

Out-of-School Time and Youth Development: Measuring Social-Emotional Development to Inform Program Practice

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Introduction

There are as many opinions about the role of youth development programs that operate outside of school as there are names for it: after-school, extended day, extended time education, expanded learning, free-standing programs, and out-of-school time (OST) are a few of the most popular terms for this valuable youth development time. (For the purposes of this chapter, we'll refer to this time as OST.) While there continues to be a rich, interesting debate about the role of OST across the world – is it supplementary, or in the case of educational gaps, compensatory to the existing in-school educational curricula or should it consist of free-standing programs that operate independently of the country's school system? – this piece will leave the debate over OST's relationship with formal education systems to others. Instead, we will focus on questions central to our work: How can we measure the impact OST programs has on youth development outcomes and how can we use those outcomes to better inform OST programming in a way that will benefit the youth the program is currently serving, not only future participants years down the line?

With all the expectations put on OST, we argue for focus on youth development as a core component of a successful OST program based on ample research that shows OST plays an important role in youth development and that impact often extends to in-school performance (Cooper, Valentine, Nye, & Lindsay, 1999; Darling, 2005; Fredericks & Eccles, 2006). A meta-analysis of OST programs in the United States showed that participants in programs that addressed personal and social skills demonstrated significant increases in their self-perceptions and bonding to school, positive social behaviors, school grades and levels of academic achievement, and a significant reduction in problem behaviors (Joseph A. Durlak, Weissberg, & Pachan, 2010). Given this research support, the measurement of youth outcomes is becoming a growing priority in the field of OST. While programs and systems may cite a variety of reasons for measuring youth social-emotional skills and beliefs, a review of the literature around expanded learning systems grouped these reasons into three categories: policy supports, program improvement, and evidence (Moroney, Newman,

Smith, McGovern, & Yohalem, 2014). While limited funding for OST programs in the U.S. allows government and private funders to exert additional pressure on programs to connect their work with measurable outcomes, we believe this interest in connecting youth developmental outcomes with OST program quality is applicable to an international audience.

Connecting OST to youth development: The Clover Model

OST has a distinctive role to play in youth development that gives it a pedagogic value distinct from in-school education. For the purposes of this paper, in-school education refers to formal, curricula-based education that is focused on academic outcomes. OST is the incubator of new practices and new testing grounds and thrives in a low accountability and low threat environment. While the structure of OST programs lends itself naturally to fostering positive relationships between adults and youth and other factors that lead to positive youth outcomes (J. A. Durlak & Weissberg, 2007; Rhodes, 2004), we believe OST programs would benefit from a more intentional connection between research on OST outcomes and youth development theory. In this section we will give an example of how theory can connect to and inform practice in OST.

Our developmental process theory (DPT), called “The Clover Model of Youth Development” (Figure 1) interconnects adolescent psychopathology with social-emotional development and resilience, reframing problem behaviors as developmental imbalances and defining resiliency as balanced social-emotional development (Malti & Noam, 2008, 2009, 2016; Noam, 1996; Noam & Triggs, 2016).



Figure 1. The Clover Model of Youth Development

The Clover Model was developed based on two decades of comparative research of various child and adolescent developmental models. It incorporates attachment, functionalist, and social-cognitive developmental theory from Bowlby, Erikson and Piaget as it is applied to risk and resilience and normative development (Bowlby, 1969; Erikson, 1950; Piaget, 1954). For more information on the process of developing the Clover Model, Noam, Malti, and Karcher present a summary of this comparative research (Noam, Malti, & Karcher, 2013). The goal in the development

of the Clover Model was to seek the minimum dimensions necessary to understand the needs and desires of children and adolescents and to provide them with the right support and learning opportunities that engage and satisfy these needs.

Tested and refined through clinical and classroom observations, the Clover Model is defined by four domains or “leaves,” each reflecting a particular kind of development (Malti & Noam, 2009). These leaves represent four key components of healthy adolescent development: active engagement, assertiveness, belonging, and reflection. We use the image of a clover and call these dimensions and their interactions “leaves” because they do not follow each other sequentially, but are each present at all points of development. The leaves are not distinct entities; rather, they overlap like a Venn diagram. Active engagement represents the desire to actively and physically engage with the world through the body; assertiveness represents the development of a voice and desire to express wants and needs; belonging represents a desire to build a connection with peers and adults; and reflection represents a desire for self-reflection and identity exploration.

