Phelps et al., 2009). At the end of the fifth year (fifth wave), of the 4-H Study of PYD, Lerner et al., (2010) collected data from a total of 4,701 adolescents which included both 4-H and non-4-H participants who resided in 34 states. Data were

gathered by means of student and parent questionnaires to assess levels of PYD among other important developmental characteristics. Findings from Lerner, Lerner, and Phelps's (2008) 4-H Study of PYD Annual Report of Wave 4 provided evidence that 4-H participants were on higher trajectories for PYD and Contribution as well as lower trajectories for depressive symptoms and risky behaviors. 4-H youth were also more likely to make contributions to their communities than their non-4-H peers and conflicting with the idea that youth are problems, more than 90% of all youth providing data reported no or very low levels of risk behavior.

Lerner et al. (2010) longitudinally compared a sample of 215 ninth grade 4-H participants and 215 ninth grade non-4-H participants from the 4-H Study of PYD Annual Report for Waves 1-5. Between these two groups, 4-H participants showed consistently higher scores for PYD, Contribution and SOC, and received lower scores on risk behaviors. Also, 4-H youth scored 25% higher in Contribution when compared to youth who were involved in other out-of-school activities, such as sports, arts or school clubs, and 41% lower on the risk/problem behavior measure than non-4-H youth. 4-H'ers were shown to achieve higher grades, being more engaged with school and more often saw themselves going to college (IARYD, 2009).

Phelps, Zimmerman, Warren, Jelicic, von Eye and Lerner (2009) conducted a study to explore whether the Five Cs component of PYD accurately applied to sixth- and seventh-grade students as it had to fifth-grade students. The researchers also wanted to explore if patterns of consistency or change

appeared across grade levels. Data were collected from students while they were in fifth, sixth, then seventh grades through the 4-H Study of PYD. Findings indicated that the PYD measurement tool originally created for the 4-H Study of PYD did, in fact, accurately measure PYD for students in consecutive grades as well as it had for fifth-grade students. Findings also showed continuity across variables and grades. Based on their findings, Phelps et al. concluded that they had developed a valid measure of PYD.

Jelicic, Bobek, Phelps, Lerner, and Lerner (2007) conducted a study to assess the degree to which predictions of Contribution and risk behaviors were accurate in youth from fifth to sixth grade. The researchers were interested in testing whether measures of PYD could predict lower levels of negative outcomes (e.g., depression, participation in risk behaviors) and higher levels of positive outcomes (e.g., youth contribution). Data were analyzed from 982 participants from the first two waves of the longitudinal 4-H Study of PYD. Findings from their study indicated that outcomes of young people can in fact be measured, and that the PYD measurement tool provides accurate measures for both positive and negative outcomes over time.

Bossaer (2009) conducted the first thesis study examining elements of Lerner et al's. (2005) PYD measures. In her study, Bossaer sought to compare 4-H participants according to their scores on Contribution. The population for this study included students in grades eight through 10 from 22 counties across the state of Indiana. Bossaer found that active 4-H participants showed higher levels of community contribution than non-4-H participants. Not surprisingly, active 4-H

participants reported significantly lower levels of risk behaviors (e.g., depression, tobacco and drug use, delinquent behaviors and bullying) than those youth who reported limited or no 4-H experience.

2.6. Indiana 4-H Program

Indiana's 4-H Youth Development Program stands by its mission to empower young people to reach their full potential by allowing them to work, as well as learn, alongside and with the help of caring adults. Indiana's 4-H Youth Development program functions through Purdue University's Cooperative Extension System. Specifically, the 4-H program operates administratively from Purdue's Department of Youth Development and Agricultural Education in the College of Agriculture (Broady & McKinley, 2009).

In recent years, 4-H has turned its focus to National Mission Mandates. These mission mandates include science, citizenship and healthy living (National 4-H Council, 2010). By offering numerous hands-on learning experiences, the 4-H program strives to refresh the proficiency of youth in areas like science, engineering, and technology. Science-based projects and programming through the 4-H program involve, but are not limited to, topics such as the changing climate and technological advances. Youth have always been encouraged through their involvement in 4-H to give back to their community. New mandates are taking service a step further by placing a new emphasis on the importance of civic engagement to bring about positive change in the communities in which youth live. Responsible citizens and well-developed leaders are optimum

outcomes for actively engaged youth. Finally, Healthy Living programming focuses on areas such as childhood obesity, physical safety as well as substance abuse. The goal of the Healthy Living Mission Mandate is to create new programs as well as new delivery methods through which education can create a healthier society (National 4-H Healthy Living Task Force, 2010). By viewing these issues with renewed importance, the 4-H program intends to lead youth into healthier and more productive lives (National 4-H Council, 2010).

According to the 2010 Indiana 4-H Report, a total of 210,467 youth were served by Indiana 4-H through a number of programming initiatives. Of these youth, 23% were from farming or rural backgrounds with 77% residing in towns, cities and suburbs. Membership in 2010 was composed of 54% females and 46% males. By race, participants were 85% Caucasian, 8% African American, with the remaining 7% being American Indian or Alaska Native, Hispanic, Asian, Native Hawaiian or multiracial.

Youth are able to be involved in 4-H programming through organized clubs, special interest groups, school enrichment programs, individual study, military programming and overnight and day camping (Indiana 4-H Report, 2010). Some of the most popular projects youth completed, or curricula that youth were involved in during 2010 were: 1) Arts and Crafts, 2) Exploring/Mini 4-H, 3) Foods and Nutrition, 4) Photography/Video and 5) Poultry Science and Embryology (Indiana 4-H Report, 2010).

2.7. Summary

This chapter provided an overview of the positive youth development perspective and its role in adolescent development research. Developmental Systems Theory was described focusing on Ecological Developmental Assets, the Selection, Optimization and Compensation component, and the Five Cs of Confidence, Competence, Connection, Character, and Caring. Finally, a review of empirical studies was conducted focusing on the Five Cs portion of PYD framework highlighting correlates and outcomes of PYD as well as the numerous findings that have come from Lerner et al's. (2010) *4-H Study of Positive Youth Development*.

As a result of this literature review, four issues are noteworthy. First, this thesis is one of very few studies that have used Lerner et al's., (2005) measures of PYD (Also see: Zimmerman, 2007; Bossaer, 2009; Kiely, 2010; Napolitano, 2010). Second, there has been limited use of the short-form version of the Positive Youth Development Student Questionnaire as it is a newly developed instrument (Lerner, Lerner, Almerigi, Theokas, Phelps, Gestsdottir, 2008). Third, little research, including theses and dissertations, has been conducted with Lerner et al.'s (2005) PYD measure focusing on high school students. Finally, to date, no cross-sectional studies, or one-time data collection, has been conducted measuring the Five Cs among students in the 4-H youth development program.

CHAPTER 3. METHODS & PROCEDURES

The purpose of this study was to explore the levels of positive youth development among Indiana 4-H participants.

3.1. Research Objectives

The research objectives of this study were to:

1. Describe the levels of positive youth development (PYD) as measured by the Five Cs between 4-H and non-4-H participants.
2. Describe differences in positive youth development (PYD) as measured by the Five Cs across 4-H participation, gender and grade.
3. Describe the relationships between positive youth development (PYD) as measured by the Five Cs and 4-H club and afterschool participation.

This chapter will highlight the methods and procedures utilized to collect and analyze the data. To begin, an overview of the research design is provided. Next, a description of the participants is highlighted followed by an explanation of the instrumentation and reports of validity and reliability. Finally a description of the Institutional Review Board Committee approval, data collection and statistical analyses are discussed.

3.2. Research Design and Variables of Study

An exploratory descriptive survey design was used for this study. The sample for this study was composed of a convenience sample of youth ($n = 453$) who were contacted by their local 4-H Youth Development Educator. Because non-random sampling methods were used, the researcher made no attempt to generalize the findings beyond the sample. Independent variables for this study included 4-H program participation, gender, grade, year in school, and level of involvement in the 4-H program. The dependent variables included the Five Cs measures of positive youth development: Competence, Confidence, Character, Caring and Connection as well as Total PYD.

3.3. Participants

The population for this study consisted of 705 4-H and non-4-H participants from 33 counties throughout the state of Indiana. Once the data were examined for unusable questionnaires the final sample resulted in 453 useable questionnaires from 31 counties. The reason for the deletion of 252 cases was because of students not completing the questionnaire thus rendering the questionnaire unusable. Figure 3.1 highlights counties that participated in the study. These counties include: Bartholomew, Blackford, Boone, Brown, Carroll, Cass, Clay, Clinton, Dearborn, Fountain, Gibson, Hancock, Hendricks, Henry, Jackson, Jasper, Kosciusko, Lawrence, Marion, Marshall, Orange, Owen, Parke, Posey, Putnam, Shelby, Steuben, Tippecanoe, Vanderburgh, Washington, and Wayne.



Figure 3.1. Indiana Counties Participating in Study

3.4. Instrumentation

The questionnaire used for this study was the short-form version of the original measure of the Positive Youth Development Student Questionnaire (Lerner et al., 2005). The questionnaire was designed to measure the Five Cs for use with youth who were over the age of 10. Also, although each of the Five Cs

are comprised of subscales, for the purpose of this study, only the scores for each of the Cs and Total PYD was used in the analysis. Items in the short-form version of the Positive Youth Development Student Questionnaire (see Table 3.1) were adapted from five measures (Lerner, et al., 2005). They are the 1) Search Institute Profiles of Student Life—Attitudes and Behaviors, 2) Self-Perception Profile for Children (SPPC), 3) Teen Assessment Project (TAP) Survey Question Bank, and composite of items from 4) The Eisenberg Sympathy Scale, and 5) The Empathic Concern Subscale of the Interpersonal Reactivity Index (IRI). Post-hoc reliabilities are reported and can be found in Table 3.2.

Questions measuring Character were created from the Search Institute's Profile of Student Life—Attitudes and Behaviors as well as the Self-Perception Profile for Children. Character levels were measured by item numbers 1-15, 56, 61, 66, 71, and 76. In the first section, 12 questions asked participants how important different items were in the participant's life. A sample item included, "Doing my best, even when I have a job I don't like." Responses were reported on a four-point Likert-type scale (*0 = Not Important to 3 = Extremely Important*). In the second section three items required participants to indicate how someone else would rate them as an individual. A sample item included, "Respecting the values and beliefs of people who are of a different race or culture than I am." Responses were reported on a four-point Likert-type scale (*0 = Not at All Like Me to 3 = Very Much Like Me*). Section three included five items that were two-part questions. The participant was given the choice between two types of people and was asked to decide which one they were most like. A sample item included,

“Some kids often do *not* like the way they *behave*.” BUT “Other kids usually *like* the way they behave.” Once participants have chosen one of the statements they are then to decide whether that statement is “Really True for Me” or “Sort of True for Me.” For the present study, questions measuring Character resulted in a post-hoc reliability of .86.

