the positive development of youth

Richard M. Lerner, Jacqueline V. Lerner, Erin Phelps, and Colleagues

INSTITUTE FOR APPLIED RESEARCH IN YOUTH DEVELOPMENT
The findings reported in this publication are based on the work of Richard M. Lerner, Jacqueline V. Lerner, Erin Phelps, and Colleagues at the Institute for Applied Research in Youth Development at Tufts University, Medford, Massachusetts.

A detailed report of the findings can be downloaded at:
The Institute for Applied Research in Youth Development thanks the many contributors who have made this study possible. We especially thank National 4-H Council, under the leadership of Donald T. Floyd, Jr., for its vision, support, and dedication. We gratefully acknowledge the financial support from Philip Morris USA Youth Smoking Prevention department. We are grateful also for the support we receive from our colleagues at Tufts University and in the Eliot-Pearson Department of Child Development. We are thankful for the support and guidance of Drs. Joan and Gary Bergstrom. We appreciate greatly the numerous contributions of the members of the institute, both past and present, for sharing their skills, dedication, and spirit. Finally, and most important, we are grateful to the youth and families involved in the 4-H Study. They are creating a world wherein the strengths possessed by all young people are being used to promote positive development and contributions to civil society. Their energy and optimism are profound and impressive.
I am pleased to share in this report the results of the first four waves of research in the 4-H Study of Positive Youth Development. I believe that this research embodies the goals of applied developmental science, that is, to conduct good science that enhances the abilities of practitioners, parents, policy makers, and young people themselves to promote positive human development. The results to date of the 4-H Study provide strong evidence that when the strengths of youth are aligned with the resources for healthy development that are found in families, schools, and communities, youth thrive. The data set underscores that all of us—as individuals, family members, professionals, advocates for youth, or members of the diverse communities of our nation—have it within our power to act to enhance the lives of all young people. I believe this message is vital and timely. I am honored that National 4-H Council has afforded my colleagues, students, and me the opportunity to ground this message in strong developmental science.

Richard. M. Lerner, Ph.D.

*Bergstrom Chair in Applied Developmental Science*

*Director, Institute for Applied Research in Youth Development*
The amount of research on positive youth development (PYD) is small. Large portions of research on adolescent development proceed from the assumption that adolescents are broken, in danger of being broken, or display deficits. A new perspective, that of positive youth development, tries to counterbalance the assumption of broken youth with the perspective that youth are developing individuals who display considerable assets, and who can be guided to develop to become positive and constructive contributors to society. So, while deficits may exist, it is the goal of development to fill the gaps. This idea is in stark contrast to a perspective that focuses on punishment and the idea that adolescents are broken.

The 4-H Study of PYD that is being conducted at the Institute for Applied Research in Youth Development at Tufts University by Richard M. Lerner, Jacqueline V. Lerner, Erin Phelps, and their colleagues and students constitutes a first, major step toward filling the research gap concerning PYD. The 4-H Study Advisory Board believes that the study conducted by this team constitutes a milestone in developmental research. It is shown, for the first time, that PYD exists, and that youth development programs can play a major role in promoting PYD. The methods that the researchers employ for design, data analysis, and interpretation of results are state-of-the-art. The unique importance of the results speaks for itself.

The 4-H Study is a landmark investigation. If the researchers continue on their scientific path, they will have produced a study of truly historic importance. The study will be able to provide compelling information about the special and vital role that 4-H may play in the lives of America’s young people.

Alexander von Eye, Ph.D.
Professor of Psychology, Michigan State University
Chair, the 4-H Study of Positive Youth Development Advisory Board

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Early researchers on adolescent development started out with the wrong set of assumptions.¹ Most, including the founder of the field, G. Stanley Hall (1844–1924), viewed adolescents in terms of what they lacked when compared to mature adults.² For many decades, this perspective subtly colored how not only researchers but also how teachers, parents, youth workers, and public policy makers looked at this period of development. It influenced what they thought they could expect from teenagers, and how they would interpret what teens said and did.

Researchers and clinicians viewed adolescence as a time of “sturm und drang” (storm and stress), in which emotional turmoil was a necessary step toward maturity. Hall drew upon Darwin’s writings on evolution for perspective.² He interpreted each person’s maturation as a retelling of how mankind as a whole evolved from primitive beasts to civilized social animals, with the teenage years reflecting a critical point in that story of transformation. Anna Freud³ wrote of emotional upheavals within adolescents and their close relationships with family and friends. Erik Erikson⁴ described the adolescent’s identity crisis as he or she struggled to achieve a more mature state.

