Chapter 9
The Five Cs Model of Positive Youth Development

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Adolescence is a period of pronounced physical, psychological, and social growth. Conventional wisdom suggests that young people have difficulties adapting to these changes and, as such, adolescence has been described as a period of "storm and stress" (Hall, 1904). Early psychotherapists viewed strife, angst, and discord as such inevitable characteristics of adolescent development that many went so far as to pathologize adolescents who remain "good children" (Freud, 1958, p. 264).

The assumption that adolescents experience inevitable storm and stress promoted the view that young people are problems to be managed (Roth & Brooks-Gunn, 2003). Accordingly, policies and programs were designed to rein in juvenile crime, substance use, poverty, out-of-wedlock births, and other potentially maladaptive

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outcomes (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004). These "deficit-oriented" programs (i.e., that focused on what young people should *not* be doing) met little success, however. By the 1990s practitioners, policy makers, and researchers began to abandon strictly deficit-oriented perspectives, instead favoring programs that also fostered young people's strengths (Catalano et al., 2004). Rather than just telling adolescents what they should not do, the growing consensus was that we must also teach adolescents what positive things they can do and highlight the positive things they are already doing. By the end of the 1990s, these ideas had coalesced into the positive youth development (PYD) perspective.

The PYD perspective has since played an important role in both research and practice. The breadth of the PYD perspective's impact is perhaps best illustrated by Hamilton's (1999) description of PYD as including (a) models of human development, (b) philosophies that underpin youth programs, and (c) actual instances of youth development programs. Prominent resources provide detailed discussions of PYD based on this tripartite description (e.g., Lerner, Phelps, Forman, & Bowers, 2009; Lerner & Lerner, 2012; Lerner, Lerner, Bowers, & Geldhof, 2015), and each of the many manifestations of the PYD perspective has something unique to offer. Among the theories of PYD, R. M. Lerner, J. V. Lerner, and colleagues' Five Cs Model of PYD has received perhaps the most consistent empirical support. Due to space constraints, and the scope of the present book, we therefore limit our discussion to this model (see Lerner et al. 2013, 2009 for discussions of alternative theories). In the present chapter we introduce the Five Cs Model, discuss issues related to its measurement (including a description of two PYD measures), describe how the Five Cs develop across adolescence, and provide key takeaways and concrete recommendations for policy makers and practitioners.

The Five Cs Model

Relying on accessible terms used by practitioners, parents, and young people when discussing positive development, the Five Cs Model emphasizes five "Cs" that characterize positive development:

- *Competence*: Young people live in complex environments that include, but are not limited to, their schools, places of worship, families, peer groups, extracurricular programs, and workplaces. Positively developing youth must competently navigate these contexts and make the most out of resources that these contexts provide.
- *Confidence*: Youth gain a sense of confidence when they are able to successfully navigate their contexts. Confident youth believe they can overcome obstacles and can have a meaningful impact on the world around them.
- *Character*: Positively developing youth internalize and respect social norms, appreciate standards of proper behavior, and have a well-formed sense of right and wrong. These youth act appropriately, even when nobody else is around.
- *Caring*: "Positive development" means more than just acting in one's own interests; thriving youth also show empathy and sympathy for the feelings and

experiences of others. Positively developing young people believe that caring for those around them is important.

- *Connection*: Positive development occurs when young people are valued, integral members of their communities. For instance, they must be positively connected to their peers, families, schools, and communities. These connections enable young people to improve their own lives and improve the lives of those around them.

Young people exhibit the Five Cs of PYD when their personal strengths align with the resources and opportunities afforded by their environments. Thus, promoting PYD requires policies and programs that build adolescents' skill sets (e.g., critical thinking, social skills), promote their ability to apply those skills [e.g., by improving adolescents' future orientation, increasing their optimism and hope for the future (Chap. 5), and enhancing their ability to self-regulate their actions to reach their goals (Chaps. 2 and 3)], and improve the contextual resources they have access to [e.g., quality schools, safe locations where they can interact with peers, mentors, opportunities of civic engagement (Chaps. 1, 6, 4, 7, and 8)].

Promoting PYD in this way has two consequences. First, youth who exhibit the Five Cs display lower levels of risk and problem behaviors, including substance use, delinquency, and depression. Promoting PYD, however, is not synonymous with preventing problem behaviors. Positively developing youth can, and often do, engage in traditionally "problematic" behaviors such as alcohol use and sexual activity. As such, programs and policies designed to support PYD can be implemented either alone or in tandem with prevention-oriented efforts. A community grappling with elevated levels of adolescent substance abuse might take a two-pronged approach that attempts to decrease substance use while simultaneously giving young people the personal and contextual resources they need to thrive.

The second consequence of promoting PYD is that youth will be more likely to contribute to their community, the "sixth" C. Positively developing youth tend to internalize an other-oriented ideology and act in ways that strengthen the families, schools, and communities in which they live. The development of PYD therefore represents a reciprocal relationship between young people and their contexts. Supportive communities foster PYD, which in turn leads youth to actively engage in and support the communities where they live.

As a theory, the Five Cs model is well suited for informing policies and programs during the planning and implementation stages. However, evaluating the effectiveness of such efforts requires a means for quantifying how strongly interventions, programs, and policies actually impact manifestations of the Cs, and in what ways. In other words, a program designed to improve the Five Cs is only useful to the extent that participating youth show increases in competence, confidence, character, caring, and connection.

Therefore, access to efficient, reliable measures of the Five Cs is paramount for the success of youth development programs. Accordingly, researchers have designed several measures of the Five Cs, two of which have been shown to be especially useful: a questionnaire designed as part of the 4-H Study of Positive Youth Development (see the introductory chapter of this volume) and a set of "Growth Grids" designed to help adult mentors promote the Five Cs in their adolescent

mentees. In the remainder of this chapter, we focus specifically on these two tools. We first describe the measures and discuss how they have informed the field's understanding of how PYD develops across adolescence. We next describe how practitioners can use these measures in their own programs and discuss the key findings from this research. We then conclude the chapter by translating existing research into specific recommendations and priority applications for policy makers and youth practitioners interested in promoting PYD in their communities.