Questions measuring Competence were taken from the Self-Perception Profile for Children. Competence levels were measured by item numbers 16, 53-55, 58-60, 63-65, 68-70 and 73-75. Question 16 inquired about grades earned in school. The remaining 15 items asked about the type of person the young person felt they were. These items appeared as two-part questions. The participant was given the choice between two types of people and was asked to decide which one they were most like. A sample item included, “Some kids feel that they are very *good* at their school work.” BUT “Other kids *worry* about whether they can do the school work assigned to them.” Once participants have chosen one of the statements they choose whether that statement is “Really True for Me” or “Sort of True for Me.” For the present study, questions measuring Competence resulted in a post-hoc reliability of .67.

Caring was measured using a composite of items from the Eisenberg Sympathy Scale and the Empathetic Concern Subscale of the Interpersonal Reactivity Index. Caring levels were measured by item numbers 17-25. Scores of Caring were calculated from nine questions asking how well the statements described the student. A sample item included, “I don’t feel sorry for other people when they are having problems.” Responses were reported on a four-

point Likert-type scale (*0 = Not Well to 3 = Very Well*). For the present study, questions measuring Caring resulted in a post-hoc reliability of .82.

Questions measuring Connection were adapted from the Search Institute's Profile of Student Life—Attitudes and Behaviors and the Teen Assessment Project (TAP) Survey Question Bank. Connection levels were measured by item numbers 26-40 and 47-52. In the first section 15 items asked students to indicate how much they agreed or disagreed with the statements. A sample item from the first section measuring Connection included, "My parents give me help and support when I need it." Responses were reported on a four-point Likert-type scale (*0 = Strongly Disagree to 3 = Strongly Agree*). In the second section four items asked students to indicate how true each statement was for them. A sample item from the second section measuring Connection included, "I trust my friends." Responses were reported on a four-point Likert-type scale (*0 = Never True to 3 = Always True*). In the third section two items asked students to indicate how true each statement was for them. A sample item included, "How often do you feel bored at school?" Responses were reported on a four-point Likert-type scale (*0 = Never to 3 = Usually*). For the present study, questions measuring Connection resulted in a post-hoc reliability of .90.

Questions measuring Confidence included items that came from the Search Institute's Profile of Student Life—Attitudes and Behaviors, and the Self-Perception for Children (SPPC), Confidence levels were measured by item numbers 41-46, 57, 62, 67, 72 and 77. In the first section six items asked students to indicate how much they agreed or disagreed with the statements. A

sample item from the first section measuring Confidence included, “On the whole, I like myself.” Responses were reported on a four-point Likert-type scale (*0 = Strongly Disagree to 3 = Strongly Agree*). The second section included five items that appeared as two-part questions. The participant was given the choice between two types of people and was asked to decide which one they were most like. A sample item included, “Some kids often get *mad* at themselves.” BUT “Other kids are pretty *pleased* with themselves.” Once they have chosen one of the statements they are then to decide whether that statement is “Really True for Me” or “Sort of True for Me.” For the present study, questions measuring Confidence resulted in a post-hoc reliability of .79.

Table 3.1
Questionnaire Items Measuring the Five Cs

“C”	Questionnaire Item and Scale
Character	Scale: (0= Not Important to 3= Extremely Important)
	– Getting to know people who are of a different race than I am.
	– Helping other people.
	– Helping to make the world a better place to live in.
	– Giving time and money to make life better for other people.
	– Helping to reduce hunger and poverty in the world.
	– Helping to make sure all people are treated fairly.
	– Speaking up for equality (everyone should have the same rights and opportunities).
	– Doing what I believe is right, even if my friends make fun of me.
	– Standing up for what I believe, even when it’s unpopular to do.
	– Telling the truth, even when it’s not easy.
	– Accepting responsibility for my actions when I make a mistake or get in trouble.
	– Doing my best, even when I have a job I don’t like.

	Scale: (0= Not at all like me to 3= Very much like me)
	– Respecting the values and beliefs of people who are of a different race or culture than I am.
	– Knowing a lot about people of other races.
	– Enjoying being with people who are of a different race than I am.
	Scale: (0=Really true for me, 1= Sort of true for me, 2= Sort of true for me, 3= Really true for me)
	– Some kids often do not like the way they behave. BUT Other kids usually like the way they behave.
	– *Some kids usually do the right thing. BUT Other kids often don't do the right thing.
	– Some kids usually get in trouble because of things they do. BUT Other kids usually don't do things that get them in trouble.
	– Some kids do things they know they shouldn't do. BUT Other kids hardly ever do things they know they shouldn't do.
	– *Some kids are usually very kind to others BUT Other kids wish they would be kinder to others
Competence	Scale: (0 = Mostly below Ds and Mostly Ds, .5= About half Cs and half Ds, 1= Mostly Cs, 1.5= About half Bs and half C, 2= Mostly Bs, 2.5= About half Bs and half A, 3= Mostly As)
	What grades do you earn in school? (Check one answer)
	Scale: (0=Really true for me, 1= Sort of true for me, 2= Sort of true for me, 3= Really true for me)
	– *Some kids feel that they are very good at their school work. BUT Other kids worry about whether they can do the school work assigned to them.
	– Some kids find it hard to make friends. BUT For other kids it's pretty easy.
	– *Some kids do very well at all kinds of sports. BUT Others don't feel that they are very good when it comes to sports.
	– *Some kids feel like they are just as smart as other kids their age. BUT Other kids aren't so sure and wonder if they are as smart.
	– *Some kids have a lot of friends. BUT Other kids don't have very many friends.
	– Some kids wish they could be a lot better at sports. BUT Other kids feel they are good enough at sports.
	– Some kids are pretty slow in finishing their school work. BUT

	Other kids can do their school work quickly.
	– Some kids are kind of hard to like. BUT Other kids are really easy to like.
	– *Some kids think they could do well at just about any new outdoor activity they haven't tried before. BUT Other kids are afraid they might not do well at outdoor things they haven't ever tried.
	– *Some kids do very well at their class work. BUT Other kids don't do very well at their class work.
	– Some kids wish that more kids liked them. BUT Others feel that most kids do like them.
	– In games and sports, some kids usually watch instead of play. BUT Other kids usually play rather than just watch.
	– Some kids have trouble figuring out the answers in school. BUT Other kids can almost always figure out the answers.
	– *Some kids are popular with others their age. BUT Other kids are not very popular.
	– Some kids don't do well at new outdoor games. BUT Other kids are good at new games right away.
Caring	Scale: (0= Not well- 3= Very well)
	– **I don't feel sorry for other people when they are having problems.
	– When I see someone being taken advantage of, I want to help them.
	– It bothers me when bad things happen to good people.
	– It bothers me when bad things happen to any person.
	– **When I see someone being treated unfairly, I don't feel sorry for them.
	– I feel sorry for other people who don't have what I have.
	– When I see someone being picked on, I feel sorry for them.
	– It makes me sad to see a person who doesn't have friends.
	– When I see another person who is hurt or upset, I feel sorry for them.
Connection	Scale: (0=Strongly Disagree- 3= Strongly Agree)
	– I get along with my parents.
	– My parents give me help and support when I need it.
	– My parents often tell me they love me.

	– I have lots of good conversations with my parents.
	– In my family, I feel useful and important.
	– I'm given lots of chances to make my town or city a better place in which to live
	– In my neighborhood, there are lots of people who care about me.
	– Adults in my town or city make me feel important.
	– Adults in my town or city listen to what I have to say.
	– In my town or city, I feel like I matter to people.
	– My teachers really care about me.
	– I get a lot of encouragement at my school.
	– Students in my school care about me.
	– In my school, there are clear cut rules for what students can and cannot do.
	– Teachers at school push me to be the best I can be.
	Scale: (0=Never true to 3= Always true)
	– I trust my friends.
	– I feel my friends are good friends.
	– My friends care about me.
	– My friends are there when I need them.
	Scale: (0=Never to 3= Usually)
	– ***How often do you feel bored at school?
	– Would you talk to your parents if you have an important concern about drugs, alcohol, sex, or some other serious issue?
Confidence	Scale: (0= Strongly disagree to 3= Strongly Agree)
	– On the whole, I like myself.
	– ****At times, I think that I am no good at all.
	– All in all, I am glad I am me.
	– ****I feel I do not have much to be proud of.
	– ****Sometimes, I feel like my life has no purpose.
	– When I am an adult, I'm sure I will have a good life.

	Scale: (0=Really true for me, 1= Sort of true for me, 2= Sort of true for me, 3= Really true for me)
	– Some kids often get mad at themselves. BUT Other kids are pretty pleased with themselves.
	– Some kids don't like the way they are leading their life. BUT Other kids do like the way they are leading their life.
	– *Some kids like the kind of person they are. BUT Other kids often wish they were someone else.
	– *Some kids are very happy being the way they are. BUT Other kids wish they were different.
	– Some kids aren't very happy with the way they do a lot of things. BUT Other kids think the way they do things is fine.
(See Lerner, et al., 2005 and Phelps, et al., 2009)	
* Items are reverse coded so that: (3=Really true for me, 2= Sort of true for me, 1= Sort of true for me, 0= Really true for me)	
** Items are reverse coded so that: (3= Not well to 0= Very well)	
*** Items are reverse coded so that: (3=Never to 0= Usually)	
**** Items are reverse coded so that: (3= Strongly disagree to 0= Strongly Agree)	

Finally, one page was included items eliciting demographic information. These questions included gender, grade, age as of January 1, 2010, county of residence and race. Level of activity participation was also recorded to ascertain how many other youth serving organizations the participant was involved in. Students were asked if they had attended 4-H camp as well as how often they participated in other community programs such as Boy Scouts and Girl Scouts, YMCA, and Boys and Girls Clubs. Responses for the level of activity were reported on a six-point Likert-type scale (0= Never, 1= Once a month or less, 2=

A couple times a month, 3= Once a week, 4= A few times a week, and 5= Every day).

Individual Five C scale scores were calculated and then averaged to reach an overall PYD score. Character was computed by calculating the mean score for each subscale individually then computing the means of the subscales. Competence scores were computed by calculating means for each subscale then averaging those scores with the score indicated for grades. For Caring, Connection and Confidence scores were calculated by simply averaging the scores. Items were all answered on a Likert-type scale of 0-3. The individual Five C scale scores are interpreted on a 100 point scale and computed by multiplying each scale score by 33.33.

