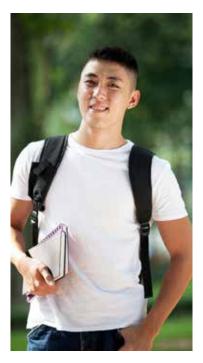
Appendix D:

Scientific Addendum: Theoretical, Empirical and Methodological Background for the Pathways Model



or close to five years, investigators and other staff at the Research and Training Center for Pathways to Positive Futures (Pathways RTC) have been engaged in efforts focused on creating and validating a general description of a practice model for using a positive developmental approach to working effectively with emerging adults with serious mental health conditions (SMHCs). The model incorporates what has been learned about effective practice, not only from formal research studies, but also from the experience of stakeholders who are highly knowledgeable about what it takes to work successfully with this population. One of the final steps in the process of defining this model—referred to here as the "Pathways model"-was the convening of expert stakeholders at the State of the Science Conference, which was held by Pathways RTC in May of 2013 in Portland, Oregon. The stakeholders who participated in the conference included young people who had experienced SMHCs, family members, researchers and service providers and administrators. The Proceedings from the State of the Science Conference (Walker, Gowen, & Jivanjee, 2013) describe in detail the Pathways model, the feedback that was provided during the Conference, and the process for gathering that feedback.

This addendum to the previously-published State of the Science Conference Proceedings expands on the original Proceedings by providing more detail about the empirical and theoretical literatures that form the basis for the model. It also provides more detail on the method by which the model was developed and validated. This addendum begins by describing the rationale for creating a general model that is built around elements and principles that are widely shared across existing empirically-supported approaches. This is followed by background on the process that was used to develop and validate the model. Next, this document provides an overview of the Pathways model, with special attention paid to how the model incorporates empirical and theoretical literature on positive development and development during emerging adulthood. Other aspects of the model are covered only briefly, since these were described in detail in Part 1 of the Proceedings. The document ends with a discussion of the implications for mental health services and systems, assuming that the goal is to make interventions and programs that are consistent with the Pathways model more widely available.

Rationale for the Model

In 2008, researchers at Pathways RTC undertook a review of reports in the peer-reviewed literature describing interventions that had been successful in improving outcomes for emerging adults with SMHCs (Walker & Gowen, 2011). The review pointed out a series of shared core features across the different interventions that were described in the literature (Geenen, Powers, Hogansen, & Pittman, 2007; Karpur, Clark, Caproni, & Sterner, 2005; Slesnick, Kang, Bonomi, & Prestopnik, 2008; Styron et al., 2006; Unruh, Waintrup, & Canter, 2010; Walker, Geenen, Thorne, & Powers, 2009). In the years since the original review, Pathways researchers have continued to track reports of programs and interventions that are specifically designed for emerging adults with SMHCs, or that have been adapted from interventions or programs originally developed

for children or adults (e.g., Gilmer, Ojeda, Fawley-King, Larson, & Garcia, 2012; Haber, Karpur, Deschênes, & Clark, 2008; Hagner, Malloy, Mazzone, & Cormier, 2008; Powers et al., 2012). In addition to this small but growing literature documenting program and intervention research, another empirically-informed literature has appeared. This literature is focused on using existing evidence, often in combination with expert consensus-building activities, to produce guidelines and recommendations regarding key features that should be included in programs designed to improve outcomes for emerging adults with SMHCs and related needs (Blau et al., 2010; Cobb, Lipscomb, Wolgemuth, & Schulte, 2013; e.g., Fraker & Rangarajan, 2009; Herz, Lee, & Lutz, 2013; Koball et al., 2011; Luecking & Luecking, 2013; Marsenich, 2005; National Collaborative on Workforce and Disability, 2013; Podmostko, 2007).

A review of this expanded literature reinforced the original observation regarding the striking degree of consensus about components of practice that were included in the interventions/programs and recommended in the guidelines/reviews. These shared components include

- taking a comprehensive approach that is individualized to meet the unique needs of each young person, and that incorporates not just mental health services, but also services focused on education/employment, housing, transportation etc.;
- using a person-centered planning process to develop this individualized response;
- providing services in a manner that is strengths based and recovery oriented; and
- maximizing the young person's input into planning and decision making and/ or promoting their empowerment or self-determination.

In addition to these components, which were

virtually universally shared across the interventions, other components appeared frequently, including a focus on developing life skills, building positive relationships and/or social capital, increasing leadership skills and self-advocacy skills, and providing services in a culturally competent manner.