Measuring the Five Cs

Measuring PYD is important for basic research, evaluating youth development programs and policies, and for optimizing the day-to-day interactions between mentors and mentees. As such, one of the key goals of the 4-H Study was to develop and validate measures of the Five Cs of PYD that could be used when assessing the outcomes associated with community-based programs. The PYD measure was developed using an extensive literature review and revision process to ensure that the measurement tool accurately reflected the Five Cs model (Lerner et al., 2005).

The PYD measure used in the 4-H Study began as a compilation of items drawn from a variety of existing sources. Items came from the Search Institute's Profiles of Student Life: Attitudes and Behaviors (Benson, Leffert, Scales, & Blyth, 1998), the Self-Perception Profile for Children (Harter, 1983) and Adolescents (Harter, 1988), the Teen Assessment Project (TAP) Survey Question Bank (Small & Rodgers, 1995), the Eisenberg Sympathy Scale (Eisenberg et al., 1996), and the Interpersonal Reactivity Index (Davis, 1983). Members of the research team independently categorized these items into each of the Five Cs and then compared and discussed their categorizations. When at least 80 % of the raters agreed that a question or set of questions represented a particular C, it was used as part of the measure (Lerner et al., 2005).

Members of the research team distributed the Five Cs questionnaire as part of the first wave of data collection of the 4-H Study (to youth in Grade 5; approximately 10 years old) and used these data to confirm that questionnaire items were optimally grouped according to the Five Cs. In other words, the team showed that the Five Cs model accurately represented the ways that youth responded to the questionnaire. These findings indicated that each C is a broad umbrella term that unites several related facets of PYD. For example, Connection was comprised of connection to family, neighborhood, school, and peers.

The Five Cs Questionnaire

Over the course of the 4-H Study, several forms of the Five Cs questionnaire were developed and evaluated for use in practical applications. The Five Cs questionnaire allowed researchers and practitioners to compute scores for each of the Five Cs as well as an overall score for global PYD. There are separate versions of the full Five

Cs measure that are appropriate for use in adolescence: an 83-item scale designed for use with early adolescents (up to age 13) and a 78-item scale designed for use in middle/late adolescence (teenagers). Scoring protocols for these measures are available online at http://ase.tufts.edu/iaryd/.

The items in the two versions are largely interchangeable but are tailored to reflect age-related differences between early and middle/late adolescence. Some of these differences include wording of items, such as "Some kids feel that they are very good at their schoolwork" compared to "Some teenagers feel that they are just as smart as others their age." Other differences involve how different characteristics represent the Cs. For example, for younger adolescents, physical competence (how a youth feels about his or her abilities regarding physical activities, such as sports) is part of Competence; however, these abilities no longer reflect competence in middle to late adolescence (Geldhof et al., 2014). On the other hand, a youth's beliefs about his or her physical appearance are a part of Confidence only in middle and late adolescence. This change may reflect a developmental shift in how youth perceptions of physical appearance are different at various stages of development. For more information on how the PYD measure was developed and validated across Grades 5–12, see Lerner et al. (2005), Phelps et al. (2009), and Bowers et al. (2010).

The PYD Short and Very Short Forms

The full-length versions of the Five Cs questionnaire are useful for research purposes but are not practical for most applications. The full PYD measures provide a comprehensive understanding of youth thriving, but their length presents a serious limitation. Completing one of the full-length PYD questionnaires can exhaust many young people and therefore limits program evaluators' ability to measure additional aspects of positive and problematic development (e.g., self-regulation skills, depression). Scoring the full measures also requires a substantial time investment, further limiting its practical usefulness in mentor-mentee relationships.

As the PYD perspective is adopted by more youth-serving practitioners and researchers, there is a need for user-friendly measures of youth thriving that are comprehensive but easy to incorporate into their work. Therefore, our team also developed short and very short versions of the Five Cs questionnaire.

Using data from the 4-H Study, we determined which items in the full questionnaires best captured the Five Cs. We then reduced the full item pool to a 34-item short form (PYD-SF) and a 17-item very short form (PYD-VSF). Although both forms are comprehensive enough to be used in advanced statistical analyses (e.g., structural equation models), their design allows for quick and efficient measurement by practitioners. The PYD-SF provides more precise measurement and is well suited for application in research and program evaluations. The PYD-VSF is a reduced subset of the PYD-SF and provides a more general measure of PYD. The PYD-VSF is therefore suited for preliminary evaluation work and use by practitioners. Both questionnaires are freely available to the public and are downloadable from http://ase.tufts.edu/iaryd/.

The PYD-SF and PYD-VSF can be used to measure each of the Five Cs individually or can be used to obtain a global index of positive development. As discussed above, each C is itself a broad umbrella that encompasses many facets of positive development, but statistical analysis of the PYD-SF and PYD-VSF suggests that some items that measure the Five Cs are not good indicators of overall PYD. Although this adds complexity to the measurement tool, it illustrates that PYD is not simply an aggregation of the Five Cs. High scores on PYD indicate that youth are, overall, thriving. However, it is still useful to look at the individual Cs as domain-specific measures of well-being. For example, physical appearance is a good measure of the C of Confidence but is not an excellent measure of overall thriving. Although it may not be surprising that physically attractive teens feel more confident, it also is logical that feeling confident about one's physical appearance is not, on its own, what we mean by overall positive youth development. Detecting these nuances may be useful for practitioners who are targeting specific areas of development within their programs.

The appendix contains a version of the PYD-SF appropriate for use with teenagers, with items *not* included in the PYD-VSF highlighted in gray. Thus, practitioners can use copies of this appendix when administering either the short or very short versions of the questionnaire. The scoring columns allow mentors to quickly obtain scores for each C and for overall PYD. Items with an "X" in the PYD scoring column were good indicators of their respective Cs but were not related to overall PYD in the 4-H Study. As such, scores on these items should not be counted when computing scores for overall PYD.