3.5. Validity

The Five Cs of PYD were measured by well-validated scales that were intended to measure important elements that would define each of the Five Cs (Gestsdottir, Lewin-Bizan, von Eye, Lerner, & Lerner, 2009). Validity has been reported in numerous previously published articles (See Bowers et al., 2010, Gestsdottir et al., 2007; Jelicic et al., 2007; Lerner et al. 2005). According to Lerner, “the construct validity of the PYD measure is substantiated by the presence of theoretically-expected relations with other indices of adaptive developmental regulations” (R. Lerner, personal communication, November 14, 2010).

3.6. Reliability

Post-hoc reliabilities are shown in Table 3.2 for each of the Five Cs as well as for Total PYD.

Table 3.2
Post-hoc Reliabilities for Total PYD and Five C Scales

Five Cs and Total PYD	Cronbach's Alpha
Competence	.63
Confidence	.79
Connection	.90
Character	.86
Caring	.82
Total PYD	.73

3.7. Institutional Review Board Committee

The researcher first completed the Collaborative Institutional Training Initiative (CITI) Course in The Protection of Human Research Subjects online training workshop. Materials were completed and attached along with the application for approval and the instrument and all materials were sent to the Institutional Review Board and Committee on the Use of Human Research Subjects. The final approval for the research study was given on April 16, 2010, from Purdue University's Institutional Review Board (Appendix A). The protocol for this research study titled, "Exploring the Positive Youth Development of 4-H Youth in Indiana", is Ref. #1004009168.

3.8. Data Collection

On Tuesday, April 30, 2010, Purdue University's Youth Development and Agricultural Education Computer Analyst entered the Institute for Applied Research Development's PYD Student Questionnaire-Short Version into a working on-line questionnaire document with Adobe Coldfusion. Data were collected using a modified version of Dillman, Smyth, & Christian's (2009) described implementation procedures by utilizing Extension Educators from across the state to invite youth to participate rather than directly contacting the students themselves. This procedure was utilized because the researcher had greater access to Extension Educators and limited access to student e-mail addresses as well as youth in schools. Also, using the Extension Educators proved to be the most practical way to reach youth because these personnel had both student e-mail addresses, and a working relationship with school administrators in their area.

The steps that were used to contact participants included:

1. Standard pre-notice letter to Educators
2. Invitation letter including the questionnaire URL to Educators and youth
3. Thank you/reminder e-mail with the questionnaire URL to Educators and youth
4. Reminder letter with the questionnaire URL to Educators and youth

On Monday, March 8, 2010, a pre-notice letter, published in Purdue University's Campus County Connection Newsletter, informed all Extension

Educators that an opportunity would be available to help gather data for a study that explored the levels of PYD of Indiana 4-H youth. On April 29, 2010, Indiana's Assistant Director and Program Leader of 4-H Youth Development sent an e-mail again making Extension professionals across the state aware of the opportunity to participate in the study.

On Tuesday, April 30, 2010, 4-H Youth Development Educators from all 92 Indiana counties received a standard pre-notice letter from the researcher inviting them to consider participation in the study. On Tuesday, May 11, 2010, the first official invitation letter was e-mailed to all Indiana 4-H Youth Development Educators, which also marked the first day of data collection. The e-mail was sent through an e-mail distribution list to Indiana Extension Educators who work in the 4-H Youth Development Program and contained detailed information on how the study would be conducted. This e-mail asked Educators to contact the researcher to indicate their interest in contacting students who could participate in the study. Educators must have been willing to assist and follow the established protocol that received IRB approval on April 16, 2010.

The process of identifying youth was done by the Educator. All Educators, those who responded indicating their participation, as well as the other Educators from across the state who did not indicate that they would be participating, were instructed to gather data by using one of the following options, or a combination of both:

- 1) Survey 9th through 12th grade students within a school district of the Educator's choice.

- 2) Survey 4-H members in grades 9 through 12 from the same county whose e-mail addresses the Educator had access to, or
- 3) The Educator could utilize both options above.

The questionnaire URL included in the invitation letter for youth linked the students directly to the questionnaire enabling youth to participate in this study from one of three locations: home, the Extension office, or a classroom. The data collection location was chosen by the Educator. The questionnaire included no identifiers. It was estimated that the questionnaire would take approximately 10 to 15 minutes to complete.

On Sunday, May 16, 2010, one Extension Educator called to ask if distributing paper copies of the questionnaire in a classroom setting would be acceptable. This request was approved by the researcher and the researcher's graduate committee and the completed questionnaires were delivered to the researcher to be entered.

On Wednesday, May 19, 2010 the first reminder e-mail was sent to Educators asking them to consider inviting the youth that they had access to participate in the study. According to Dillman, Smyth, & Christian (2009), surveys being sent through the mail should be followed by a reminder postcard seven days after the questionnaire. The researcher drafted letters that were sent to the youth, but the Extension Educators volunteered to, and were responsible for contacting the youth. The exact time the students were reminded was unknown by the researcher. An Extension Educator also asked if mailing paper copies of the invitation to students would be acceptable since they had access to more

home mailing addresses than e-mail addresses. This request was also approved by the researcher and the researcher's committee.

Finally, on June 1, 2010, a final e-mail reminder was sent asking Extension Educators to consider assisting in the data collection effort, and at this point Educators could only e-mail invitations requesting youth participation. From the 19 counties that responded and participated after the first three invitation e-mails, 409 questionnaires were collected. A remaining 308 questionnaires were collected from 14 counties that did not initially contact the researcher with an intention to participate. Data collection officially ended on July 1, 2010.

3.9. Data Analysis

Data were analyzed using descriptive statistics including means, standard deviations, frequencies and percentages (See Table 3.3). Independent samples t-tests were used to describe differences in positive youth development as measured by the Five Cs between 4-H and non-4-H participants. A one-way Analysis of Variance was used to describe mean differences among the Five Cs and Total PYD across grade levels. Pearson's correlation coefficients were used to describe the relationships between positive youth development as measured by the Five Cs and selected demographic characteristics. For this study, effect sizes were calculated for relationships using Cohen's r^2 (1988) and relationship strength was described using Hopkin's (1997) conventions (See Tables 3.4 and 3.5). Effect sizes for mean differences (See Table 3.6) were calculated using Cohen's d (1988). Gender was dummy coded for statistical analyses with the

following codes being used (0 = male, 1 = female). Any level of participation in 4-H clubs, 4-H camps and 4-H afterschool programming was used to distinguish the 4-H participants from the non-4-H participants.

Table 3.3

Research Objectives, Variables, Scale of Measurement, and Analysis Techniques

Research Objectives	Variables		Scale of Measurement	Statistical Analysis
	Independent	Dependent		
1. Describe the levels of positive youth development (PYD) as measured by the Five Cs between 4-H and non-4-H participants.	4-H program participation (4-H/non-4-H)	Confidence Competence Connection Caring Character	Interval	Means, Standard Deviations
2. Describe differences in the levels of positive youth development (PYD) as measured by the Five Cs across 4-H participation, gender, and grade.	4-H program participation (4-H/non-4-H)	Confidence Competence Connection Caring Character	Interval	Independent t-test
	Gender		Nominal	
	Grade		Interval	One-way ANOVA
3. Describe the relationships between positive youth development (PYD), as measured by the Five Cs and 4-H and 4-H afterschool participation.	Frequency of 4-H participation	Confidence Competence Connection Caring Character	Interval	Pearson's Correlation Coefficient

Table 3.4

Conventions for Effect Sizes of Relationships (Cohen, 1988)

Effect Size Coefficient (r^2)	Convention
0.01-0.08	Small
0.09-0.24	Medium
>0.25	Large

Table 3.5

Conventions for Relationships (Hopkins, 1997)

Relationship Coefficient (r)	Convention
0.9-1.0	Nearly Perfect
0.7-0.9	Very Large
0.5-0.7	High
0.3-0.5	Moderate
0.1-0.3	Low
0.0-0.1	Trivial

Table 3.6

Effect Size for Differences between Two Independent Means (Cohen, 1988)

Effect Size Coefficient (d)	Interpretation
0.0 to 0.2	Trivial
0.2 to 0.5	Small
0.5 to 0.8	Moderate
0.8 and above	Strong

Although it is not customary to use inferential statistics with a non-random sample, Uessler, Ricketts, Duncan and Peake (2006) stated that inferential statistics are useful with data from a convenience sample if the sample is “carefully conceptualized to represent a particular population” (p. 104). As a

result, findings from this study will add to the knowledge base by supplying preliminary data for comparison purposes, and “for providing the basis for future research from samples that would allow generalizability to larger populations,” (Roberts, Harlin, & Briers, 2007, p. 58).

CHAPTER 4. RESULTS

4.1. Purpose of the Study

The purpose of this study was to explore the levels of positive youth development among Indiana 4-H participants. A questionnaire developed by researchers at Tufts University was distributed to measure levels of PYD through the Five Cs: Competence, Confidence, Connection, Character and Caring. Participants ($n=453$) in this study were in grades 9-12 from 31 Indiana counties. Data were analyzed with the Predictive Analytics Software (PASW), version 18 for Windows (formerly Statistical Package for Social Sciences (SPSS)). Findings from this study are organized by first presenting the demographic characteristics of the participants followed by the three research objectives.

4.2. Research Objectives for the Study

The researcher explored the following research objectives:

1. Describe the levels of positive youth development (PYD) as measured by the Five Cs between 4-H and non-4-H participants.
2. Describe differences in positive youth development (PYD) as measured by the Five Cs across 4-H participation, gender and grade.
3. Describe the relationships between positive youth development (PYD) as measured by the Five Cs and 4-H club and 4-H afterschool participation.

4.3. Participant Demographics

A range of demographic data was gathered including gender, grade, race/ethnicity, 4-H membership, 4-H club participation frequency and the extent of participation in other out-of-school activities. These data were analyzed using frequencies, percentages, means and standard deviations (See Table 4.1).

Two hundred fifty-five (56.9 %) participants were female and 193 (43.1%) were male. One hundred and sixty-one (36.3%) youth were in 9th grade, 129 (29.1%) were in 10th grade, 91 (20.5%) were in 11th grade and 63 (14.2%) were in 12th grade.

Three hundred and ninety-three (89.1%) of the participants were Caucasian. Remaining questionnaires were completed by youth who were multiethnic (5.7%), Native American (2.5%), African American (1.4%), Hispanic (1.1%). Participants were asked to indicate their age as of January 1, 2010, with the average age of participants being 15.5 years ($SD= 1.21$).