While all leaves are present throughout development, there are key times of specialization in each leaf based on the youth’s developmental progress. Connection to the physical world through active engagement begins at birth and remains the dominant focus through age 5. In middle childhood (ages 6–10), assertiveness begins to take prominence, with youth learning how to assert their own voice and autonomy in relationships. In early adolescence (ages 11–15), the belonging leaf becomes a major focus of energy when youth strive to make friends, explore various identities and personas and try to find where they fit in relation to others. Moving into full adolescence (age 16 and beyond), the focus often turns inward toward reflection and includes an increased interest in meaning-making, observation, insight, and self-awareness.

In addition to describing aspects of youth development individually, the Clover Model leaves also work in conjunction as “partner leaves” help youth who are overly specialized in one or more Clover domains to find balance. The Clover Model domains can also be divided into internalizing and externalizing hemispheres (Noam, Malti, & Guhn, 2012). Active engagement and assertiveness deal with what we call “externalizing” behaviors and cognitions: thoughts and behaviors that are not only observable to the outside world, but are in fact directed from the individual toward the outside world. For example, active engagement behaviors would include physical activity (seen as disruptive classroom behavior when negatively expressed) and assertiveness would include speaking your mind and presenting options (seen as argumentativeness or opposition to authority when negatively expressed). The belonging and reflection leaves describe “internalizing” behaviors and cognitions: thoughts and behaviors that are directed within a person and not necessarily obvious to the outside world. Feeling like you belong in a group or pondering the meaning of the world are activities that happen within a youth’s head and are more difficult to see from the outside. Internalizing struggles can be just as harmful to young people as the externalizing behaviors of acting out and arguing, but are more likely to go untreated and unresolved because they are not as evident to those working with the youth.

The Clover Model was designed not only to explain youth behavior in terms of developmental process, but also to be applied as a guide for those working with

youth to better understand what approaches and practices will best suit the developmental needs of a particular youth. To this end, the model encourages facilitators to use youth's strengths in a particular domain to cultivate their less developed competencies and in turn, to enhance their overall balance. For example, instead of focusing on managing the behavior of those with strengths in active engagement to be less active, the Clover Model encourages the support of a youth's innate strengths by allowing for activities that include physical movement that also include work on self-regulation and reflection on their actions. Working to maintain a balanced Clover is important for the development of social-emotional competencies, which are linked to academic success, positive peer and adult relationships, and mental health (Oberle, Schonert-Reichl, Hertzman, & Zumbo, 2014; Ursache, Blair, & Raver, 2012).

Measuring Youth Development: The Holistic Student Assessment

Research has found that developmentally-sensitive assessments can improve the use of intervention strategies that fit the developmental needs of children and adolescents (Malti, Chaparro, Zuffianò, & Colasante, 2016; Weisz, 1997). While the Clover Model can serve as a framework for OST facilitators to better understand the developmental needs of the youth they serve, observation of behaviors alone is often insufficient in identifying social-emotional needs, particularly for youth who deal with more internalizing challenges. The use of a psychometrically strong data-creating tool is an important step to identify the social-emotional needs of young people for specific prevention practices (Malti, Zuffianò, & Noam, 2017). In addition to collecting individual data, systematic assessments can also provide information on strengths of a diverse group of children in a classroom (or an entire community) that might not be easily detected without a data-driven approach. In this section, we will discuss how an assessment tool based on a youth development model can provide data to drive decision-making within OST programs.

The impetus for the development of the Holistic Student Assessment (HSA), a youth social-emotional self-report tool, was the recognition that traditional psychological assessments were often focused on risk factors in youth such as depression, aggression, and anxiety. While these risk factors are important, they often neglect contextual risk factors and the existence of supportive relationships in relation to individual development and risks (Malti, Liu, & Noam, 2010). The theoretical starting point for the HSA is the Clover Model of Youth Development (Malti & Noam, 2009). It is based on previous research and on the Resilience Inventory developed by Noam and Goldstein (1998) and Song (2003). The HSA measures resiliencies that align with Clover's four leaves (see Table 1).