The items that do not measure overall PYD generally correspond to four facets of the Cs: having a lot of friends (Competence), being athletic (Competence), physical appearance (Confidence), and knowing and being friends with people from diverse racial backgrounds (Character). The first three facets on this list will make intuitive sense to many practitioners—positively developing adolescents may be able to get by with a few close friends, do not necessarily have to be athletic, and do not have to be good looking. The fact that having diverse friends did not tend to represent PYD among participants of the 4-H Study is not as easily explained, but this finding may reflect the fact that a subset of our participants lived in relatively homogenous communities. For youth living in racially homogenous communities, the opportunity to have a diverse set of friends may not be available to them, and, thus, this component of character development may likewise not be available to these youth in the same way as it is for youth living in more diverse communities. These youth may, nevertheless, find alternative pathways to character development. More research is needed to understand these potentially different pathways to developing character for youth from different communities.

Limitations of the PYD-SF and PYD-VSF

The PYD-SF and PYD-VSF were developed using data from a single sample that was not nationally representative (i.e., the 4-H Study sample). This lack of diversity limits the applicability of these measures. The PYD-SF and PYD-VSF were

designed to capture broad aspects of the Cs relevant to most young people, but this goal also means that the measures may lack context specificity. Each C can mean different things to different people living in different contexts. As an extreme example, competence in hunting may be an important index of PYD in communities that rely heavily on subsistence hunting (e.g., Inupiat Eskimos living in Alaska; Brower & Hepa, 1998). These same skills may be unrelated to PYD for youth living in large urban centers. As discussed above, having a diverse set of friends may similarly mean something different for youth living in homogenous vs. diverse communities. Any application of the PYD-SF and PYD-VSF must therefore account for a young person's unique context, especially when examining populations that deviate from the relatively middle-class American sample obtained in the 4-H Study.

The need to consider contextual differences is especially important when measuring PYD outside of the United States. Although at this writing we have received requests for the measure from researchers representing 17 different countries, we know of no published research that examines the PYD-SF or PYD-VSF outside of the United States. Until such research is published (e.g., ongoing research examining the validity of the PYD-SF in some European and Central American contexts), we cannot recommend that practitioners use the PYD questionnaires in their present form to measure PYD outside the United States.

The relative homogeneity of the 4-H Sample also impacts practitioners' ability to interpret scores on the PYD questionnaires. National norms do not exist for these scales and it is unclear what scores indicate "high" versus "low" levels of PYD. Program and policy evaluations must therefore use these questionnaires to make relative comparisons. Such comparisons might ask whether youth display higher levels of the Five Cs after participating in a program. Similarly, a comparison might determine whether the young people impacted by a specific policy display higher PYD than those not directly impacted.

Individual practitioners can also use these questionnaires to help frame discussions with individual youth. A mentor might ask his or her mentee to complete the PYD-SF to determine which aspects of the Five Cs the mentee needs the most help developing (i.e., scores lowest on). However, the PYD-SF and PYD-VSF were designed primarily as research and evaluation tools and were not designed to facilitate such conversations. To fill this gap, members of the Institute for Applied Research in Youth Development (IARYD) developed the PYD Growth Grids.

The PYD Growth Grids

High-quality youth development programs are key resources for promoting positive development among adolescents (Roth & Brooks-Gunn, 2003). Youth development programs based on youth mentoring may be especially effective in promoting PYD among participating youth, or "mentees" (Lerner, Napolitano, Boyd, Mueller, & Callina, 2014). Despite the many benefits that these mentoring programs can provide, today's competitive funding environment requires organizations to base their

practices on empirical research and to assess their impact on participating youth. Using measures such as the PYD-SF and PYD-VSF is one assessment option; however, having mentees complete questionnaires may reduce valuable mentoring time and interrupt scheduled activities. Thus, a research-based, empirically rich PYD assessment tool that can be quickly and flexibly deployed in a variety of mentoring settings could be a valuable addition to many mentoring programs.

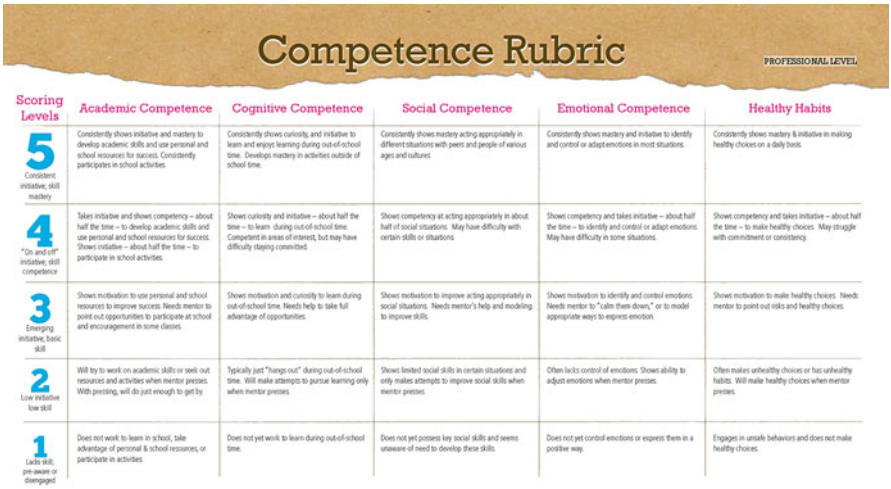
To address the need for mentor-oriented measures of the Five Cs, members of the IARYD developed the *Growth Grids* rubrics as part of a study funded by the Thrive Foundation for Youth (GPS to Success; Bowers et al., 2013; Napolitano, Bowers, Gestsdóttir, & Chase, 2011; Napolitano et al., 2014). In this section, we first describe the Growth Grids and their use by both mentors and mentees to assess and promote PYD. We then conclude by describing the strengths and limitations of these tools.