4-H participation was determined using three criteria. First, youth were asked whether or not they attended a 4-H camp. Youth who answered 'Yes' were identified as 4-H participants while youth who answered 'No' were identified as non-4-H participants. Second, youth were also asked to indicate their 4-H club and 4-H afterschool program participation by stating their level of involvement across various time frames: 1) Never, 2) Once a month or less, 3) A couple times a month, 4) Once a week, 5) A few times a week, or 6) Every day. Youth who indicated a specific time frame were categorized as 4-H participants while youth who answered 'Never' were categorized as non-4-H participants. As a result, two

hundred and thirty-two (51.2%) students were non-4-H participants and 221 (48.8%) were 4-H participants. All demographic data is displayed in Table 4.1 below.

Table 4.1
Demographic Characteristics of Participants

Category	Response	f	%
Gender	Female	255	56.9%
	Male	193	43.1%
Grade	9 th	161	36.3%
	10 th	129	29.1%
	11 th	91	20.5%
	12 th	63	14.2%
Race/Ethnicity	Asian, Asian American or Pacific Islander	1	.2%
	Black or African American	6	1.4%
	Hispanic or Latino/a	5	1.1%
	White, Caucasian; not Hispanic	393	89.1%
	American Indian/ Native American	11	2.5%
	Multiethnic or multiracial	25	5.7%
Age	13	3	.7%
	14	62	14.0%
	15	143	32.1%
	16	122	27.4%
	17	70	15.7%
	18	42	9.4%
	19	3	.7%
4-H Membership	4-H Participant	221	48.8%
	Non-4-H Participant	232	51.2%

Note. Total number of responses are unequal due to non-response within various categories

4.4. Results for Objective 1: Describe the Levels of Positive Youth Development (PYD) as Measured by the Five Cs Between 4-H and Non-4-H Participants

Levels of positive youth development for 4-H and non-4-H participants (See Table 4.2) were measured through the Five Cs by a 4-point Likert-type scale and are reported on a 100-point scale. Mean scores for 4-H participants were Competence: 57.22, ($SD=11.14$), Confidence: 67.51 ($SD=16.37$), Connection: 70.11, ($SD=16.16$), Character: 73.4, ($SD=12.85$), Caring: 75.52, ($SD=11.19$), and Total PYD: 69.28, ($SD=10.17$).

Scores for non-4-H participants were as follows: Competence: 55.77, ($SD=12.17$), Confidence: 61.48, ($SD= 17$), Connection: 65.39, ($SD= 16.58$), Character: 68.31, ($SD=15.14$), Caring: 69.53, ($SD=19.15$), and Total PYD: 64.42, ($SD=10.73$).

Table 4.2
Descriptive Means Between 4-H and Non-4-H Participants

Five Cs	4-H Participants	Non-4-H Participants
Competence	57.22	55.77
Confidence	67.51	61.48
Connection	70.11	65.39
Character	73.4	68.31
Caring	75.53	69.53
Total PYD	69.28	64.45

4.5. Results for Objective 2: Describe Differences in Positive Youth Development (PYD) as Measured by the Five Cs Across 4-H Participation, Gender and Grade

Independent samples t-tests were used to assess possible differences in group means among 4-H and non-4-H participants for each of the Five Cs and Total PYD. Results are reported in Table 4.3. Levene's test was used to assess whether equal variance could be assumed in the two groups. Results showed equal variances could not be assumed for the Character and Caring scales. The adjusted *t* statistics are reported in table 4.3 for these scales. Significant differences were found between 4-H and non-4-H participants on Confidence, Connection, Character, Caring and Total PYD. Only the Competence scale did not yield significant differences between 4-H and non-4-H participants. Effect sizes for the mean differences between 4-H and non-4-H participants among the Five Cs scores and total PYD were small according to Cohen's (1988) criteria.

Table 4.3
T-Test Results Between 4-H and non-4-H Participants

C	4-H Participation	<i>n</i>	\bar{x}	<i>SD</i>	<i>t</i>	<i>D</i>
Competence	4-H	188	57.21	11.14	-1.23	.12
	Non-4-H	203	55.77	12.17		
Confidence	4-H	193	67.51	16.37	-3.61**	.36
	Non-4-H	208	61.49	17.00		
Connection	4-H	216	70.11	16.17	-3.04**	.29
	Non-4-H	229	65.39	16.58		
Character	4-H	192	73.40	12.85	-3.61**	.36
	Non-4-H	205	68.32	15.14		
Caring	4-H	218	75.53	17.19	-3.49**	.33
	Non-4-H	230	69.52	19.15		
Total PYD	4-H	185	69.28	10.17	-4.51**	.46
	Non-4-H	198	64.45	10.73		

** $p < .05$

Note. Total number of responses are unequal due to non-response within various categories

Significant differences were found between males and females on levels of Connection, Character, Caring and Total PYD (Table 4.4). Only the Competence and Confidence scales did not yield significant differences between males and females. Effect sizes for the mean differences between males and females among Competence, Confidence and Connection were small, moderate for Total PYD, and strong for Character and Caring according to Cohen's (1988) criteria.

Table 4.4
T-Test Results Between Males and Females

C	Gender	<i>n</i>	\bar{x}	<i>SD</i>	<i>t</i>	<i>D</i>
Competence	Males	164	56.27	11.25	-.279	.03
	Females	227	56.61	12.03		
Confidence	Males	169	63.16	15.95	-1.23	.13
	Females	232	65.28	17.62		
Connection	Males	188	64.84	16.06	-3.04**	.29
	Females	253	69.62	16.61		
Character	Males	167	63.93	15.35	-8.46**	.91
	Females	230	75.74	11.10		
Caring	Males	189	63.62	18.90	-9.04**	.90
	Females	255	78.74	15.24		
Total PYD	Males	158	62.77	10.66	-6.46**	.67
	Females	225	69.60	9.86		

** $p < .05$

Note. Total number of responses are unequal due to non-response within various categories

A one way analysis of variance test (ANOVA) was conducted to assess whether means for the Five Cs and for Total PYD varied among the four grade levels. Results shown in Table 4.5 revealed that means varied at statistical significance across the various grade levels for two of the Five Cs, Confidence and Caring, as well as for Total PYD (Confidence: $F(3, 391) = 2.92, p < .05, n^2 = .022$; Caring, $F(3, 436) = 2.90, p < .05, n^2 = .02$; Total PYD, $F(3, 377) = 2.92, p < .05, n^2 = .023$).

Post-hoc comparisons using Bonferroni comparisons showed that the mean Confidence levels for 9th grade students ($\bar{x} = 62.07$) was significantly lower than the mean for 12th grade students ($\bar{x} = 70.15$). Relative to Caring, post-hoc comparisons showed that the mean levels for 9th grade students ($\bar{x} = 69.22$) was significantly lower than the mean for 10th grade students ($\bar{x} = 75.40$). Post-hoc

testing failed to show any statistically significant differences for Total PYD by grade level, despite the significant F statistic. The significant difference in group means may have resulted from the larger number of responses in the overall dataset used to generate the F statistic. Smaller numbers of responses are used in Post-hoc testing.

Table 4.5
Analysis of Variance Summary, Means and Standard Deviations of the Five Cs and Total PYD

Variable	\bar{x}	SD	F	p	η^2
Competence			.022	.996	.00
Grade 9	56.59	11.86			
Grade 10	56.50	11.76			
Grade 11	56.26	11.25			
Grade 12	56.76	11.49			
Confidence			2.92	.034*	.02
Grade 9	62.07	17.68			
Grade 10	64.56	17.26			
Grade 11	64.27	16.46			
Grade 12	70.15	14.74			
Connection			2.24	.083	.02
Grade 9	64.93	17.70			
Grade 10	69.75	15.41			
Grade 11	68.16	17.48			
Grade 12	68.72	13.68			
Character			.658	.578	.01
Grade 9	69.57	14.48			
Grade 10	71.87	14.11			
Grade 11	70.32	14.41			
Grade 12	70.72	14.43			
Caring			2.9	.035*	.02
Grade 9	69.22	19.79			
Grade 10	75.40	18.00			
Grade 11	73.54	15.87			
Grade 12	72.81	17.58			
Total PYD			2.92	.034*	.02
Grade 9	64.65	11.43			
Grade 10	68.16	10.04			
Grade 11	67.08	10.81			
Grade 12	68.60	9.97			

Note. *p < .05

Competence, Confidence, Connection, Character, Caring and Total PYD
 maximum score=100

4.6. Results for Objective 3: Describe the Relationships Between Positive Youth (PYD) Development as Measured by the Five Cs and 4-H Club and 4-H Afterschool Participation

Pearson's correlations were used to describe the relationships between Total PYD, each of the Five Cs, 4-H Club participation and 4-H afterschool participation (Table 4.6). Hopkin's (1997) and Cohen's (1988) conventions were used to describe strength and effect sizes of the relationships. An effect size, or an r^2 , that is less than .08 is considered small, an r^2 falling between .09 and .24 is considered medium and any r^2 greater than .25 is considered large. All significant relationship conventions (Table 3.4) ranged from low to high (.10-.70).

Confidence was significantly related to Competence ($r^2=.19$), Connection ($r^2= .23.$), Character ($r^2= .09$), Caring ($r^2=.03$), and 4-H club participation ($r^2=.02$). Confidence was not significantly related to 4-H afterschool participation ($r^2=.01$). Competence was significantly related to Connection ($r^2=.05.$), Character ($r^2=.03$) and Caring ($r^2=.02$). Competence was not significantly related to 4-H club ($r^2=.00$) or afterschool participation ($r^2=.00$). Connection was significantly related to Character ($r^2=.26$), Caring ($r^2=.21$), Total PYD ($r^2=.61$), and 4-H club participation ($r^2=.01$). Connection was not significantly related to 4-H afterschool participation ($r^2=.00$). Character was significantly related to Caring ($r^2=.41$), Total PYD ($r^2=.55$), and 4-H club participation ($r^2=.02$). Character was not significantly related to 4-H afterschool participation ($r^2=.01$). Caring was significantly related to Total PYD ($r^2 =.52$) and 4-H club participation

($r^2=.02$). Caring was not significantly related to 4-H afterschool participation

($r^2=.00$).

Finally, Total PYD was significantly related to 4-H club participation

($r^2=.04$) but not 4-H afterschool participation ($r^2=.01$). 4-H club participation and

4-H afterschool participation were significantly related ($r^2=.41$).