In short, early researchers and clinicians alike based their observations and theories on the underlying assumption that adolescents are inherently “at risk” for behaving in uncivilized or problematic ways; they were “broken” in some way, and needed repair. Given that premise, that is largely what they saw.
the emergence of the positive youth development (PYD) perspective

This frame of reference shifted in the early 1990s, as growing numbers of researchers viewed adolescence through the lens of systems theories that look at development throughout the life span as a product of relations between individuals and their world. One key aspect of this new focus was plasticity: the potential that individuals have for systematic change across life. This potential is critically important, for it tells us that adolescents’ trajectories are not fixed, and can be significantly influenced by factors in their homes, schools, and communities.

Despite the manifold problems often seen during adolescence—drug and alcohol use and abuse, unsafe sex and pregnancy, school failure and dropping out, crime and delinquency, depression and self-destructive behaviors—most young people do not have a stormy adolescence. Similarly, while teenagers spend much more time with their peers than with their parents and may, sometimes for the first time, openly challenge their parents’ actions and beliefs, they value their relationships with their parents tremendously. They also tend to incorporate their parents’ core values in such areas as social justice, spirituality, and the importance of education into their own values. Indeed, most adolescents select friends in part because they share these core values and similar perceptions of the world.

Integrating the theoretical ideas about the plasticity of adolescent development and the practical findings about the multiple pathways children take through adolescence led to the framework now known as Positive Youth Development (PYD), which views young people as resources to be developed rather than as problems to be managed.

**Features of PYD**

The PYD approach builds upon what have become known as the “Five Cs”: Competence, Confidence, Connection, Character, and Caring. Researchers theorized that young people whose lives incorporated these Five Cs would be on a developmental path that demonstrates a Sixth C: Contributions to self, family, community, and the institutions of a civil society. In addition, those young people whose lives contained lower amounts of the Five Cs would be at higher risk for a developmental path that included personal, social, and behavioral problems and risks.

Despite the manifold problems often seen during adolescence—drug and alcohol use and abuse, unsafe sex and pregnancy, school failure and dropping out, crime and delinquency, depression and self-destructive behaviors—most young people do not have a stormy adolescence.
THE "FIVE Cs" OF POSITIVE YOUTH DEVELOPMENT

| COMPETENCE | Positive view of one’s actions in specific areas, including social, academic, cognitive, health, and vocational. Social competence refers to interpersonal skills (e.g., conflict resolution). Academic competence refers to school performance as shown, in part, by school grades, attendance, and test scores. Cognitive competence refers to cognitive abilities (e.g., decision making). Health competence involves using nutrition, exercise, and rest to keep oneself fit. Vocational competence involves work habits and explorations of career choices. |
| CONFIDENCE | An internal sense of overall positive self-worth and self-efficacy. |
| CONNECTION | Positive bonds with people and institutions that are reflected in exchanges between the individual and his or her peers, family, school, and community in which both parties contribute to the relationship. |
| CHARACTER | Respect for societal and cultural norms, possession of standards for correct behaviors, a sense of right and wrong (morality), and integrity. |
| CARING/COMPASSION | A sense of sympathy and empathy for others. |

This relationship between PYD and risk/problem behaviors, however, was not seen as simple or uniform. The plasticity of development meant that some children from some homes, schools, and communities that lacked resources and supports showed themselves to be resilient and resistant to problems. A few who came from environments filled with resources and supports were drawn nevertheless into numerous troubles. But on the whole, PYD researchers hypothesized that the availability of activities that supported the Five Cs would help steer young people toward a life of successful contributions.\(^5\), \(^10\)

The potential for change is a core strength of all youth—a strength that can be built upon. This is cause for optimism, for it means that we can influence the life paths of all children in a good direction. The contexts in which they live, learn, and play each have resources to promote positive youth development. The resources can become the “social nutrients” young people need for healthy development. Researchers and practitioners agree that this concept of developmental assets is key to understanding how to foster PYD in our homes, classrooms, and community-based programs.\(^10\)

Studies suggest a link between PYD and the developmental assets associated with youth programs—especially programs that go beyond simple extracurricular activities to focus specifically on promoting youth development. The “Big Three” features of effective youth-serving programs\(^9\), \(^11\), \(^12\) are:

- Positive and sustained relationships between youth and adults.
- Activities that build important life skills.
- Opportunities for children to use these life skills as both participants and as leaders in valued community activities.