Unlike the PYD-SF or PYD-VSF self-report questionnaires, the Growth Grids are arrayed as separate mentor-reported and mentee-self-reported rubrics. Widely used in education and other fields, rubrics are measurement tools that allow for quick ratings of complex behavior in incremental steps. Rated from 1 (low) to 5 (high), the criteria for the Growth Grids are "initiative" and "mastery." A mentee with a score of 5 displays "consistent initiative and skill mastery," while a mentee with a score of a 1 "lacks skill" and is "pre-aware or disengaged." The language of the mentee-self-reported rubrics is adjusted to be appropriate for youth ages 10 and above.

Consistent with the results of the 4-H Study, a mentee's PYD is assessed across six Growth Grids: one for each of the Five Cs of PYD, as well as a separate rubric for the "sixth C" of contribution. The Growth Grid for each C contains several independently assessed skills, based on empirical PYD research. For instance, mentors and mentees completing the Competence Growth Grid rate a mentee's academic, cognitive, social, and emotional competence, as well as the extent to which their mentee engages in healthy habits. A mentee's initiative and mastery in each domain of competence may vary, providing the mentor with an indication of where to focus his or her activities to maximize positive development. An example of a mentor-scored Growth Grid is shown below in Fig. 10.1.

Strengths and Limitations of the Growth Grids

Like the PYD questionnaires described above, a key asset of the Growth Grids is that they are freely available to mentoring organizations (downloadable from www.gps2success.org). In addition to their availability, there are three characteristics of the Growth Grids that make them useful tools for the mentoring context. First, as indicated earlier, both mentors and mentees can complete Growth Grids to assess the mentee's PYD. Convergent or divergent scores are opportunities for mentors to direct conversations and activities.



Competence Rubric

PROFESSIONAL LEVEL

Scoring Levels	Academic Competence	Cognitive Competence	Social Competence	Emotional Competence	Healthy Habits
5 Consistent initiative; skill mastery	Consistently shows initiative and mastery to develop academic skills and use personal and school resources for success. Consistently participates in school activities.	Consistently shows curiosity, and initiative to learn and enjoys learning during out-of-school time. Develops mastery in activities outside of school time.	Consistently shows mastery acting appropriately in different situations with peers and people of various ages and cultures	Consistently shows mastery and initiative to identify and control or adapt emotions in most situations.	Consistently shows mastery & initiative in making healthy choices on a daily basis.
4 "On and off" initiative; skill competence	Takes initiative and shows competency – about half the time – to develop academic skills and use personal and school resources for success. Shows initiative – about half the time – to participate in school activities.	Shows curiosity and initiative – about half the time – to learn during out-of-school time. Competent in areas of interest, but may have difficulty staying committed.	Shows competency at acting appropriately in about half of social situations. May have difficulty with certain skills or situations.	Shows competency and takes initiative – about half the time – to identify and control or adapt emotions. May have difficulty in some situations.	Shows competency and takes initiative – about half the time – to make healthy choices. May struggle with commitment or consistency.
3 Emerging initiative; basic skill	Shows motivation to use personal and school resources to improve success. Needs mentor to point out opportunities to participate at school and encouragement in some classes.	Shows motivation and curiosity to learn during out-of-school time. Needs help to take full advantage of opportunities.	Shows motivation to improve acting appropriately in social situations. Needs mentor's help and modeling to improve skills.	Shows motivation to identify and control emotions. Needs mentor to "calm them down," or to model appropriate ways to express emotion.	Shows motivation to make healthy choices. Needs mentor to point out risks and healthy choices.
2 Low initiative low skill	Will try to work on academic skills or seek out resources and activities when mentor presses. With pressing, will do just enough to get by.	Typically just "hangs out" during out-of-school time. Will make attempts to pursue learning only when mentor presses.	Shows limited social skills in certain situations and only makes attempts to improve social skills when mentor presses.	Often lacks control of emotions. Shows ability to adjust emotions when mentor presses.	Often makes unhealthy choices or has unhealthy habits. Will make healthy choices when mentor presses.
1 Lacks skill; pre-aware or disengaged	Does not work to learn in school, take advantage of personal & school resources, or participate in activities.	Does not yet work to learn during out-of-school time.	Does not yet possess key social skills and seems unaware of need to develop these skills.	Does not yet control emotions or express them in a positive way.	Engages in unsafe behaviors and does not make healthy choices.

Fig. 10.1 An example Growth Grid from Project GPS

The second unique feature of the Growth Grids is their flexibility. Mentors can complete Growth Grids for all six Cs (the Five Cs, plus Contribution), a selection of Cs, or even a single subcomponent of one C. This flexibility is attractive to many mentoring organizations, which already have detailed curricula or programs in place.

The Growth Grids were designed as both measurement tools and mentoring tools. Thus, the third unique feature of the Growth Grids is their links to a collection of activities and videos designed to foster development in the Five Cs of PYD, as well as Contribution. Mentoring organizations that incorporate the Growth Grids into their program therefore have access to a suite of tools that, together, can both assess and promote PYD among their mentees.

There are two major limitations to the utility of the Growth Grids for some mentoring contexts. First, as with any measurement tool, accurate and reliable scoring on the Growth Grids requires training. In an initial study of the Growth Grids, members of the IARYD research team trained mentors or mentor coordinators in Growth Grid scoring, instructing them to relay this scoring training to their colleagues or, in some cases, their mentees. This indirect training, while economically feasible, can introduce variance into Growth Grid scores. Ensuring consistent training on Growth Grid scoring is a next step for the Growth Grid project.

A second major limitation to the Growth Grids lies in the balance between program fidelity (i.e., consistent use of the Growth Grids) and program flexibility (i.e., varied use of the Growth Grids to suit individual program or mentor/mentee needs). To best use Growth Grids as a metric for the development of PYD requires consistent scoring procedures for each youth within each mentoring program. However, day-to-day mentoring can vary widely for individual mentees across time, for different mentees within the same program, and across different programs.

Therefore, although the Growth Grids will remain free to use for mentoring organizations, future assessments of the project may rely on closer collaborations between researchers and practitioners to develop optimal program-specific training and scoring procedures.

What Do These Measures Tell Us?