Table 4.6

Pearson's Correlations Among the Five Cs, PYD, 4-H Club Participation and 4-H Afterschool Participation

Variable	1	2	3	4	5	6	7	8
1. Total Confidence	-----							
2. Total Competence	.44**	-----						
3. Total Connection	.48**	.23**	-----					
4. Total Character	.30**	.17**	.51**	-----				
5. Total Caring	.18**	.13**	.46**	.64**	-----			
6. Total PYD	.69**	.52**	.78**	.74**	.72**	-----		
7. 4-H Club Participation	.15**	.04	.12*	.14**	.15**	.19**	-----	
8. 4-H Afterschool Participation	.07	-.03	.05	.08	.06	.09	.64**	-----

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

Note. Total number of responses are unequal due to non-response within various categories

CHAPTER 5. SUMMARY, CONCLUSIONS AND RECOMENDATIONS

5.1. Purpose of the Study

The purpose of this study was to explore the levels of positive youth development among Indiana 4-H participants.

5.2. Research Objectives for the Study

The research objectives of this study were to:

1. Describe the levels of positive youth development (PYD) as measured by the Five Cs between 4-H and non-4-H participants.
2. Describe differences in positive youth development (PYD) as measured by the Five Cs across 4-H participation, gender and grade.
3. Describe the relationships between positive youth development (PYD) as measured by the Five Cs and 4-H club and afterschool participation.

5.3. Limitations

The following limitations should be considered when interpreting the results of this study:

1. The results of this study are limited to the state of Indiana thus the findings cannot be generalized to other states.
2. The data collection method of this study did not include a randomized selection of the participants and is not generalizable beyond the participants studied.

3. The researchers cannot control for the effects of students being involved in other youth programs which may impact their responses.
4. Self-report is a limitation in this study because the accuracy of this data is reliant upon the honesty and accuracy of the students' opinions of themselves.
5. The data collection method used in this study cannot be described exactly as the researcher did not contact the subjects. Precise dates for initial and follow-up contact cannot be determined.

5.4. Conclusions of the Study

There were three major findings of the current study. Conclusions are discussed below through an interpretation as well as ways in which the findings contribute to prior research.

5.5. Conclusion 1: Mean Differences in Positive Youth Development Between 4-H and Non-4-H Participants

Youth who participated in the 4-H program via 4-H clubs, 4-H camps and 4-H afterschool programming reported higher levels of total positive youth development than those who had never participated in 4-H. These findings are important because the outcomes of positive youth development include less frequent participation in risky behaviors, community involvement, increased civic engagement, higher grades in school, and aspirations to pursue post-secondary education (Lerner, 2009). However, although the findings of the study align with findings from Lerner et al. (2009) and Lerner et al. (2008) who also found that 4-H youth reported higher levels of positive youth development the “true value of 4-H programs comes not from short-term results or even the effects over a few

years... but from the programs' influence on lifelong pathways of development” (Lerner, Lerner & Phelps, 2009, p. 16).

5.6. Conclusion 2: Mean Differences Among Individual Cs Across 4-H Participation, Gender and Grade

Youth who participated in the 4-H program reported significantly higher scores on four of the Five Cs (Confidence, Connection, Character, and Caring). Among these Cs, 4-H participants averaged 2.3 to 7.5 points higher than non-4-H participants. This finding is unique because prior studies (see Lerner et al., 2009; Lerner, Lerner, & Phelps, 2008) have only discussed the concept of PYD as a function of the Five Cs. It should be noted that reporting findings related to the Five Cs individually is contrary to previous research using Developmental Systems Theory. For example, Lerner noted that each “C” is measured by its own individual scale. As such, PYD is typically only reported as a collective construct of the Five Cs. (J. Lerner, personal communication, February 13, 2011). However, in this study the researcher was primarily interested in exploring differences in levels of PYD between 4-H and non-4-H participants; as such differences in individual C scores were deemed important and were thus reported.

Although effect sizes between mean differences were small according to Cohen (1988), this may result from the population being very similar due to the convenience sampling methods used in the study. In this study, the researcher did not contact the participants, rather; the Educator was responsible for

recruiting the participants. Small effect sizes could also be a result of the researcher's inability to assess the intensity (i.e., depth and breadth) of the participants' involvement in 4-H programming and other out-of-school programs. Both 4-H and non-4-H participants in this study reported involvement in other out-of-school activities such as Boy Scouts, the YWCA, and the Big Brothers Big Sisters program. Lerner et al. (2005) and Busseri & Rose-Krasnor (2007) also found that youth are typically involved in more than one youth development program. Although Theokas et al., (2006) reported that participation in more than one out-of-school time program is common and beneficial for youth, they also note that this makes it increasingly difficult for researchers to pin-point which program had the greatest impact on the development of a young person.

Females also reported significantly higher levels of Connection, Character, Caring and Total PYD than males. These findings align with findings from previous research indicating that females achieved higher PYD than their male counterparts (Lerner, 2005b; Jellicic et al., 2007; Zimmerman, 2007). However, this study measured PYD overall rather than through specific domains.

Finally, findings between participants based on grade level indicated that there were significant differences in levels of Confidence, Caring and Total PYD. Confidence was significantly different between youth in 9th and 12th grades with 12th grade students reporting an average of 8.1 points higher. Caring was significantly different between youth in 9th and 10th grades with 10th grade

students reporting an average of 6.2 points higher. Total PYD was significantly different; however, specific grade level differences were not detected.

Findings from previous studies are conflicting as levels of PYD appear to vary. Youth reported decreases in levels of PYD from 5th to 7th grade (Phelps et al., 2009). Another study reported increases in levels of PYD from 8th to 9th grade, however that 9th grade level of PYD was higher than when that same student reported in 10th grade (Gestsdottir et al., 2009). Finally, students while in 8th grade reported higher levels of PYD compared to when they were in 9th grade, but once they reached 10th grade they reported their highest levels of PYD (Bowers et al., 2010). Although in this study increased levels of PYD were observed across grade levels, it is somewhat difficult to compare this study's findings to previous research because previous findings were based on longitudinal data whereas this study utilized a cross-sectional design.

5.7. Conclusion 3: Relationships Between the Five Cs and 4-H Participation

Findings from this study revealed significant relationships between levels of 4-H club, 4-H camp and 4-H afterschool participation and four of the Five Cs (Confidence, Character, Caring, and Connection) as well as level of 4-H participation and total PYD, with the largest relationship (albeit small effect size) existing between level of 4-H club, 4-H camp and 4-H afterschool participation and total PYD. Lerner, Lerner, and Phelps (2008) reported that 4-H participation leads to higher levels of PYD and a stronger connection between 4-H participation and PYD scores. Findings from this study also support Lerner et al.

(2010) who found that 4-H club, 4-H camp and 4-H afterschool participation was consistently related to higher levels of PYD. Findings revealing significant relationships between levels of 4-H participation and four of the Five Cs seem reasonable considering that PYD is a function of the individual Five Cs (J. Lerner, personal communication, February 13, 2011).

5.8. Implications for Theory and Research

The theoretical framework of this study, Developmental Systems Theory, has been useful in studies of adolescent development and is helpful in understanding the process of PYD as a function of the 4-H youth development program. However, the DST model in its entirety is much larger and complex than the scope of this study required. The findings of this study, which indicated that youth involved in the 4-H youth development program reported higher levels of PYD, makes a small, but meaningful contribution to DST by considering the role that 4-H has in contributing to positive youth development.

Although this study did not directly test all components of DST, the findings provide support, albeit indirectly, for DST as a useful framework to help guide the development of 4-H programming. For example, the Ecological Developmental Assets: Youth-Adult Collaborations, Access, Institutions and Individuals, are key components of the 4-H program which have been found to contribute to higher levels of PYD (Lerner, 2005b). The goals of the 4-H program include facilitating youth learning, the development of life skills, and an effort to

help youth grow into productive members of their society (McKee, 2008) which have clear connections to DST and the Five Cs framework.

Youth-adult collaborations occur as adults invest time in youth and these partnerships, which are formed and maintained through the 4-H program, will serve as protective factors for those youth (Jones & Perkins, 2006; Lerner, 2005b). Research shows that caring and supportive adults who maintain high expectations for youth, and who consistently encourage their participation in a variety of activities serve as a key component in the positive development of that young person. Additionally, the availability of opportunities allowing youth to contribute to their communities will increase when adults hold youth to higher standards (Benard, 1991).

Access refers to the availability of the 4-H program to youth and the accesses they have to interaction with adults. The environment that youth have access to must be safe venues that help foster high levels of interaction among all participants. According to Iowa State University Extension Service (2011), the 4-H program is available to youth through numerous experiences that take place in safe environments suitable for learning, and that allow youth to enhance skills that will enable them to face the challenges of life through partnerships with caring adults and contributions to their society.

The 4-H Youth Development program provides many critical elements required of a program to encourage PYD including caring adults, a safe environment and opportunities to master skills and content (National 4-H Impact Assessment Project, 2001). Benefits of positive youth-adult collaborations and

access include connections among members of the community and social capital for young people which are great factors in positive youth outcomes (Theokas & Lerner, 2006).

Institutional resources include libraries, youth facilities, recreational and engaging individuals and other arenas in which youth can learn and engage with others (Theokas & Lerner, 2006; Lerner, 2005b). Smith and Barker (2007) indicated that internal and external assets such as relationships with adults in a school or community setting, and resources available to youth are considered to be protective factors as youth who take advantage of these resources are less likely to be involved in risky behavior (Smith & Barker, 2007).

Individuals in a young person's life act as resources by demonstrating strengths, skills and abilities which serve as role models for youth. Through the 4-H program, youth interact with adults who serve as program volunteers, 4-H club leaders, and 4-H Youth Development Educators. Volunteers in the 4-H program are trained to serve as positive role models who contribute to the success of young people and do so by participating in 4-H activities, leading workshops to help youth manage their projects, and leading local club meetings (UMASS Extension, 2010; Hutchins, Seevers & Van Leeuwen, 2002).

The Ecological Developmental Assets provided to youth through the 4-H youth development program serve as evidence of the program having theoretically derived components. Taken together, this study serves somewhat as confirmation of the DST framework; however, the researcher recognizes that in order to accurately predict trajectories such as Contribution and lesser risky

behaviors for youth, additional survey items that specifically addressed these behaviors should have been assessed also. Clearly, this study contributes to the importance of the Five Cs components of PYD and further contributes to the recent attention these components have received in the PYD literature (Bowers et al., 2010).