The existence of these shared components points to a strong level of consensus regarding the characteristics of an empirically-informed approach to improving outcomes for emerging adults with SMHCs. What the existing literature does not provide, however, is a description of a) *how* these rather abstract practice principles are implemented in the interactions and activities that providers implement with young people, and b) *why* it is that working with young people in this manner should produce positive outcomes. The review of the literature thus sparked the strand of work that culminated in the State of the Science Conference.

Steps in the Development of the Pathways Model

The first iteration of the full Pathways model was based on a review of existing research evidence, as well as the research-derived recommendations and guidelines described above. The resulting model was written up and circulated internally, to Pathways staff. After feedback from staff was incorporated, the revised theory was circulated to a set of 15 nationally recognized experts outside of Pathways RTC. These included specialists whose work focused on development during emerging adulthood, as well researchers who had created and tested interventions. Additionally, feedback was sought from providers and administrators in programs that implemented empirically-supported interventions for emerging adults with SMHCs. Finally, feedback was also sought from young people and family members who were active at a national level in efforts to improve services and systems for emerging adults with SMHCs.

At the same time as the expert review was underway, Pathways RTC staff members were conducting a qualitative research project, for which data was gathered using semi-structured interviews with young people and providers (Walker & Flower, under review). The major goals of this strand of activity were a) to understand from a concrete and applied perspective what the principles actually mean in practice and b) to gather specific examples of activities, procedures or types of interactions that expert practitioners use to realize these principles in their work with young people.

The overall intention behind this work was to combine this specific and concrete information gained from the provider interviews with the more abstract and theoretical principles from the empirical literature to yield a practice model that describes both common "factors"-i.e., the features of interpersonal relationship and communication that are associated with positive outcomes regardless of the specific treatment model being used-and the common "elements"-i.e., the specific, discrete, defined activities or procedures that comprise an intervention (Barth et al., 2011). Cutting-edge work in both adult and children's mental health has been exploring how to use a common factors and elements perspective to capitalize maximally on what has been learned in the development of evidence-based treatments (Barth et al., 2011; Bruns et al., 2014; Chorpita & Daleiden, 2009; Duncan, Miller, Wampold, & Hubble, 2010; Garland, Bickman, & Chorpita, 2010).

Administrators in agencies implementing empirically-supported programs were invited to identify their most accomplished practitioners, who were then interviewed for the project. The interviews focused on eliciting participants' reflections on the practice principles and elements that had been extracted from the literature. Particular emphasis was placed on eliciting specific practice examples that illustrated what providers did to realize the principles in their work with young people. During analysis of the interview material, emphasis was placed on understanding on how these examples articulated with the premises of the model (Braun & Clarke, 2006), as well as understanding participants' own theories regarding how these practice elements contributed to desired outcomes.

The theory was then revised yet again, incorporating and responding to the expert feedback and the information gained through analysis of the interview material. A description of this version of the theory was circulated to participants who had been invited to attend Pathways RTC's state-ofthe-science conference, held in May, 2013. The conference was attended by representatives of various stakeholder groups, including researchers, practitioners and administrators. More than a quarter of the attendees were systems-experienced young adults who had received treatment for SMHCs and related needs. Parents and other family members were also well represented. Over the course of the one-and-a-half day conference, attendees participated in a series of structured small- and large-group work sessions focused on specific aspects of, or questions arising from, the then-current version of the Pathways model. Attendees were generally in agreement with the basic tenets of the model, and offered numerous examples and ideas regarding implications, in areas including workforce, organizational support, state and local policy, and family support. Attendees' feedback was recorded in the Conference Proceedings (Walker et al., 2013) and incorporated into the version of the model outlined here and described in more detail elsewhere (Walker, under review).

Development During Emerging Adulthood and the Pathways Model

In the Pathways model, intervention elements

(specific steps, activities and procedures) and provider factors (a practice "mode" characterized by specific types of provider-client interaction) come together to promote positive development for emerging adults. Figure 1 depicts this process. The left-hand side describes key intervention elements (top box) and provider factors (bottom box), while the right-hand side depicts the cycle that drives positive development during emerging adulthood. The right-hand side of the figure has been updated for this addendum to the conference proceedings, to reflect the more detailed discussion of the positive developmental cycle provided herein. The left-hand side remains basically unchanged. Details on those sections of the model/diagram are provided in the original Proceedings. The sections below begin with a description of the positive developmental cycle of emerging adulthood, and then go on to describe how interventions characterized by certain common elements and factors promote development by stimulating the positive developmental cycle.