Adolescence is a time of rapid physical and psychological change. When parents, educators, and youth development practitioners are observing these changes, they may wonder about the life path that a young person will take. We all have experience that tells us that some people who start from the same set of circumstances—siblings growing up in the same house, for example—might nevertheless end up taking very different life paths. On the other hand, individuals from very different backgrounds often find themselves on a similar path in adulthood, ending up in the same career, for instance.

For developmental scientists, the goal of research is to be able to *predict* such outcomes and, ultimately, to intervene in such a way as to *optimize* the life chances for all young people to be positive, productive members of their communities, no matter what their "starting point" in life (Maholmes & Lomonaco, 2010). First, however, we must *describe* what these pathways are. Using data from the 4-H Study, we examined pathways of positive and problematic outcomes across adolescence. Although we did not analyze these data for specific individuals who participated in the study, we were able to look at some trends at the group level. In the following section, we describe the course of PYD scores across the adolescent years and the nature of the relationship between PYD and other developmental outcomes, including risk behaviors, during this time period.

PYD Is Stable Across Adolescence

Data from the 4-H Study show that scores on PYD are, on average, high and stable across the adolescent period. That is, data from the 7,000 participants in our study show that youth are generally doing well on the Five Cs of PYD. Furthermore, scores on PYD (and each of the Five Cs) tend to be consistent across adolescence. For example, Geldhof and colleagues (2014) found that average scores on the PYD measure in early and middle adolescence (Grades 6–8) are strong predictors of average PYD scores in later adolescence (Grades 9–12). This finding was also true for each of the Five Cs of PYD. On average, youth who are doing well in middle school will most likely be doing well into their high school years. Of course, practitioners, parents, and policy makers should be aware that what is true for a group of adolescents may not hold for an individual; each young person's pathway can be shaped by the influences of adults, peers, and other individuals and institutions in

the person's life, as well as through the person's own agency to select goals and plan for the future.

To explore individual youth's developmental pathways, or *trajectories*, of PYD in Grade 5 through Grade 12, we used information from youth who participated in two or more years of the 4-H Study. Trajectory analysis uses longitudinal data (i.e., data collected over several time points) to estimate patterns of change (pathways) in an outcome of interest, such as PYD scores. In the final report of the 4-H Study of PYD (Lerner & Lerner, 2012), which was developed in collaboration with the National 4-H Council, we found four pathways that indicate relative stability in PYD across adolescence (described below). Then, we examined the general characteristics of different groups, such as the number of males versus females in each trajectory. It appears that fifth graders (approximately age 10 years, the beginning of adolescence) tended to maintain a relatively stable level of PYD through Grade 12.

The finding of such marked consistency suggests that the individual and contextual factors that place youth on a particular pathway may exert a continuous influence across adolescence. These factors might include adolescents' self-regulation skills, such as their ability to set and manage goals, as well as external factors such as the people and institutions with which young people are engaged. We believe interventions that seek to move youth from a lower level of PYD to a higher level will need to take into account the power and persistence of such individual and ecological factors. These interventions may need to take a holistic approach to promoting PYD. On the other hand, the stability of PYD across adolescence might indicate that youth who are high in PYD in early adolescence are resilient across the middle and high school years.

Trajectories of Positive and Problem Behaviors

As discussed earlier in this chapter, the youth development field has traditionally been dominated by a "deficit" approach, which means programs for youth were traditionally aimed at preventing problem behaviors. Initial ideas within the PYD perspective suggested that if parents, practitioners, and policy makers focused on the promotion of PYD, then the negative outcomes typically associated with adolescence, such as drug and alcohol use, unsafe sex, and delinquency, would also diminish (e.g., Benson, Mannes, Pittman, & Ferber, 2004; Pittman, Irby, & Ferber, 2001).

Indeed, findings from the 4-H Study of PYD show that when we compare *average* scores on PYD with indicators of problematic development, this "inverse relationship" hypothesis appears to hold. Geldhof and colleagues (2014), for example, found a significant negative correlation between PYD and risk behaviors (including drug use and delinquent behaviors) and between PYD and depressive symptoms, across Grades 5 through 12. The researchers also found a significant positive correlation between PYD and Contribution across Grades 5 through 12.

When we examine different *individuals'* trajectories of PYD and problem behaviors across adolescence, a more complex pattern of positive and negative outcomes

emerges. For instance, Lewin-Bizan, Lynch, Fay, Schmid, McPherran, Lerner, and Lerner (2010) examined data from the 4-H Study and found that youth who were high on PYD were most likely to be low on problematic outcomes across early through middle adolescence; however, about 45 % of youth in the high PYD trajectory nevertheless showed increasing scores on risk behaviors, and about a third of youth in the high PYD trajectory showed increasing scores on depressive symptoms. The authors concluded that although the inverse relationship hypothesis held "more or less" for youth in the 4-H Study of PYD, "the [hypothesis] holds more for some youth, less for others, and even not at all for some youth" (p. 759). Schwartz et al. (2010) also used data from the 4-H Study to examine the relationship between PYD with specific risk behaviors, including tobacco use, alcohol use, marijuana use, hard drug use and sex initiation. The authors found that PYD was negatively related to hard drug use and positively associated with the probability of using condoms, but also found that young men with higher PYD were more likely to start using alcohol *earlier*. Practitioners should be aware, therefore, that while efforts to promote PYD—such as long-term, positive mentor relationships and opportunities for skill building and leadership—may buffer against negative outcomes, youth programming should also incorporate strategies for avoiding risk behaviors of concern to them.

In sum, the findings from these various studies, using data from the 4-H Study, provide strong evidence that the Five Cs of PYD measures are good indicators of positive development across adolescence. For the most part, we should be confident that young people who score highly on PYD are following positive pathways to adulthood. Moreover, these pathways tend to be consistent; youth who are doing well in middle school will most likely be doing well into their high school years. Of course, practitioners, parents, and policy makers should be aware that what is true for a group of adolescents may not hold for an individual; each young person's pathway can still be shaped by the influences of adults, peers, and other individuals and institutions in the person's life, as well as through the person's own agency to select goals and plan for the future. Nevertheless, PYD is a useful measure for practitioners to understand the effects of their programs on the developmental trajectories of the young people whom they serve.