5.9. Implications for Practice

Findings from this study serve as information to help promote and accomplish the goals of the Indiana 4-H youth development program. In particular, based on the findings of this study it is reasonable to assume that 4-H Youth Development programs in Indiana could make a difference in the lives of young people in terms of enhancing their positive youth development. It is also understood that the positive youth development reported by an individual cannot be attributed to 4-H alone nor to any single out-of-school activity (Theokas, Lerner, Phelps, and Lerner, 2006). This study in concert with previous research indicates that youth who participated in 4-H Youth Development programming report higher levels of positive youth development. Clearly, although no causal inferences can be made based on the findings of this study, there is reason to speculate that participants in this study did enhance their positive youth development through their involvement in the Indiana 4-H Youth Development program.

Although the 4-H program continues to uphold its programmatic goals of encouraging learning, the development of life skills, and helping youth grow into

productive members of their society, funding for programs like Extension are still subject to reductions at both the Federal and State levels. As such, 4-H Youth Development Educators from the participating counties in this study should utilize the findings as evidence of the contribution that the 4-H program makes in the lives of young people. Simply, findings from this study should be used as empirical evidence that the 4-H program is providing an opportunity for youth to become engaged in youth development activities and experiences which lead to positive youth outcomes.

Despite research that supports the impact 4-H programming provides to our nation's youth, Extension programming will more than likely continue to operate with less funding from the federal, state, and local levels. As such, additional research is necessary to ensure that Extension programs are indeed making an impact that is both positive and long-term which will help to make the case that 4-H youth development programs are worth sustaining (Ahmed & Morse, 2010; Galloway, Peterson & Dalton, 2006; King, 2008; Morrissey & Werner-Wilson, 2005). Because individuals at the local, state, and federal levels of government will ultimately decide whether or not to fund youth development programs such as 4-H, it is critical that they be made aware of the measurable impacts of Extension programming (Lindstrom, 2007).

5.10. Recommendations for Future Research

The following recommendations are intended to provide guidance for future research related to the Five Cs aspect of positive youth development among 4-H youth.

- 1) Students can participate in 4-H programming a number of different ways including 4-H clubs, 4-H camps and 4-H afterschool activities. However, because involvement in 4-H usually occurs on average once or twice a month, asking youth if they were involved in 4-H a couple times per week or every day, as was done in this study, proved to be somewhat limiting. Also, '4-H experiences' can vary greatly depending on a particular city or state. As such, future research should try to ascertain a more accurate measure of the duration (years involved in the 4-H program) and frequency (how often youth participate) of 4-H participation. Perhaps the most important approach to measuring the '4-H experience' is through intensity (depth and breadth) which could be assessed by asking questions regarding meeting attendance and leadership, as well as involvement in other 4-H programs like Junior Leaders or Master Gardeners. Clearly defining 4-H experiences would allow researchers to more precisely measure the effect 4-H participation has on young people. Another suggestion would be to include a qualitative component that would allow youth to describe their intensity of participation by indicating the leadership roles they

have assumed, the number of projects in which they are involved, or camps where they have served as counselors.

- 2) Data for this study were collected using a convenience sample. As a result, this sampling method prevented the researcher from generalizing beyond the sample. Future studies would be strengthened by gathering data from a random sample thus enhancing external validity.
- 3) Because of the homogeneous sample of the study, the researcher was unable to draw conclusions to other racial and ethnic groups. As such, future research would benefit from collecting data involving a more diverse sample among both 4-H and non-4-H participants.
- 4) The short version of the Positive Youth Development questionnaire used in this study did not include items measuring the Contribution or risk/problem behaviors that are recognized as key components of Developmental Systems Theory. To better contribute to theory, future research should include items that assess these two constructs which will then lend to findings and conclusions that can be better linked to DST.

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APPENDICES

Appendix A. Institutional Review Board Approval of Research

From: [Berry, Erica L](#)
To: [McKee, Renee K](#)
Cc: [Robinson, Abby M](#)
Subject: IRB Approval 1004009168 "Exploring the Positive Youth Development of 4-H Youth in Indiana"
Date: Friday, April 16, 2010 3:20:31 PM

The IRB has reviewed your Research Exemption Request titled, "Exploring the Positive Youth Development of 4-H Youth in Indiana", Ref. #1004009168 and deem it to be exempt. A copy of the approved letter will be forthcoming via campus mail. Good luck on your research.

Erica L. Berry

Human Research Protection Program

Purdue University

Ernest C. Young Hall

10th Floor, Room 1032

155 S. Grant Street

West Lafayette, IN 47907-2114

PH: 765/494-7090

FAX: 765/494-9911

<http://www.irb.purdue.edu>

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Appendix B. Pre-notice Letter sent to Educators

From: extydae-bounces@lists.purdue.edu on behalf of [Robinson, Abby M](#)
To: extydae@lists.purdue.edu
Cc: [Allen, Janet E.](#); [Fowler, Natalie .](#); [Chase, Rick L](#); [Manning, Michael E.](#); [Stewart, Daniel B.](#); [Hibberd, Charles A](#)
Subject: New study of Positive Youth Development
Date: Friday, April 30, 2010 12:29:04 PM
Importance: High

Dear Educators,

Approval from IRB has been received for the research project titled "Exploring the Positive Youth Development of 4-H Youth in Indiana." This research will examine the positive youth development of 4-H and non-4-H participants in grades 9-12. Your help is being requested in order to collect this data. We respectfully request your assistance with e-mailing 4-H members a request to participate as well contacting a school in your community to collect data from non-4-H members. Please be thinking about a school or a few classrooms that you think would like to participate in this study. The choice to gather data from non-4-H members is strongly encouraged as a comparison group will make our results all the more compelling. In the interest of time, two major advantages to being a part of this study are that the data collection tool is online and accessed through an e-mailed link and **no parental consent forms must be collected or mailed!** This study will not be successful without your help, so please consider participating! More details will follow with an informational letter being sent to you on or around May 10, 2010.

Thanks for your consideration,

Abby M. Robinson

Graduate Research Assistant

Youth Development and Agricultural Education

**Agricultural Admin. Bldg., Rm. 219
615 W. State St .
West Lafayette , IN 47907-2053**

robins25@purdue.edu

Appendix C. First Invitation Letter for participation to Educators

From: [Robinson, Abby M](#)
To: extydae@lists.purdue.edu
Subject: New Study of Positive Youth Development
Date: Tuesday, May 11, 2010 10:49:15 AM
Importance: High

Dear 4-H Youth Development Extension Educators,

As you are aware, the National 4-H Study of Positive Youth Development (PYD) has led to numerous rich findings during the years it has been conducted. Large amounts of data have been collected, and the results of 4-H involvement seem to be positive. However, Indiana has only been participating in this large data collection process for the past two waves. Recently, Tufts University has released a new, shorter version of their positive youth development questionnaire that measures PYD through the Five Cs. My graduate research project involves the implementation of this shorter questionnaire that only takes about 10-15 minutes to complete (rather than the longer, 60-90 minute version) and **no parental consent forms must be collected or mailed!**

Continued research on positive youth development in young people is increasingly important. With impending budget cuts, youth programs such as 4-H are facing the challenge of demonstrating their programmatic effectiveness. In order to measure the effectiveness of 4-H, I need to gather data from both 4-H members and non-members alike. This is where you come in.

I know this seems like yet another serving of work added to your already overflowing plate, but I am optimistic that my findings will help you in the long run! What does your County Council need to hear to continue your funding? Results of this study might be extra evidence to show that you are a vital asset in your community. Every little bit helps and goes a long way. You are the only person in your county that can aid me in completing this task, and that is why I am asking for your help.

I realize that you are busy and that each of you have different relationships with your local schools. Knowing this and trying to maintain flexibility, I am asking you to personally determine how you can best help me. This research has the approval of Dr. Hibberd, Dr. McKee and has been approved by Purdue's IRB committee. Let me also mention that this questionnaire is online so there will be no cost to your county, such as printing or postage. The first option is to survey 9th through 12th grade students within a school district of your choice. This means choosing a school and gathering data from a number of classrooms. The number of classrooms you choose to gather data from would be up to you! Again, every little bit helps. The second option is to electronically survey your county's 4-H members in grades 9 through 12. Lastly, would be for you to do both options one and two.

Though I am very interested in learning about positive youth development levels of the Five Cs in and among 4-H'ers, the results could be even more informative if I have a comparison

group. This is why the option to go into the school is encouraged. If you feel that you would like to engage in only one type of data collection, please rest assured that I understand and appreciate any data you may help me gather.

Thank you for your continued support in helping the Indiana 4-H program grow stronger and thank you for all that you do. Please let me know which option you have chosen for your county and I will forward you the corresponding contact letters. We anticipate data collection beginning immediately and though this seems early, in order to gather as much data as possible we must survey students while school is still in session! The questionnaire is open now and will be until June 4th. If you would like to take a look at the questionnaire please feel free to do so by following this link: <http://www.ydae.purdue.edu/pyd/>. I look forward to hearing from you, and please contact me if you have any questions.

ABBY M. ROBINSON

GRADUATE RESEARCH ASSISTANT

YOUTH DEVELOPMENT AND AGRICULTURAL EDUCATION

**AGRICULTURAL ADMIN. BLDG., RM. 219
615 W. STATE ST .
WEST LAFAYETTE , IN 47907-2053**

ROBINS23@PURDUE.EDU

Appendix D. Clarification E-mail to Educators

From: Robinson, Abby M
To: ["extydae@lists.purdue.edu"](mailto:extydae@lists.purdue.edu)
Subject: Details: New Study of Positive Youth Development
Date: Thursday, May 13, 2010 11:56:00 AM
Importance: High

Dear Educators,

Thanks so much to all of you who are willing to participate, and I am very much looking forward to working with each of you! I understand there has been a bit of confusion as to my exact expectations for your participation, and would appreciate a few moments to clarify some commonly asked questions. Hopefully this will make things seem easy!

First of all, the documents that you will need to participate may be located on the U: Drive. Originally I had planned to send these to anyone who was participating, but this seems simpler. To access these documents go to U: Drive, State UDAE, then PYD 2010 Study (Abby Robinson). In this folder are the four documents you will need. Since you will be contacting (e-mailing) the participants, the first document you will need is a Publisher file titled LETTER TO YOUTH FROM EDUCATOR-ABBY. This letter will require you to add your name and county and then send it out to the youth in your county. This can be used for both 4-H and non-4-H youth. For your 4-H members you can e-mail it. For your non-4-H members, I encourage you to communicate with local schools to determine how best to present this message.

The second letter for the youth is the follow up letter to the young person. It is written as if it is from me but will come from you since you have the addresses.

Also, in the file is some information I created for use as you see fit. This is something that could be attached to a newsletter, for instance.