Table 1. HSA Subscales as Applied to The Clover Model

Clover Model	HSA Subscale	Definition	Sample Item
Active Engagement	Action Orientation	Engagement in physical and hands-on activities.	I like being physically active and moving my body.
	Emotion Control	Self-regulation of distress and management of anger.	I react to things so quickly I get in trouble.
Assertiveness	Assertiveness	Confidence in putting oneself forward and standing up for what one believes.	I defend myself against unfair rules.
Belonging	Empathy	Recognition of other's feelings and experiences.	I like to help people with their problems.
	Trust	Perception of other people as helpful and trustworthy.	I trust other people.
Reflection	Reflection	Inner thought processes and self-awareness, and internal responsiveness toward broader societal issues.	I try to understand the world I live in.
	Optimism	Enthusiasm for and hopefulness about one's life.	I have more good times than bad times.

In 2012, the HSA's psychometric properties were evaluated and the results of that study lent empirical support to the HSA as a valid measure of children's and adolescents' resiliencies (Noam et al., 2012).

HSA Data Analysis and Reporting

The Clover Model portion of the HSA is 28 questions that can be completed at the beginning of any OST program. Collected data can be analyzed and returned to a program in as little as a few days so that programs can get a sense of the social-emotional strengths and challenges of their participants at the beginning of the program. In addition to a basis in the Clover Model, HSA results are mapped to a three-tier intervention pyramid that is based on the public health model (Frieden, 2010) that has been adapted by educators to determine the support need of a school or OST population (U.S. Department of Education, 2010). The pyramid provides a simple way to display the level of intervention each participant in a program may need, with those in the top smallest percent of the pyramid requiring the highest support need and the larger base of the pyramid benefiting from activities that promote social-emotional competencies throughout the program. The support need pyramid is the basis for how we organize and report individual HSA data to OST programs and is the primary indicator for assessing which youth need additional support. Placement on the pyramid is determined by the youth's strengths and challenges as self-reported in the HSA when their responses are normed against our database of students of similar age and gender. After data collection and processing, the results of the HSA were shared with OST providers via

individual “HSA Portraits” (see Figure 2) and an interactive Excel-based “HSA Dashboard” as part of the data interpretation session (see Figure 3).