Programs having these features may be termed youth development (YD) programs.\(^9\), \(^12\) Key questions are: How can we translate PYD theory into specific practices that will help young people thrive? Do YD programs do this successfully? To help address these questions, National 4-H Council sponsored research to understand the developmental assets already or potentially present in youth programs, especially the programs lead by 4-H.
the 4-H study of positive youth development: what we did and why we did it

There are several ways to try to answer the question of whether involvement in specific out-of-school activities predicts positive growth and decreased risk during adolescence. The most powerful approach is to conduct a longitudinal study—research that follows young people over a significant period of time and records important changes within individual participants, as well as critical differences between participants at any given age. We used this approach in this study, which is funded by National 4-H Council.

In the 4-H Study of Positive Youth Development we used what is called a longitudinal sequential design. We began with fifth graders in the 2002–2003 school year, a time period known as Wave 1. Since we knew that, as in all longitudinal studies, we would lose some participants over time for a variety of reasons, we added participants at other waves so that our statistical analyses would maintain their power.

As in the real world, participants decided on their own to get involved with or to skip out-of-school programs; they were not assigned to a program by the researchers. This distinction is important. We wanted study participants to mirror youth who were not part of the study, who chose their own levels of participation in such programs. To look for possible relationships between involvement in 4-H and positive youth development, we matched 4-H participants with non-participants on a variety of demographic and other variables.

Wave 1 included 1719 fifth-graders and 1137 of their parents. They came from 13 states and 61 schools in rural, suburban, and urban areas in different parts of the country and represented a variety of racial, ethnic, and religious backgrounds. By the end of Wave 4, we had collected data from a total of 4404 adolescents from 34 states. The figures on page 8 provide more details about the youth comprising the 4-H Study sample.

We gathered data through a student questionnaire, a parent questionnaire, and from school and government sources such as the U.S. Census. We explored whether each young person could select positive life goals, optimize what he or she needed to achieve those goals, and compensate for obstacles that stood in the way. This Selection (S), Optimization (O), Compensation (C) triad yielded what we called a SOC score that allowed us to predict important future positive behaviors and risk/problem behaviors. We also examined the activities of youth outside of school, not only in 4-H but in sports, arts, school clubs, religious groups, community service, and other organizations. We looked as well at risk/problem behaviors, such as smoking, drinking, bullying, and depression.

WE EXPLORED WHETHER EACH YOUNG PERSON COULD SELECT POSITIVE LIFE GOALS, OPTIMIZE WHAT HE OR SHE NEEDED TO ACHIEVE THOSE GOALS, AND COMPENSATE FOR OBSTACLES THAT STOOD IN THE WAY.
RACE/ETHNICITY IN THE 4-H SAMPLE

- European American: 65%
- Latino/a American: 14%
- Asian American: 3%
- African American: 8%
- Native American: 2%
- Multiracial: 5%
- Other: 3%

LIVING ENVIRONMENTS IN THE 4-H SAMPLE

- Rural: 40%
- Urban: 22%
- Suburban: 38%

GEOGRAPHIC DISTRIBUTION IN THE 4-H SAMPLE

- West: 25%
- Northeast: 20%
- North Central: 22%
- South: 33%

*Geographic divisions represent the four regions of the Cooperative Extension System.
Results of the study
Detailed results of the study and descriptions of the methodology have been published in scholarly books, chapters, and journals. A sampling of the publications can be found in the Notes.

The young person’s PYD in the fifth grade predicted several important positive characteristics and risks in the sixth grade. Specifically, we found that those children who had higher levels of PYD in fifth grade were more likely during the next year to contribute to their family and community, less likely to engage in problem behaviors such as smoking, drinking, and bullying, and less likely to show symptoms of depression.

SOC scores among the fifth, sixth and seventh graders were related to both positive and negative characteristics in their lives. Specifically, high SOC scores were associated with higher levels of contribution to the community and lower levels of risk/problem behaviors. In fact, higher SOC scores among the fifth graders—the children entering adolescence—successfully predicted higher levels of PYD and lower rates of depression, delinquency, and risk/problem behaviors. In Grades 6 and 7.

Resources in the families, schools, and communities of youth—resources that are labeled “developmental assets”—promote PYD. These developmental assets involve out-of-school-time (OST) activities, opportunities for youth to work with adults on community projects, or engagement by youth with caring and committed adults. In all settings, people are the most important developmental asset associated with PYD. More so than school or community resources, family members play the largest role in the positive development of youth. In fact, one of the strongest predictors of PYD was the child and his or her family regularly eating dinner together.

In sum, through measuring PYD, we have a way of telling which adolescents are likely to do well in the near future, and which ones are at greater risk. These findings are critical in defining successful positive development in youth and developing effective prevention and intervention programs and for promoting effective public policy.