The Postive Developmental Cycle of **Emerging Adulthood.** Contemporary theories that describe positive development during the later teens and twenties (Catalano, Berglund, Ryan, Lonczak, & Hawkins, 2004; Gestsdottir & Lerner, 2008; Hawkins, Letcher, Sanson, Smart, & Toumbourou, 2009; Kia-Keating, Dowdy, Morgan, & Noam, 2011; Lerner, Brentano, Dowling, & Anderson, 2002; Lerner, Freund, Stefanis, & Habermas, 2001) tend to draw on two sets of broader psychosocial developmental theories and concepts. The first of these describe human development through a focus on "ecological systems" (i.e., the various social contexts of people's lives, including family and peers, as well as community and other groups and organizations), social networks and social capital (Amerikaner, 1981; Bronfenbrenner & Morris, 1998; Bronfenbrenner, 1980; Hawkins et al., 2009). Development is stimulated through an individual's connections to these different life contexts. Over the course of emerging adulthood, young people gradually commit to a specific set of life contexts-including

The Pathways Model Figure 1.

Intervention elements:

- decisions process for making and carrying out plans/ The intervention includes a clearly-defined
- tice/application of meta-developmental skills clearly defined elements that promote prac-The larger planning process includes smaller



person: Process outcomes: As work progresses, the young Perceives the provider as genuine, supportive

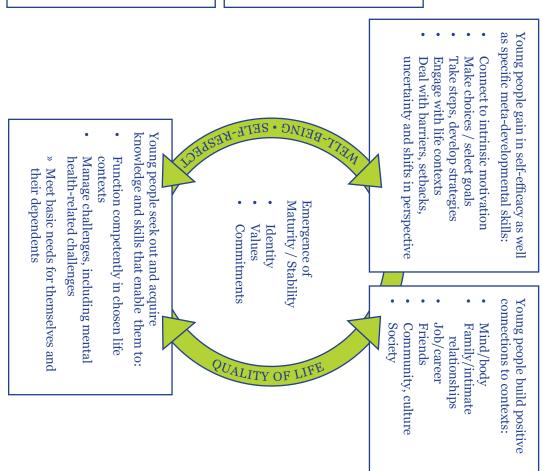
- Is able to describe specific examples of trustworthy and competent
- Activities he/she has undertaken and how
- Meta-developmental skills learned and how these are linked to personally meaningful goals
- Areas in which he/she has expanded skill/ he/she has applied them

competence

using a practice "mode" that: Provider factors: Providers coach young people through the intervention,

- Promotes trust
- Is driven by the priorities and perspectives of the young person
- Is "motivational" toward
- Building perceptions and experiences of strengths and competence
- Building connections to positive contexts
- Expanding skill and competence
- Promoting discovery and activity

about resources, contexts, and the developmental process While operating in this mode, providers draw on and share knowledge



family/intimate relationships, educational/ vocational contexts, and community and broader social contexts—and thus to the values and role expectations that prevail in those contexts.

The second set of theories focuses on emerging adults' growing ability to drive their own development and acquiring the skills that are needed to do so. The skills for directing one's own development are referred to here as "meta-developmental" skills, because they are the skills for developing development. Key meta-developmental skills include selecting goals that are motivating and personally meaningful; making plans, creating strategies and taking action steps toward the goals; engaging with life contexts that are supportive of goals; and adjusting goals and plans over time as needed (Deci & Ryan, 2002; Salmela-Aro, 2010; Schmid, Phelps, & Lerner, 2011; Snyder, Rand, & Sigmon, 2002). Skills for driving development also include those related to handling the thoughts and feelings generated by success and failure, and those related to managing uncertainties and shifts of perspective that naturally arise in the course of making and carrying out plans. Over time, young people who successfully deploy meta-developmental skills gain confidence in their ability to make progress towards personally meaningful goals. In turn, this leads to increases in the self-efficacy (and the closely related constructs of self-determination, empowerment and hope), which is associated with positive outcomes for emerging adults (Deci & Ryan, 2002; Gullan, Power, & Leff, 2013; Lerner et al., 2002; Schmid et al., 2011; Snyder et al., 2002)

In the Pathways model, these two sets of theories come together to provide the basis for describing a "virtuous cycle" of positive development during emerging adulthood. (This is represented on the right-hand side of figure 1.) Young people gain the skills they need to drive their development in the directions they find personally meaningful and motivating. They apply these skills toward seeking out and engaging with relationships and contexts. In turn, this motivates them to learn about and acquire the skills and knowledge they need in order to function competently in these contexts. As they practice the planning that is part of connecting to contexts and acquiring knowledge and skills, their meta-developmental skills and perceptions of self-efficacy grow, and so on. Through this process, they learn progressively about which contexts and connections fit with their evolving goals and aspirations for the future. Young people's commitment to chosen contexts (and the values represented in those contexts) grows over time. Values, commitments and successful functioning in chosen roles serve to support and stabilize identity as young people grow into mature adulthood. Assuming roles in valued contexts and accomplishing age-related milestones contribute to perceptions of self-respect, well-being and quality of life (Amerikaner, 1981; Baltes & Baltes, 1990; Deci & Ryan, 2002; Gestsdottir & Lerner, 2008).