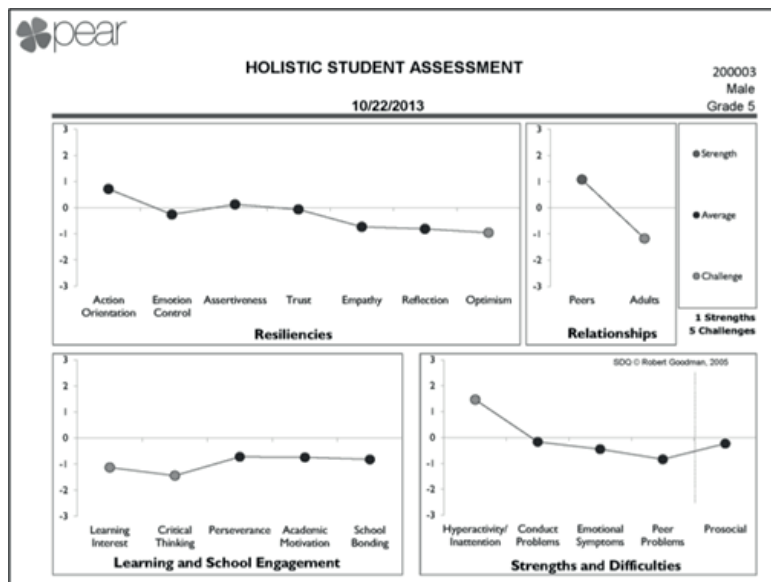


Figure 2. Sample HSA Individual Portrait

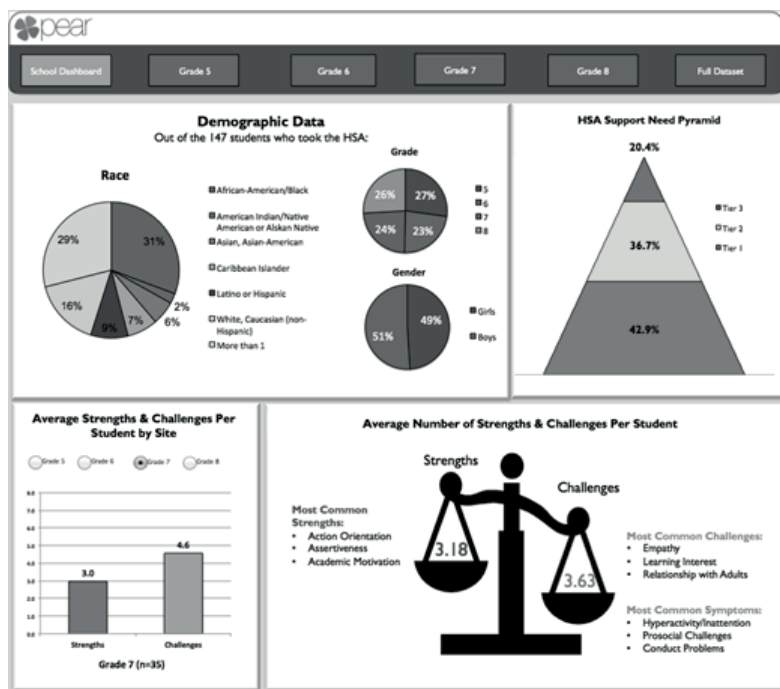


Figure 3. Sample HSA Dashboard cover page

The information provided by the HSA is intentionally designed to be simple for OST providers to use and interpret. In addition to data reporting at the individual and group levels, considerable training support is provided by The PEAR Institute's research and coaching staff to support the survey administration and interpretation. By being able to review participant data at the individual and group levels, OST providers can make more informed decisions on how to mentor and support individual students as well as make decisions about which interventions and activities may benefit the larger group.

Moving from Data to Action: Intervention Groups and Professional Development

Now that we've traced the connection from how a youth development theory can inform a social-emotional assessment for OST programs, we must address the question of how to use those outcomes to better inform OST programming in a way that will benefit the youth the program is currently serving. A shift in how data is viewed by OST programs, networks, and funders is an important first step. With student self-report data available at the start of the program, OST providers will have important information they can use to make decisions about how to modify or increase programming to better meet the needs of their current participants. In this section we'd like to share an example of how youth development theory-based curricula can be used by a program in direct response to student need as expressed by data collected from the HSA.

To more fully support the Clover Model framework and the HSA, The PEAR Institute developed five small-group curricula that are tailored to each of the potential Clover Model imbalances described by the model and identified by the HSA. These Clover Groups were initially designed for youth who demonstrated an imbalance in their Clover who could benefit from a small group intervention that supported their strengths while addressing their challenges. These groups can also be expanded to benefit a general population, as developing social-emotional competencies is important and beneficial for all youth (Centers for Disease Control and Prevention, 2014). The overarching goals of these groups are to:

- Build youth's social-emotional competencies with an emphasis on active engagement, assertiveness, belonging and reflection
- Prevent the development of problem behaviors by increasing youth's competencies and positive relationships with adults
- Support youth's ability to thrive in their academic and social environment

For more information on focus of each of the five Clover Groups, see Table 2.

Table 2. Clover Groups Descriptions

Clover Model	Clover Group	Description
Active Engagement	Ready, Set, Action	This group engages youth by capitalizing on their natural desire to be moving, utilizing hands-on activities to help youth reflect, improve concentration, and control impulses. Each activity can be facilitated to help students feel part of a caring community, express themselves productively, and understand the importance of reflection in acquiring new knowledge.
Assertiveness	Photo Justice	This group engages natural leaders who can speak their minds and act autonomously, but at times struggle to express their ideas in productive ways. It provides a forum where young people's passions and opinions can be channeled through a positive form of expression. It encourages individual and collective voice and empowerment through photography.
Belonging	StrongLinks – Female	This group is designed for females who have a strong focus on social connection and relationships, but are sometimes at risk of sacrificing self-expression. Activities include expressive arts and reflective projects including journaling, media literacy, and arts and crafts. It provides adolescent girls opportunities for safe expression of ideas, values, and beliefs while connecting with peers.
	StrongLinks– Male	This group is designed for males who have a strong focus on social connection and relationships, but are sometimes at risk of sacrificing self-expression. The group activities allow adolescent boys to assert their own individuality and voice through drumming, drama, and journaling.
Reflection	Reflections	This group (<i>currently in development</i>) is designed for youth who are overly specialized in reflection, thinking, and perfectionism. It will focus on digital storytelling, building on students' interests in biography, self and identity.