Conclusions from Research on the Five Cs Model

The cumulative results from the eight waves of the 4-H Study of PYD suggest that the Five Cs Model of PYD is a useful and practical tool for measuring and understanding youth thriving. Using the Five Cs measurement model has practical implications for practitioners, and these benefits include:

- The Five Cs Model provides a useful framework for targeting content or curricula in youth development programs.

- The Five Cs measures can be used as evaluation tools for youth development programs.
- The Five Cs measures provide an opportunity to assess specific developmental areas (e.g., social skills/competence) as well as more general thriving (e.g., PYD).
- The various forms of the PYD measure provide an opportunity to use the tools that are most appropriate for specific youth programs with regard to age, length of survey, and content area.
- Because there is not a perfect inverse relation between PYD and risk/problem behaviors, practitioners should both act to promote PYD and prevent negative development.
- Due to the imperfect inverse relation between positive and problematic attributes of youth, every young person must be evaluated as an individual with his or her own pathway through adolescence.

Specific Recommendations for Youth Practitioners and Policy Makers

Based on the evidence base, we can make several recommendations to practitioners. However, we also include several considerations that programs and youth development leaders should also take into account for designing, implementing, and managing their PYD programs as well as when working with individual youth.

Our first recommendation is that for programs aimed at promoting PYD, evaluations should include a multidimensional and comprehensive measure of youth thriving such as the Five Cs measure of PYD. However, for programs with a focus on more specific youth outcomes, such as self-esteem or character, a subset of the Five Cs may be more appropriate. Taking the time and resources to make these decisions will benefit youth programs in the long run. Given that a theory of change and logic model for the program are in place, leaders should work to ensure that there is intentionality in the particular activities they engage in with young people and that young people are also able to identify the purpose and reason for particular activities. We recommend that programs develop activities that are sequenced, active, focused, and explicit (SAFE, Durlak & Weissberg, 2007) to promote each of the Five Cs of PYD.

Whereas we have provided several ideas for building particular Cs in young people in earlier work (see Lerner, Brittian, & Fay, 2007), *our second recommendation* is that programs consider youth-adult partnerships (Liang, Spencer, West, & Rappaport, 2013; Zeldin, Larson, Camino, & O'Connor, 2005) as a potential program framework for ensuring that each of the Five Cs and Contribution are promoted. In youth-adult partnerships, young people and youth leaders work collaboratively, learning from each other and jointly contributing to the decision-making processes that affect the program itself and their community in positive ways. The principles and strategies entailed in youth-adult partnerships promote

young people's (1) Competence, as they build skills to reach goals they set and lead projects; (2) Confidence, as adults share authority and power; (3) Connection, as young people develop bonds to adults, fellow young people, and the community; (4) Character, as youth become more socially aware, shape norms, and make decisions with consequences; and (5) Caring, as youth have disagreements with partners and see issues and ideas from others' perspectives. Finally, the ultimate aim of youth-adult partnerships is to contribute to positive change at the individual, community, and policy levels (Liang et al., 2013).

Regardless of the positive outcomes of interest, our findings also indicate that programs should not assume that promoting PYD will automatically lead to a decrease in problem behaviors. In fact, programs should take care that their activities do not have a negative effect on young people (Dishion, McCord, & Poulin, 1999). Accordingly, *our third recommendation* is that programs should be designed to influence both positive and negative outcomes in the people with whom they work, and, as such, evaluations must measure both types of outcomes in youth. In regard to working with individual youth, youth leaders should help young people learn skills and set goals toward positive ends as well as learn skills and set goals to avoid negative consequences. For example, in programs aimed at reducing teen pregnancy rates, leaders can work with young people to set positive vocational or academic goals that would be adversely affected by a pregnancy in addition to setting reproductive health goals.

In the same way, practitioners must also recognize that bad behaviors are not the end of the world. Misbehaviors are often a part of normal development in adolescence (Baumrind, 1987; Dworkin, 2005; Maggs, Almeida, & Galambos, 1995). Youth leaders should work to distinguish more normative or experimental risk-taking behaviors that may lead to positive developmental opportunities for young people (Baumrind, 1987). However, more research and practical efforts need to take into account the individual and contextual factors that might lead to youth engaging in both positive and problematic pursuits.

For example, if a young person did engage in problematic or risky behaviors as a means to build relationships and improve his or her standing with peers, programs can focus on structuring positive social activities with the goal of promoting PYD (Dworkin, 2005). Developing a close relationship with a young person may help youth leaders and practitioners to determine the reasons behind youth misbehaviors (Bowers et al., 2012).

Our fourth recommendation is that programs and youth development leaders should take into account the unique strengths that each young person exhibits. It is not necessary to force or pressure youth into specific tracks or activities. Our findings indicate that, whereas the Five Cs frame applies to all adolescents, the specific levels of each C may differ across adolescents. These findings also suggest that all young people do not have to be the star athlete nor do all children need to be popular to report having high PYD. Youth can develop competence and PYD within their

own areas of interest. Youth leaders can help young people to identify their "spark" (Ben-Eliyahu, Rhodes, & Scales, 2014; Benson, 2008).

In a similar way, youth leaders could work with youth to identify what internal strengths the youth can build on as well as what contextual resources may be available to help them build on these interests. While this task could be accomplished through a simple list, we recommend several more creative and engaging options such as provided in GPS to Success activities (Bowers et al., 2013; Napolitano et al., 2014) or several suggestions provided by the Girl Scout Research Institute (2009), such as creating a map of resources, recruiting ideas for resources through social media, or connecting youth to resources through field trips or guest visitors. These opportunities may strengthen interests in areas already meaningful to some youth (Damon, 2008), but they may also ignite new interests in other young people. Therefore, these activities also expose youth to a greater diversity of people, cultures, and experiences.