More than 88% of children in Grades 5 and 6 participated in OST activities, often several different activities during the week. The most popular programs involve sports. But sports alone do not provide the positive outcomes we seek for children. We found that for both boys and girls, combining sports and youth development programs such as 4-H, Boys & Girls Clubs, YMCA, Big Brothers/Big Sisters, Scouting, etc., was one of the most effective way to promote positive development and to prevent problems.

Our research found that these two concerns, promoting positive development and preventing problem behaviors, are separate and call for different but complementary approaches. In other words, we need to create and support programs that address both needs. We cannot simply assume that working on one takes care of the other. This is an important finding that has been missed by other research.
These findings led us to explore the relations between 4-H Clubs and 4-H after-school program participation compared to participation in other OST activities and PYD. We made this comparison by matching youth who participated at least twice per month in 4-H programs to other youth who regularly participated in other OST activities. In Grade 6 there were 181 youth in each group. In Grade 8 there were 184 youth in each group. Matching was based on gender, race/ethnicity, rural/urban/suburban community, number of parents in the home, family per capita income, mother’s education, and region of the country.

Among sixth-grade participants, we found that in comparison to the matched sample those children who participated in 4-H programs had consistently higher scores on PYD, Contribution, and SOC, as well as lower scores on measures of depression and risk/problem behaviors. The 4-H youth were 10% higher on the Contribution measure than were youth in the comparison group. This difference was statistically significant. On our educational measures, participants in 4-H programs had higher school grades, greater emotional engagement in school, and were more likely to see themselves as going to college. In Grade 6, the odds that 4-H youth expect to go to college are 1.3 times higher than the odds for comparison youth.

The eighth graders in our study showed an even stronger pattern. Measures of Positive Youth Development, Contribution, and SOC were significantly higher among 4-H participants than among the matched group. The 4-H youth were also significantly more likely to say that they planned to attend college. In Grade 8, the odds that 4-H youth expect to go to college are 1.6 times higher than the odds for comparison youth. Measures of school grades and emotional engagement in school were higher among 4-H participants. As with the sixth graders, measures of depression and risk behavior were not statistically different.
In Grade 8, measures of PYD, contribution, SOC, and expectations to go to college were higher among 4-H participants.

In Grade 8, 4-H youth report they have more mentors than do comparison youth.
When participants were in the eighth grade, we asked them about their involvement in civic activities and their civic identities, using a measure that had eight different components:

- Neighborhood social capital/social trust—mutually beneficial relations, trust, and bonding with other people in the community
- Peer social capital/social trust—mutually beneficial relations, trust, and bonding with friends and classmates
- Adult social capital/social trust—mutually beneficial relations, trust, and bonding with adults and teachers
- Civic duty—a sense of obligation to something larger than oneself
- Civic information—a commitment to gathering political and civic knowledge
- Civic voice—the ability to express oneself about community issues
- Civic helping—time spent helping others in informal settings, such as helping a neighbor
- Civic activities—time spent in formal activities giving back to others, such as volunteering, tutoring, serving in a civic organization, participating in student government

Together, these scores yielded an overall Civic Identity/Civic Engagement (CICE) score. Participants in the 4-H programs had significantly higher scores on six of the eight factors, as well as on the overall CICE, compared to youth in other programs. (For the remaining two factors, 4-H participants also had higher scores, but the differences were not statistically significant.)

Participants had significantly higher scores on six of the eight factors and on total CICE.
The true value of 4-H programs comes not from short-term results or even the effects over a few years. It comes from the programs’ influence on lifelong pathways of development. By analyzing the data from students who participated in two or more years of the study, we developed models for several long-term trajectories (optimal, problematic, and gradations in between) involving PYD, Contribution, depressive symptoms, and risk/delinquent behaviors.

Youth who had participated in 4-H at some point during Grades 5 through 8 were significantly more likely to show the optimal trajectories for all four of the variables we assessed: high trajectories for PYD and Contribution; low trajectories for depressive symptoms and risk/delinquent behaviors. In fact, children who had participated in 4-H for at least one year by eighth grade were about 1.5 times more likely than children in other after-school programs to be in the highest PYD trajectory and more than 3.5 times more likely to be in the highest Contribution trajectory. The two highest trajectories of PYD are actually quite similar. They are the trajectories we hope all of our children will follow.

Across Grades 5 through 8, youth show different levels of contribution. While almost two-thirds of young people move from low to moderate levels of contribution, only about 13% show highest (most desired) levels of contributions.

4-H YOUTH ARE 1.5 TIMES MORE LIKELY THAN COMPARISON YOUTH TO BE IN THE HIGHEST PYD TRAJECTORIES.