The last document is a REQUEST FOR SCHOOL-PERMISSION FROM SCHOOL LETTER. For those of you going into schools to gather data, this form will need to be filled out prior to being sent to the school.

A few other things I wanted to address:

- If you are planning on participating, YES, I would love to hear from you! This will help me keep track of who I am working with and where my data should be coming from.
- If you collect e-mail address from your 4-H members, as I understand most do, this is the best method to contact your 4-H youth. I am not very familiar with ED, but I understand there is a way to sort and obtain addresses specifically for 9th-12th grade students and then send a mass e-mail to them.
- It was mentioned to me that Facebook could be used as a means of spreading the word. Originally, I thought this would work, but I am afraid that this will draw too broad an audience for evaluation purposes. The protocol states that 4-H students will be contacted through e-mail so please only plan to directly contact them this way.

I hope this helps, but if you have any more questions please don't hesitate to contact me!
Thanks again for your help with this project!

Abby M. Robinson

Graduate Research Assistant

Youth Development and Agricultural Education

Agricultural Admin. Bldg., Rm. 219

615 W. State St.

West Lafayette, IN 47907-2053

robins25@purdue.edu

Appendix E. Second Invitation to Participate to Educators

From: extydae-bounces@lists.purdue.edu on behalf of [Robinson, Abby M](#)
To: extydae@lists.purdue.edu
Subject: Reminder: New Study of Positive Youth Development (Response Requested)
Date: Wednesday, May 19, 2010 11:55:15 AM
Importance: High

Dear 4-H Youth Development Extension Educators,

First, thanks to all of you who have already contacted me with willingness to participate in the New Study of Positive Youth Development! I am so appreciative. I wanted to send a quick, (and shorter) note just as a reminder to those who I have not yet heard from. There is still plenty of time for you to be a part of this study!

For my graduate research I am utilizing a shorter version of Tufts positive youth development questionnaire that measures PYD through the Five Cs. This shorter questionnaire that only takes about 10-15 minutes to complete and **no parental consent forms must be collected or mailed!**

Growing up with an Extension Educator as a parent, I understand the need for flexibility. That is why the data collection methods for this study are as such. In an effort to maintain flexibility, I am asking you to personally determine how you can best help me.

The first option is to survey 9th through 12th grade students within a school district of your choice. This means choosing a school and gathering data from a number of classrooms. The number of classrooms you choose to gather data from would be up to you! Again, every little bit helps. The second option is to electronically survey your county's 4-H members in grades 9 through 12. Lastly, would be for you to do both options one and two. Results of this study could be even more informative if I have a comparison group. This is why the option to go into the school is encouraged. If you feel that you would like to engage in only one type of collection, I completely understand.

The questionnaire is open now and will be until June 4th. If you would like to take a look at the questionnaire please feel free to do so by following this link:
<http://www.ydae.purdue.edu/pyd/>.

Thanks so much for your time, and I look forward to hearing from you!

Abby Robinson

Graduate Research Assistant

Youth Development and Agricultural Education

*Agricultural Admin. Bldg., Rm. 219
 615 W. State St.
 West Lafayette, IN 47907-2053*

robins25@purdue.edu

A few housekeeping notes for further clarification:

- The documents that you will need to participate are located on the U: Drive.
- To access these documents go to U: Drive, State UDAE, then PYD 2010 Study (Abby Robinson).
- In this folder are the four documents you will need.
 - o Since you will be contacting (e-mailing) the participants, the first document you will need is a Publisher file titled LETTER TO YOUTH FROM EDUCATOR-ABBY.
 - o This letter will require you to add your name and county and then send it out to the youth in your county.
 - o This can be used for both 4-H and non-4-H youth. For your 4-H members you can e-mail it. For your non-4-H members, I encourage you to communicate with local schools to determine how best to present this message.
 - o The second letter for the youth is the follow up letter to the young person. It is written as if it is from me but will come from you since you have the addresses.
 - o Also, in the file is some information I created for use as you see fit. This is something that could be attached to a newsletter, for instance.
 - o The last document is a REQUEST FOR SCHOOL-PERMISSION FROM SCHOOL LETTER. For those of you going into schools to gather data, this form will need to be filled out prior to being sent to the school.
- If you are planning on participating, YES, I would love to hear from you! This will help me keep track of who I am working with and where my data should be coming from.
- If you collect e-mail address from your 4-H members, as I understand most do, this is the best method to contact your 4-H youth. I am not very familiar with ED, but I understand there is a way to sort and obtain addresses specifically for 9th-12th grade students and then send a mass e-mail to them.

Appendix F. Third and Final Reminder E-mail Sent to Educators

From: extydae-bounces@lists.purdue.edu on behalf of [Robinson, Abby M](#)
To: extydae@lists.purdue.edu
Subject: Final Reminder: New Study of Positive Youth Development (Response Requested)
Date: Tuesday, June 01, 2010 2:58:13 PM

4-H Youth Development Extension Educators,

Thanks again to all of you who have helped me collect almost 500 completed questionnaires!! This note will serve as my final reminder and request to counties who are still interested in e-mailing their 4-H members with a request to complete the questionnaire. For those counties who have already sent the youth letter, please now send out the follow up letter for the young person. This letter is also located in the U: Drive.

As a reminder, this study utilizes a shorter version of Tufts positive youth development questionnaire that measures PYD through the Five Cs. This shorter questionnaire that only takes about 10-15 minutes to complete and **no parental consent forms must be collected or mailed!** Your responsibility will simply be to e-mail the letter for youth that is located in the U: Drive (location directions below my signature) to the 4-H members in your county who have just or will be completing grades 9-12. If you feel that you could still contact youth through schools, please do!

The questionnaire is open now and will be until this weekend. If you would like to take a look at the questionnaire please feel free to do so by following this link:

<http://www.ydae.purdue.edu/pyd/>.

Thanks so much for your time and effort,

Abby Robinson
 Graduate Research Assistant
 Youth Development and Agricultural Education

robins25@purdue.edu

A few more notes:

- The documents that you will need to participate are located on the U: Drive.
- To access these documents go to U: Drive, State UDAE, then PYD 2010 Study (Abby Robinson).
- In this folder are the four documents you will need.
 - Since you will be contacting (e-mailing) the participants, the first document you will need is a Publisher file titled LETTER TO YOUTH FROM EDUCATOR-ABBY.
 - This letter will require you to add your name and county and then send it out to the youth in your county.
 - This can be used for both 4-H and non-4-H youth. For your 4-H members you can e-mail it. For your non-4-H members, I encourage you to communicate with local schools to determine how best to present this message.
 - The second letter for the youth is the follow up letter to the young person. It is written as if it is from me but will come from you since you have the addresses.
 - Also, in the file is some information I created for use as you see fit. This is something that could be attached to a newsletter, for instance.

- The last document is a REQUEST FOR SCHOOL-PERMISSION FROM SCHOOL LETTER. For those of you going into schools to gather data, this form will need to be filled out prior to being sent to the school.
- If you collect e-mail address from your 4-H members, as I understand most do, this is the best method to contact your 4-H youth. I am not very familiar with ED, but I understand there is a way to sort and obtain addresses specifically for 9th-12th grade students and then send a mass e-mail to them.

Appendix G. Piece for Educators to use in Newsletter

Exciting things are happening in the world of research. Faculty and students alike at Purdue University are studying a wide range of topics/issues which include SET (science, engineering and technology) education, college choices in conjunction with science workshops, and levels of learning from career development experiences. Up and coming research is focusing on Positive Youth Development. Abby Robinson, a graduate research assistant in the Department of Youth Development and Agricultural Education, is excited to learn more about the effectiveness of 4-H. Abby, with the help of Extension Educators across the state, will be gathering data from 4-H members and non-4-H members in grades nine through 12 to determine whether or not 4-H could be playing a role in the development of the Five Cs. These five Cs are confidence, competence, connection, character, and caring, and are great indicators of positive youth development. Please be on the lookout for this exciting research opportunity! The more respondents we have, the better our results will be. We look forward to your cooperation!

Appendix H. Request for School/Permission from School Letter

[Date], 2010

Dear [High School Contact],

Thank you for speaking with me about this exciting study exploring the Positive Youth Development (PYD) of 4-H Youth in Indiana. I am requesting your assistance to conduct this study with selected classrooms at [High School Title].

Previous studies, like the National 4-H Study of Positive Youth Development have led to numerous rich findings. Large amounts of data have been collected and the results of 4-H involvement seem to be positive. However, Indiana has only been participating in this large data collection process for the past two waves. Recently, Tufts University released a new, shorter version of their positive youth development (PYD) questionnaire. This questionnaire asks no in-depth personal questions like the longer version and only takes about 10-15 minutes to complete!

Continued research on positive youth development of youth is increasingly important. With impending budget cuts, youth programs such as 4-H and other out-of-school activities are facing the challenge of demonstrating their programmatic effectiveness. In order to measure the effectiveness of 4-H, we are working to gather data from both 4-H members and non-members alike. The goal of this study is to identify factors related to positive youth development.

As a Purdue University staff member, I will conduct the study for [Name] County. This research has the approval of Dr. Charles Hibberd, Purdue University's Director of the Cooperative Extension Service and Associate Dean of Purdue Agriculture as well as the Purdue University Institutional Review Board. This body reviews all studies to insure that participants are not harmed or misled.

If you agree to participate, I will work with you or your designee to coordinate the project. Thank you for your interest in this important study. Together, we can learn more about positive youth development. I look forward to hearing from you concerning this request.

Sincerely,

[Extension Educator]

[Given County]

Purdue University

Appendix I. Letter to Youth from Researcher

**LETTER FROM RESEARCHER/EDUCATOR TO 4-H MEMBER OR HIGH SCHOOL STUDENT:**

Dear [4-H member/student],

Below you will find a personal letter from a graduate student at Purdue University. Her name is Abby and she is very interested in learning more about how young people grow and change! Please take a few minutes to read her message, and then follow the link to complete her survey.

Thanks for your help,
[Extension Educator]
[Given County]

Hey there, young person!

As I'm sure you know lots of the tools and technologies you use today are available to you because of one thing. No, I'm not talking about money, I'm talking about research. Through research we strive, we grow and we expand. When you think of research you might think of old guys, or geeks in lab coats, but not me. When I think of research I think of you. I think of young people just like you who are making an impact everyday. Most importantly, when I think of doing research, I know that I can't do it without you. So in short, I need your help!

What does that mean?