Our work also provides *several recommendations for policy*. First, the personal interactions that are the bases of the mutual trust between young people and adults provide a model for the types of interactions essential for effective community partnerships (Hartley, 2004). Therefore, stakeholders in youth development (young people, parents, researchers, teachers, youth development leaders, policy makers) must work to build a support system to change youth policies and to facilitate a PYD agenda (Pittman, Yolahem, & Irby, 2003). Few political candidates' agendas address youth issues, and if they do, they revolve around reducing problem behaviors in youth. However, youth stakeholders' work can also extend to influencing how the public views and reasons about youth and youth issues through mass communication (Gilliam & Bales, 2003). For example, stakeholders could develop and maintain ties to members of the media to help reframe the public's view of young people and the definition of well-being and success in adolescence.

Currently, many federal funding priorities are aimed at science, technology, engineering, and math (STEM) success. While STEM is essential to success in many areas, the definition of success from a PYD perspective must be broader. Making connections among influential stakeholders and applying pressure to raise awareness of youth issues from a PYD perspective is the primary recommendation for policy priorities.

With broader support for PYD policies in place, funding sources must also be allocated in an appropriate manner. Funding to promote PYD is present. However, the devil is in the details. That is, we recommend that these funding sources must acknowledge the time and effort needed to develop the complex partnerships essential for promoting PYD. These partnerships require the commitment and integration of each of the above constituencies over several years to design and implement a PYD program that is evidence-based, rigorous, and sustainable. Therefore, funding is needed not only for the provision of opportunities but also for capacity building, monitoring, and technology support.

The funding for PYD programs and research must also be stable and coordinated, as opposed to being transient and disjointed efforts from different funding sources. For example, the PYD perspective is consistent with a "whole-child" approach to development. Therefore, policies should support the integration of schools with out-of-school-time activities as complementary opportunities to promote PYD in a comprehensive manner (Weiss, Little, Bouffard, Deschenes, & Malone, 2009). In order to accomplish this integration successfully, funding should prioritize integrated and comprehensive approaches among several contexts of youth development.

We also recommend that young people be included in as many facets of youth-serving programs and organizations as possible. Having young people included in the decision-making processes of organizations is consistent with the principles of youth-adult partnerships. It also allows young people's voices to be included in how researchers, practitioners, and policy makers measure PYD, as well as to how staff may be trained in the best practices to promote PYD.

Conclusions and Next Steps

The past two decades have seen a great increase in the number of researchers, practitioners, and policy makers using strength-based language or approaches to youth development, including the Five Cs model of PYD. To most fully capitalize on youth strengths, the next decade must turn toward enhancing the evidence base for these comprehensive models of youth development and, ultimately, toward increasing the number of research-informed policies and programs. Much of the work on the Five Cs of PYD did not take into account other ecological, individual, and demographic characteristics of youth that could have shed light into the differences among young people in regard to the Cs. Such work in this area will greatly benefit researchers, practitioners, and policy makers. In addition, it will provide a more comprehensive understanding of the efforts that need to be undertaken to align individuals and contexts to maximize the possibility of PYD among diverse youth.

These efforts must be guided at the legislative and policy levels by interdisciplinary partnerships involving communication among developmental scientists, practitioners, and politicians in order to spark innovative approaches grounded in research and accountable to best practices and scientific rigor. An example of this type of collaboration is the White House Social and Behavioral Sciences Team. In turn, these efforts must be matched by streamlined and coordinated funding streams that reward this integrated approach to youth development. Finally, as the heart of this work is the positive development of young people, this research must be translated into improving the regular daily contexts of youth and the common practices of youth-serving systems.

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Recommended Additional Resources

Lerner, R. M., Lerner, J. V., Almerigi, J., Theokas, C., Phelps, E., Gestsdóttir, S., et al. (2005). Positive youth development, participation in community youth development programs, and community contributions of fifth-grade adolescents: Findings from the first wave of the 4-H Study of Positive Youth Development. *Journal of Early Adolescence, 25*(1), 17–71.

This article provides a foundational overview of the 4-H Study of Positive Youth Development and an analysis of data from the initial wave of this study. The empirical analyses support the existence of the Five Cs of positive youth development and their relation to youth contributions. This study therefore provides an empirical basis to support future investigations to assess and refine the Five Cs of PYD as a useful theoretical model of adolescent development.

Lerner, J. V., Bowers, E. P., Minor, K., Lewin-Bizan, S., Boyd, M. J., Mueller, M. K., et al. (2013). Positive youth development: Processes, philosophies, and programs. In R. M. Lerner, M. A., Easterbrooks, & J. Mistry (Eds.), *Developmental psychology* (Handbook of psychology 2nd ed., Vol. 6, pp. 365–392). Hoboken, NJ: Wiley. Editor-in-chief: I. B. Weiner.

This chapter describes prominent theories of PYD and key features of the PYD perspective. The authors review key scholars, explore notable research contributions, and explain the importance of context and unique experience on positive youth development within a theoretical framework that places adolescent development within a system of mutually influential relations between individuals and their contexts (this approach to theory is therefore termed "relational developmental systems").

Lerner, R. M., Lerner, J. V., Bowers, E., & Geldhof, G. J. (2015). Positive youth development: A relational developmental systems model. In W. F. Overton & P. C. Molenaar (Eds.), *Theory and method* (Handbook of child psychology and developmental science, 7th ed., Vol. 1). Hoboken, NJ: Wiley. Editor-in-chief: R. M. Lerner.

This chapter builds on J. Lerner and colleagues' (2013) chapter in the Handbook of Psychology, paying particular attention to the ways the positive youth development perspective aligns with theories involving the relational developmental system. The authors encourage the refinement and expansion of PYD as a developmental process, as well as utilizing both PYD and prevention science approaches in research and application of developmental science in order to maximize positive development across the life span.

Lerner, R. M., Napolitano, C. M., Boyd, M. J., Mueller, M. K., & Callina, K. S. (2014). Mentoring and positive youth development. In D. L. Dubois & M. J. Karcher (Eds.) *Handbook of youth mentoring* (2nd ed., pp. 17–28). Thousand Oaks, CA: Sage.