Successfully implementing these groups, which typically run for 12 sessions for 50 minutes a session, requires two facilitators who have experience in youth development, mental health, or education that have been trained in the Clover Model and group facilitation. To help support programs that are interested in running a Clover Group, The PEAR Institute has created a Clover Group certification program that includes orientation around the Clover Model, peer coaching around group facilitation best practices, and video or in-person observation and feedback. Once a participant completes the Clover Group certification process, they will be able to facilitate their own groups and coach other facilitators. By using this model of training-the-trainer, we are able to spread capacity across OST programs while uniting each program around a common language and understanding of youth development.

Conclusion

While this chapter focuses specifically on our work in OST youth development, it does so to highlight the life cycle of a youth development theory as it moves from a model to an assessment to practice. The value of this process is that it unites a program or a network of programs with a common language and understanding. By identifying a unifying framework, or a common language to communicate learning goals, programs and networks will be better informed when selecting which data collection tools to use to measure the progress of their programs and participants. It is also important to shift the perspective on data collection in OST to embrace a system that not only informs on past success and challenges, but that serves as an integral part of a program from its very beginning. This new approach to data will allow programs to know every child at the beginning of the year, build stronger relationships, and increase student engagement in the program from the start. Rapid analysis and reporting of data at the beginning of programming would also provide information that could lead to changes in activity planning or execution of the program while the youth is still participating and could benefit from the changes.

If OST programs agree to adopt a common framework and set of tools around youth development, the next step to support these efforts is the development of a shared data system where programs can access this wealth of shared data. To this end, The PEAR Institute, with support from the Noyce Foundation, is developing a data system that will provide organizations with access to a variety of survey tools, as well as fully analyzed data reports and program improvement recommendations. This data system will translate youth social-emotional data in a common vocabulary within and between organizations, including comparisons based on an extensive de-identified database of youth participating in OST across the U.S., and ultimately our hope is that it will support international comparisons as well. Interventions and other practice recommendations would be included and linked to the data in an ever-evolving collection of best practices from OST programs in an ever-expanding network of collaboration. Developing such a system will undoubtedly come with a set of challenges including the difficulty of agreeing on tools, concerns around privacy, negative thinking around assessment, and feelings of competition among organizations. However, there is a great opportunity for OST providers and supporters to unite around sharing best practices, reduce staff time with efficient data collection tools, inform on national policy, and serve as the model for using data to drive quality improvement and youth developmental outcomes in the OST field.

References

- Bowlby, J. (1969). *Attachment*. New York: Basic Books.
- Centers for Disease Control and Prevention. (2014). *Whole school, whole community whole child: A collaborative approach to learning and health*. Retrieved from <http://www.ascd.org/ASCD/pdf/siteASCD/publications/wholechild/wsccl-a-collaborative-approach.pdf>
- Cooper, H., Valentine, J.C., Nye, B., & Lindsay, J.J. (1999). Relationships between five after-school activities and academic achievement. *Journal of Educational Psychology, 91*, 369–378.
- Darling, N. (2005). Participation in extracurricular activities and adolescent adjustment: Cross-sectional and longitudinal findings. *Journal of Youth and Adolescence, 34*, 493–505.
- Durlak, J.A., & Weissberg, R.P. (2007). *The impact of afterschool programs that promote personal and social skills*. Chicago, IL: Collaborative for Academic, Social and Emotional Learning. Retrieved from <http://www.uwex.edu/ces/4h/afterschool/partnerships/documents/ASP-Full.pdf>
- Durlak, J. A., Weissberg, R. P., & Pachan, M. (2010). A meta-analysis of after-school programs that seek to promote personal and social skills in children and adolescents. *American Journal of Community Psychology, 45*(3–4), 294–309. <https://doi.org/10.1007/s10464-010-9300-6>
- Erikson, E. H. (1950). *Childhood and society*. New York: Norton.
- Fredericks, J.A., & Eccles, J.S. (2006). Is extracurricular participation associated with beneficial outcomes? Concurrent and longitudinal relations. *Developmental Psychology, 42*, 698–713.
- Frieden, T.R. (2010). A framework for public health action: The health impact pyramid. *American Journal of Public Health, 100*(4), 590–595. <https://doi.org/10.2105/AJPH.2009.185652>
- Malti, T., Chaparro, M.P., Zuffianò, A., & Colasante, T. (2016). School-based interventions to promote empathy-related responding in children and adolescents: A developmental analysis. *Journal of Clinical Child & Adolescent Psychology, 45*(6), 718–731. <https://doi.org/10.1080/15374416.2015.1121822>
- Malti, T., Liu, C.H. J., & Noam, G.G. (2010). Holistic assessment in school-based, developmental prevention. *Journal of Prevention & Intervention in the Community, 38*(3), 244–259. <https://doi.org/10.1080/10852352.2010.486306>
- Malti, T., & Noam, G. G. (Eds.). (2008). Where youth development meets mental health and education: The RALLY approach. *New Directions for Youth Development, 120*.
- Malti, T., & Noam, G.G. (2009). A developmental approach to the prevention of adolescent's aggressive behavior and the promotion of resilience. *International Journal of Developmental Science, 3*(3), 235–246. <https://doi.org/10.3233/DEV-2009-3303>
- Malti, T., & Noam, G.G. (2016). Social-emotional development: From theory to practice. *European Journal of Developmental Psychology, 13*(6), 652–665. <https://doi.org/10.1080/17405629.2016.1196178>