I am trying to figure out how different activities you participate in are affecting your personal development. This new buzzword positive youth development, is specifically what I am interested in. So, what does *that* mean? It means that whatever you do (whether it is homework, sports, drama, 4-H, or just hanging out with friends OR a combination of all of these things) your activities are helping you grow as an individual. This growth may or may not be positive, but that is what is really important here. That is what I am interested in learning about, so that is why I'm counting on you.

How can you help?

I want to learn more about your likes, dislikes and opinions on other activities you enjoy. Luckily, I was able to get my hands on a great measurement tool (research lingo for 'survey') that will tell me all of these things. All I need you to do is take about 10 to 15 minutes to go to this link and fill out my survey. If you choose not to participate in the survey, please know that you will not be penalized in any way! Your participation is completely voluntary. I really appreciate your help and I hope that someday this research will help you!

Thanks again,

Abby Robinson
Graduate Research Assistant
Youth Development and Agricultural Education
Purdue University



Appendix J. Follow-up Letter to Participant

Hello again,

I know that e-mails get lost or buried fairly often so I just wanted to contact you one more time.

I am still trying to figure out just how much different activities you participate in are affecting your personal development. This new buzzword, positive youth development, is specifically what I am interested in learning about. What does *that* mean? It means that whatever you do, (whether it is homework, sports, drama, 4-H, or just hanging out with friends OR a combination of all of these things,) is helping you grow as an individual. This growth may or may not be positive, but that is what is really important here. That is why I'm counting on you.

I want to know more about your likes and dislikes. As I mentioned before, I was able to get my hands on a great measurement tool (research lingo for 'survey') that will tell me all of these things. All I need you to do is take about **10 to 15 minutes** to follow this link <http://www.ydae.purdue.edu/pyd/> and fill out my questionnaire. If you choose not to participate in the survey, please know that you will not be penalized in any way! Your participation is completely voluntary. I really appreciate your help and I hope that someday this research will help you!

Thanks again,

Abby Robinson
Graduate Research Assistant
Youth Development and Agricultural Education
Purdue University

Appendix K. Questionnaire Instrument

PURDUE UNIVERSITY
PURDUE AGRICULTURE
YOUTH DEVELOPMENT AND AGRICULTURAL EDUCATION

What county do you live in?

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

	Not Important	(1)	(2)	Extremely Important
1. Getting to know people who are of a different race than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Helping other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Helping to make the world a better place to live in.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Giving time and money to make life better for other people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Helping to reduce hunger and poverty in the world.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Helping to make sure all people are treated fairly.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Speaking up for equality (everyone should have the same rights and opportunities).	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Doing what I believe is right, even if my friends make fun of me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Standing up for what I believe, even when it's unpopular to do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Telling the truth, even when it's not easy.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Accepting responsibility for my actions when I make a mistake or get in trouble.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Doing my best, even when I have a job I don't like.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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

	Not at All Like Me	(1)	(2)	Very Much Like Me
13. Respecting the values and beliefs of people who are of a different race or culture than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Knowing a lot about people of other races.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Enjoying being with people who are of a different race than I am.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

16. What grades do you earn in school?

How well does each of these statements describe you?

	Not Well			Very Well
17. I don't feel sorry for other people when they are having problems.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
18. When I see someone being taken advantage of, I want to help them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
19. It bothers me when bad things happen to good people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
20. It bothers me when bad things happen to any person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
21. When I see someone being treated unfairly, I don't feel sorry for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
22. I feel sorry for other people who don't have what I have.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
23. When I see someone being picked on, I feel sorry for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
24. It makes me sad to see a person who doesn't have friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
25. When I see another person who is hurt or upset, I feel sorry for them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How much do you agree or disagree with the following?

	Strongly Disagree			Strongly Agree
26. I get along with my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
27. My parents give me help and support when I need it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
28. My parents often tell me they love me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
29. I have lots of good conversations with my parents.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
30. In my family, I feel useful and important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
31. I'm given lots of chances to make my town or city a better place in which to live.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
32. In my neighborhood, there are lots of people who care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
33. Adults in my town or city make me feel important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
34. Adults in my town or city listen to what I have to say.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
35. In my town or city, I feel like I matter to people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
36. My teachers really care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
37. I get a lot of encouragement at my school.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
38. Students in my school care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
39. In my school, there are clear cut rules for what students can and cannot do.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
40. Teachers at school push me to be the best I can be.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How well does each of these statements describe you?

	Strongly Disagree		Strongly Agree	
41. On the whole, I like myself.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
42. At times, I think that I am no good at all.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
43. All in all, I am glad I am me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
44. I feel I do not have much to be proud of.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
45. Sometimes, I feel like my life has no purpose.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
46. When I am an adult, I'm sure I will have a good life.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

How true is each of these statements for you?

	Never True		Always True	
47. I trust my friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
48. I feel my friends are good friends.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
49. My friends care about me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
50. My friends are there when I need them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
	Never		Usually	
51. How often do you feel bored at school?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
52. Would you talk to your parents if you have an important concern about drugs, alcohol, sex, or some other serious issue?	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.

The following pairs of sentences are talking about two kinds of kids. We'd like you to decide whether you are more like the kids on the left side, or you are more like the kids on the right side. Then we would like you to decide whether that is only sort of true for you or really true for you and mark your answer.

	Really True for Me	Sort of True for Me		BUT		Sort of True for Me	Really True for Me
53.	<input type="radio"/>	<input type="radio"/>	Some kids feel that they are very <i>good</i> at their school work.		Other kids worry about whether they can do the school work assigned to them.	<input type="radio"/>	<input type="radio"/>
54.	<input type="radio"/>	<input type="radio"/>	Some kids find it <i>hard</i> to make friends.		For other kids it's pretty <i>easy</i> .	<input type="radio"/>	<input type="radio"/>
55.	<input type="radio"/>	<input type="radio"/>	Some kids do very <i>well</i> at all kinds of sports.		Others <i>don't</i> feel that they are very good when it comes to sports.	<input type="radio"/>	<input type="radio"/>
56.	<input type="radio"/>	<input type="radio"/>	Some kids often do <i>not</i> like the way they behave.		Other kids usually <i>like</i> the way they behave.	<input type="radio"/>	<input type="radio"/>
57.	<input type="radio"/>	<input type="radio"/>	Some kids often get <i>mad</i> at themselves.		Other kids are pretty <i>pleased</i> with themselves.	<input type="radio"/>	<input type="radio"/>
58.	<input type="radio"/>	<input type="radio"/>	Some kids feel like they are <i>just as smart</i> as other kids their age.		Other kids aren't so sure and <i>wonder</i> if they are as smart.	<input type="radio"/>	<input type="radio"/>
59.	<input type="radio"/>	<input type="radio"/>	Some kids have a <i>lot</i> of friends.		Other kids <i>don't</i> have very many friends.	<input type="radio"/>	<input type="radio"/>
60.	<input type="radio"/>	<input type="radio"/>	Some kids wish they could be a lot better at sports.		Other kids feel they are good enough at sports.	<input type="radio"/>	<input type="radio"/>
61.	<input type="radio"/>	<input type="radio"/>	Some kids usually do the <i>right</i> thing.		Other kids often <i>don't</i> do the right thing.	<input type="radio"/>	<input type="radio"/>
62.	<input type="radio"/>	<input type="radio"/>	Some kids <i>don't</i> like the way they are leading their life.		Other kids <i>do</i> like the way they are leading their life.	<input type="radio"/>	<input type="radio"/>
63.	<input type="radio"/>	<input type="radio"/>	Some kids are pretty <i>slow</i> in finishing their school work.		Other kids can do their school work <i>quickly</i> .	<input type="radio"/>	<input type="radio"/>
64.	<input type="radio"/>	<input type="radio"/>	Some kids are kind of <i>hard</i> to like.		Other kids are really <i>easy</i> to like.	<input type="radio"/>	<input type="radio"/>
65.	<input type="radio"/>	<input type="radio"/>	Some kids think they could do <i>well</i> at just about any <i>new</i> outdoor activity they haven't tried before.		Other kids are afraid they might <i>not</i> do well at outdoor things they haven't ever tried.	<input type="radio"/>	<input type="radio"/>
66.	<input type="radio"/>	<input type="radio"/>	Some kids usually get in <i>trouble</i> because of things they do.		Other kids usually <i>don't</i> do things that get them in trouble.	<input type="radio"/>	<input type="radio"/>
67.	<input type="radio"/>	<input type="radio"/>	Some kids <i>like</i> the kind of <i>person</i> they are.		Other kids often wish they were someone else.	<input type="radio"/>	<input type="radio"/>
68.	<input type="radio"/>	<input type="radio"/>	Some kids do very <i>well</i> at their class work.		Other kids <i>don't</i> do very well at their class work.	<input type="radio"/>	<input type="radio"/>
69.	<input type="radio"/>	<input type="radio"/>	Some kids wish that more kids liked them.		Others feel that most kids <i>do</i> like them.	<input type="radio"/>	<input type="radio"/>
70.	<input type="radio"/>	<input type="radio"/>	In games and sports, some kids usually <i>watch</i> instead of play.		Other kids usually <i>play</i> rather than just watch.	<input type="radio"/>	<input type="radio"/>
71.	<input type="radio"/>	<input type="radio"/>	Some kids do things they know they <i>shouldn't</i> do.		Other kids <i>hardly ever</i> do things they know they shouldn't do.	<input type="radio"/>	<input type="radio"/>
72.	<input type="radio"/>	<input type="radio"/>	Some kids are very <i>happy</i> being the way they are.		Other kids wish they were <i>different</i> .	<input type="radio"/>	<input type="radio"/>
73.	<input type="radio"/>	<input type="radio"/>	Some kids have <i>trouble</i> figuring out the answers in school.		Other kids can almost <i>always</i> figure out the answers.	<input type="radio"/>	<input type="radio"/>
74.	<input type="radio"/>	<input type="radio"/>	Some kids are <i>popular</i> with others their age.		Other kids are <i>not</i> very popular.	<input type="radio"/>	<input type="radio"/>
75.	<input type="radio"/>	<input type="radio"/>	Some kids <i>don't</i> do well at new outdoor games.		Other kids are good at new games right away.	<input type="radio"/>	<input type="radio"/>
76.	<input type="radio"/>	<input type="radio"/>	Some kids are usually very <i>kind</i> to others		Other kids wish they would be <i>kinder</i> to others	<input type="radio"/>	<input type="radio"/>
77.	<input type="radio"/>	<input type="radio"/>	Some kids <i>aren't</i> very happy with the way they do a lot of things.		Other kids think the way they do things is <i>fine</i> .	<input type="radio"/>	<input type="radio"/>