This chapter presents theoretical and empirical foundations of PYD and examines how mentoring programs may actively foster PYD through a positive and sustainable relationship with a mentor, life-skill-building activities, and opportunities for youth to engage with their communities. The chapter provides an example checklist for mentoring practitioners to enhance mentees' development of Five Cs of PYD and encourages the use of a PYD perspective in mentoring programs in order to promote the healthy development of adolescents.

Benson, P. L., Mannes, M., Pittman, K., & Ferber, T. (2004). Youth development, developmental assets, and public policy. In R. M. Lerner & L. Steinberg (Eds.), *Handbook of adolescent psychology* (2nd ed., pp. 781–814). Hoboken, NJ: Wiley.

Benson and colleagues compare strength-based and deficit approaches to youth development and discuss the theoretical and empirical foundation of the Search Institute's developmental asset framework. The authors identify and consider the implications of social and cultural dynamics on youth development policy. They highlight the potential for developmental science to inform and shape public policy affecting youth.

Appendix: Adapted PYD-SF and PYD-VSF Scales for Practitioners

Competence

The following pairs of sentences are talking about <u>two kinds of kids</u>. 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 <u>sort of true</u> for you or <u>really true</u> for you and mark your answer.

FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.								Scoring (coder use only)	
	Really True for me [4]	Sort of True for me [3]				Sort of True for me [2]	Really True for me [1]	Competence	PYD
1.	o	o	Some teenagers feel that they are just as smart as others their age.	BUT	Other teenagers aren't so sure and wonder if they are as smart.	o	o		
2.	o	o	Some teenagers have a lot of friends.	BUT	Other teenagers don't have very many friends.	o	o		X
3.	o	o	Some teenagers think they could do well at just about any new athletic activity.	BUT	Other teenagers are afraid they might not do well at a new athletic activity.	o	o		X
4.	o	o	Some teenagers do very well at their class work.	BUT	Other teenagers don't do very well at their class work.	o	o		
5.	o	o	Some teenagers feel that they are better than others their age at sports.	BUT	Other teenagers don't feel they can play as well.	o	o		X
6.	o	o	Some teenagers are popular with others their age.	BUT	Other teenagers are not very popular.	o	o		X

Competence Sum:_____

PYD Page Sum:_____

Confidence

FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.								Scoring (coder use only)	
	Really True for me [4]	Sort of True for me [3]				Sort of True for me [2]	Really True for me [1]	Confidence	PYD
1.	o	o	Some teenagers are happy with themselves most of the time.	BUT	Other teenagers are often not happy with themselves.	o	o		
2.	o	o	Some teenagers think that they are good looking.	BUT	Other teenagers think that they are not very good looking.	o	o		X
3.	o	o	Some teenagers really like their looks.	BUT	Other teenagers wish they looked different.	o	o		X
4.	o	o	Some teenagers are very happy being the way they are.	BUT	Other teenagers wish they were different.	o	o		

How much do you agree or disagree with the following?	Strongly agree [4]	Agree [3]	Disagree [2]	Strongly disagree [1]	Confidence	PYD
5. All in all, I am glad I am me.	o	o	o	o		
6. When I am an adult, I'm sure I will have a good life.	o	o	o	o		

Confidence Sum:_____

PYD Page Sum:_____

Character

FILL IN ONLY ONE CIRCLE FOR EACH PAIR OF SENTENCES.								Scoring (coder use only)	
	Really True for me [4]	Sort of True for me [3]				Sort of True for me [2]	Really True for me [1]	Character	PYD
1.	○	○	Some teenagers hardly ever do things they know they shouldn't do.	BUT	Other teenagers do things they know they shouldn't do.	○	○		
2.	○	○	Some teenagers usually act the way they know they are supposed to.	BUT	Other teenagers often don't act the way they are supposed to.	○	○		

How important is each of the following to you in your life?	Not important [1]	Somewhat important [2]	Quite important [3]	Extremely Important [4]	Character	PYD
3. Helping to make the world a better place to live in.	○	○	○	○		
4. Giving time and money to make life better for other people.	○	○	○	○		
5. Doing what I believe is right even if my friends make fun of me.	○	○	○	○		
6. Accepting responsibility for my actions when I make a mistake or get in trouble.	○	○	○	○		

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]	A little like me [2]	Quite like me [3]	Very much like me [4]	Character	PYD
7. Knowing a lot about people of other races.	○	○	○	○		X
8. Enjoying being with people who are of a different race than I am.	○	○	○	○		X

Character Sum:_____

PYD Page Sum:_____

Caring

How well do each of these statements describe you?	Not well [1]	[2]	[4]	Very well [5]	Scoring (coder use only) Caring	PYD
1. When I see someone being taken advantage of, I want to help them.	o	o	o	o		
2. It bothers me when bad things happen to any person.	o	o	o	o		
3. I feel sorry for other people who don't have what I have.	o	o	o	o		
4. When I see someone being picked on, I feel sorry for them.	o	o	o	o		
5. It makes me sad to see a person who doesn't have friends.	o	o	o	o		
6. When I see another person who is hurt or upset, I feel sorry for them.	o	o	o	o		

Caring Sum:_____

PYD Page Sum:_____

Connection

How much do you agree or disagree with the following?	Strongly agree [5]	Agree [4]	Disagree [2]	Strongly disagree [1]	Scoring (coder use only) Connection	PYD
1. I get a lot of encouragement at my school.	o	o	o	o		
2. Teachers at school push me to be the best I can be.	o	o	o	o		
3. I have lots of good conversations with my parents.	o	o	o	o		
4. In my family I feel useful and important.	o	o	o	o		
5. Adults in my town or city make me feel important.	o	o	o	o		
6. Adults in my town or city listen to what I have to say.	o	o	o	o		

How true is each of these statements for you?	Always true [5]	Usually true [4]	Sometimes true [2]	Almost never true or never true [1]	Connection	PYD
7. I feel my friends are good friends.	o	o	o	o		
8. My friends care about me.	o	o	o	o		

Connection Sum:_____

PYD Page Sum:_____

PYD Total Sum:_____

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