For many young people, the positive developmental cycle moves ahead with only the "natural" support that is available from family, friends and others. For some young people with serious mental health conditions, however, the virtuous cycle is not robust. In fact, the process can begin to operate like a vicious cycle with young people having difficulties taking positive steps in their lives and experiencing demoralization and lack of confidence as a result.

Outcomes from Positive Developmental Intervention. According to a positive development perspective, promoting thriving is particularly important for people who are struggling or at risk, and the focus of intervention is to enhance or restore the developmental processes that have been compromised by high levels of risk and challenge (Ho, Andreasen, Flaum, Nopoulos, & Miller, 2000; Kia-Keating et al., 2011; Lerner et al., 2002; Li & Julian, 2012; Masten et al., 2004). Positive developmental interventions for emerging adults with SMHCs should thus be expected to demonstrate that they are building the types of outcomes listed in the three boxes depicted around the outside of the cycle in figure 1: gaining self-efficacy and meta-developmental skills; building positive connections to life contexts; and seeking out and acquiring knowledge and skills. (These can be considered intermediate outcomes, with outcomes inside the circle's perimeter emerging over the longer run. Improvement in longer-term outcomes may be expected for interventions that continue over longer periods of time.) With regard to the two latter types of outcomes (connections to contexts and acquisition of skills) it is essential to note that improvements in these areas occur as a result of the young person's exercise of the meta-developmental skills. Thus, positive developmental interventions should be able to demonstrate that young people are indeed using meta-developmental skills and developing perceptions of self-efficacy. In addition to this core outcome, positive developmental interventions and programs can demonstrate success when young people make gains in one or more of the outcome areas listed in the other two boxes.

Intervention/Program Elements. As noted previously, the work that was done to develop and validate the Pathways model uncovered a common set of shared elements across the empirically-supported programs and guidelines. Interventions and programs consistent with the Pathways model are centered around the use of a clearly defined and structured process-typically a person-centered planning process-for making decisions and carrying out activities based on those decisions. The goal of this process is not just to make decisions and execute plans, however, but also to explicitly teach and coach the young person in the use of specific steps, processes and procedures that are consistent with the meta-developmental skills, and that are core elements that make up the planning process. A more detailed description of these kinds of elements, as well as a number of examples, is provided in Part 1 of these Proceedings (specifically, pages 12-15 from the "Model Overview," and the section on "Activating Change" beginning on page 22).

Provider Factors. Both the empirical literature

and the provider interviews conducted prior to the State-of-the-Science Conference stressed the importance of practice principles that are intended to guide interactions between providers and young people regardless of which specific intervention element might be underway. In other words, providers are supposed to interact consistently with young people in specific ways, using a practice "mode" that promotes the growth of young people's self-efficacy and meta-developmental skills, and "feeds" the virtuous cycle of positive development. A more detailed description of these factors is provided in Part 1 of these Proceedings (specifically, pages 15-18 from the "Model Overview" section).

Process Outcomes. Figure 1 depicts the way in which intervention elements and provider factors are seen as coming together to add positive momentum to the cycle of positive development. The box labeled "process outcomes" suggests some indicators that could be used to assess whether or not this is happening. These indicators are described in more detail on pages 18-19 of Part 1 of the Proceedings.

Conclusion and Implications for Mental Health Services

Despite the high level of consensus expressed in the empirical literature—and shared by Conference participants and other reviewers of earlier versions of the Pathways model—the vision expressed in the Pathways model is very different from current practice as usual. This observation leads to several implications, assuming that this type of practice model should be more widely implemented. First, there will be a need for workforce training that gives providers knowledge about and skill in working within a positive developmental framework that promotes young people's self-determination and supports their acquisition of meta-developmental skills, while also "motivating" certain types of perspectives, activities and changes. Additionally, providers need knowledge about development in emerging adulthood, as well as specific knowledge about the contexts of young people's lives and how to help them forge connections to those contexts. Of particular importance are providers' skills in helping young people connect to contexts in which they can access supports (e.g., housing services, mental health specialty services) and gain skills (e.g., education or employment-related skills) that, in turn, allow them to maintain safety/wellness and function competently in other contexts such as family/intimate relationships and job/career.