- Malti, T., Zuffianò, A., & Noam, G.G. (2017). Knowing every child's social-emotional development: Toward the use of developmental tools in psychological intervention. *Prevention Science*, 1–12. <https://doi.org/10.1007/s11121-017-0794-0>
- Moroney, D., Newman, J., Smith, C., McGovern, G., & Yohalem, N. (2014). *Understanding key elements, processes, and outcomes of expanded learning systems: A review of the literature*. New York: Every Hour Counts.
- Noam, G.G. (1996). High-risk youth: Transforming our understanding of human development. *Human Development*, 39(1), 1–17. <https://doi.org/10.1159/000278376>
- Noam, G.G., & Goldstein, L.S. (1998). The resilience inventory. Unpublished protocol.
- Noam, G.G., Malti, T., & Guhn, M. (2012). From clinical-developmental theory to assessment: The Holistic Student Assessment tool. *International Journal of Conflict and Violence*, 6(2), 201–213. <https://doi.org/10.4119/UNIBI/ijcv.276>
- Noam, G.G., Malti, T., & Karcher, M. J. (2013). Mentoring relationships in developmental perspective. In *The handbook of youth mentoring* (2nd ed., pp. 99–115). Los Angeles, CA: SAGE.
- Noam, G.G., & Triggs, B. (2016). Positive developments during the transition to adulthood. In R. A. Scott & S. M. Kosslyn (Eds.), *Emerging trends in the social and behavioral sciences* (pp. 1–15). Hoboken, NJ, USA: John Wiley & Sons, Inc. Retrieved from <http://doi.wiley.com/10.1002/9781118900772.etrds0416>
- Oberle, E., Schonert-Reichl, K. A., Hertzman, C., & Zumbo, B. D. (2014). Social-emotional competencies make the grade: Predicting academic success in early adolescence. *Journal of Applied Developmental Psychology*, 35(3), 138–147. <https://doi.org/10.1016/j.appdev.2014.02.004>
- Piaget, J. (1954). *The construction of reality in the child*. New York: Basic Books.
- Rhodes, J. E. (2004). The critical ingredient: Caring youth-staff relationships in after-school settings. *New Directions for Youth Development*, 2004(101), 145–161. <https://doi.org/10.1002/yd.75>
- Song, M. (2003). *Two studies on the Resiliency Inventory (RI): Toward the goal of creating a culturally sensitive measure of adolescent resilience* (Unpublished doctoral dissertation). Harvard University.
- Ursache, A., Blair, C., & Raver, C.C. (2012). The promotion of self-regulation as a means of enhancing school readiness and early achievement in children at risk for school failure. *Child Development Perspectives*, 6(2), 122–128. <https://doi.org/10.1111/j.1750-8606.2011.00209.x>
- U.S. Department of Education. (2010). *Implementing RTI Using Title I, Title III, and CEIS Funds: Key Issues for Decision-Makers*. Retrieved from <https://www2.ed.gov/programs/titleiparta/rtifiles/rti.pdf>
- Weisz, J.R. (1997). Effects of interventions for child and adolescent psychological dysfunction: Relevance of context, developmental factors, and individual differences. In *Developmental psychopathology: Perspectives on adjustment, risk, and disorder* (pp. 3–22). Cambridge, UK: Cambridge University Press.