4-H YOUTH ARE 3.5 TIMES MORE LIKELY THAN COMPARISON YOUTH TO BE IN THE HIGHEST CONTRIBUTION TRAJECTORY.
The course of depression across Grades 5 through 8 takes several forms. Some youth show low levels across time but substantial numbers of youth show variations from this optimal trajectory.

Across grades, most youth (more than 90%) reported no or very low levels of risk behavior. This finding counters the youth stereotype of storm and stress. Only about 4% of youth appear to be on a trajectory of increasing risk behaviors. While this group is small, it is important to pay particular attention to them in the upcoming waves.

4-H youth were also 1.3 times more likely to be on the lowest trajectories for both depressive symptoms and for risk/delinquent behaviors. Equally important, this influence appears to become stronger as children grow older.

LONGITUDINAL RESULTS ACROSS GRADES 5 THOUGH 8 INDICATE THAT 4-H YOUTH ARE MORE LIKELY THAN COMPARISON YOUTH TO BE IN THE OPTIMAL DEVELOPMENTAL TRAJECTORIES.

4-H YOUTH WERE 1.3 TIMES MORE LIKELY THAN COMPARISON YOUTH TO BE IN THE LOWEST DEPRESSION TRAJECTORY.

4-H YOUTH WERE 1.3 TIMES MORE LIKELY THAN COMPARISON YOUTH TO BE IN THE LOWEST RISK BEHAVIOR TRAJECTORY.
Effects of Health Rocks!®

We also gathered information on those youth who had participated in the 4-H healthy life program Health Rocks!®, underwritten by funds from Philip Morris USA Youth Smoking Prevention, and offered in a variety of venues. Health Rocks! focuses on developing key decision making, communication, critical thinking, and stress management skills while increasing accurate health knowledge in order to reduce and prevent youth smoking and drug abuse. It also encourages adult-youth partnerships in developing community-based initiatives in these areas.

Because of where the program is offered, our sample of students who had participated in Health Rocks! (N = 722) came from backgrounds we would associate with higher risks and problems than those in the general population of students. For example, participants reported significantly more peer pressure to smoke than did members of a matched comparison group (of non-Health Rocks! participants). The comparison group had been matched to the Health Rocks! youth in regard to gender, mother’s education, family per capita income, race/ethnicity, geographic location, and participation in 4-H (one-third of each group were in 4-H). The Health Rocks! participants’ backgrounds made them more vulnerable to other health risks as well.

We found that Health Rocks! appears to inoculate youth against smoking and other health risk behaviors. Despite the intense peer pressure to smoke, their level of smoking is identical to that of the matched group—something we would not have expected without this program.

This inoculation effect was present in our measures of other risks. Levels of routine physical exercise as well as their PYD, Contribution, and “Five Cs” scores among the Health Rocks! youth were virtually identical to their matched, lower-risk group. In addition, by the seventh grade, the academic performance of the Health Rocks! group, which had been significantly lower in earlier grades, had caught up with the matched group.

**AN INOCULATION EFFECT WAS PRESENT IN OUR MEASURES OF SEVERAL RISKS. LEVELS OF ROUTINE PHYSICAL EXERCISE AS WELL AS PYD, CONTRIBUTION, AND “FIVE Cs” SCORES AMONG THE HEALTH ROCKS! YOUTH WERE VIRTUALLY IDENTICAL TO THEIR MATCHED, LOWER-RISK GROUP.**
next steps for the study of PYD

In its first few years, this first-of-a-kind longitudinal study has already yielded important information about how PYD can launch young people into healthy and productive lives. The findings have profound implications not only for the programs themselves, but also for public policy.

One of the things we have learned is that youth programs cannot remain static; they must expand and change so that they address the diverse and changing needs and interests of adolescents and their families. We also learned that youth programs must address both prevention and promotion; contrary to popular belief, focusing on one does not necessarily affect the other.

We are excited about the possibility of continuing this study through Grade 12 and beyond so that we can gather and analyze additional information to help the youth of today and tomorrow. By building upon and extending this longitudinal study, we will gain powerful and practical insights into what guides an adolescent into a productive and successful adulthood. We will also be able to determine which PYD assets are related to critical life events, such as completing high school, going to college, and successful entry into the workforce.

If we are able to extend the 4-H Study beyond the high school years, we will provide previously unavailable information about how youth development programs such as 4-H can move adolescents onto a productive and healthy adulthood, one benefiting both children and their communities. Such knowledge would be of inestimable value for science, for practitioners, and for developing effective social policy.

YOUTH PROGRAMS MUST ADDRESS BOTH PREVENTION AND PROMOTION; CONTRARY TO POPULAR BELIEF, FOCUSING ON ONE DOES NOT NECESSARILY AFFECT THE OTHER.
Notes