Another set of implications has to do with organizing systems to provide this kind of comprehensive and integrated approach. Providers and administrators who have implemented comprehensive approaches consistently note that procuring sustainable funding for an intervention that cuts across service system boundaries is an ongoing challenge. Additionally, system fragmentation and a bewildering and complex assortment of eligibility criteria also militate against successful implementation of interventions that are designed to help young people meet needs and reach goals across a variety of domains-including housing, education, employment, mental health, community integration, physical health, emotional/behavioral health, and family and relationships. System reform is a complex endeavor, and work in this area would benefit from tools to support this process, from examples of and models for systems-change efforts to assessments and measures that can provide feedback on what has been achieved and what needs to be addressed in order for systems to become hospitable environments for positive developmental interventions to support emerging adults with SMHCs.

The model also has implications for the design of and access to specialty behavioral or mental health services. Emerging adults are the most unlikely age group to seek mental health treatment (Kessler, Demler, & Frank, 2005; Pottick, Bilder, & Vander Stoep, 2008). Young people who participated in the validation of the Pathways model stressed that their peers generally have a low level of trust in mental health providers, are reluctant to self-label or be labeled with a mental health diagnosis, and are unlikely to see traditional mental health and psychiatric services as being at the core of their efforts to maintain mental health/wellness. The Pathways model suggests that behavioral or mental health services become relevant to young people primarily once they have already been engaged in person-centered planning, and have begun to see mental health services as potentially helpful in overcoming barriers that come up as they work on achieving personally meaningful goals. Approached on these terms, behavioral and mental health service providers would focus their work with emerging adults on the need(s) identified by the young person. Existing programs that integrate behavioral and mental health services in this manner often have mental health specialty providers on site, and allow young people to drop in when and if they feel comfortable, to discuss how services could be helpful and perhaps to make a plan for more structured treatment. During treatment itself, providers work with young people using a positive developmental approach that incorporates the elements and factors outlined in the Pathways model.

While these implications call out a wide range of challenges and barriers, there is a growing number of programs and interventions that are consistent with the overall approach described here, that are demonstrating capacity to improve outcomes, that are motivating systems change at the local and state level, and that are finding sustainable funding to support their work.

References

- Amerikaner, M. J. (1981). Continuing theoretical convergence: A general systems theory perspective on personal growth and development. *Journal of Individual Psychology*, *37*, 31–53.
- Baltes, P. B., & Baltes, M. M. (1990). Psychological perspectives on successful aging: The model of selective optimization with compensation.
 In P. B. Baltes & M. M. Baltes (Eds.), Successful aging: Perspectives from the behavioral sciences (pp. 1–34). New York: Cambridge University Press.
- Barth, R. P., Lee, B. R., Lindsey, M. A., Collins,
 K. S., Strieder, F., Chorpita, B. F., ... Sparks,
 J. A. (2011). Evidence-based practice at a crossroads: The timely emergence of common elements and common factors. *Research on Social Work Practice*, *22*(1), 108–119. doi:10.1177/1049731511408440
- Blau, G. M., Caldwell, B., Fisher, S. K., Kuppinger, A., Levison-Johnson, J., & Lieberman,
 R. (2010). The Building Bridges Initiative:
 Residential and community-based providers,
 families, and youth coming together to improve outcomes. *Child Welfare*, *89*(2), 21–38.
 Retrieved from http://www.ncbi.nlm.nih.gov/
 pubmed/20857878
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, *2*, 77–101.

- Bronfenbrenner, U. (1980). *The ecology of human development: Experiments by nature and design*. Cambridge: Harvard University Press.
- Bronfenbrenner, U., & Morris, P. A. (1998). The ecology of developmental processes. In W. Damon & R. M. Lerner (Eds.), *Handbook of child psychology vol. I: Theoretical models of human development* (pp. 993–1027). New York: Wiley.
- Bruns, E. J., Walker, J. S., Bernstein, A., Daleiden, E., Pullmann, M. D., & Chorpita,
 B. F. (2014). Family voice with informed choice: Coordinating wraparound with research-based treatment for children and adolescents. *Journal of Clinical Child and Adolescent Psychology*, *43*(2), 256–69. doi:10.1080/15374416.2013.859081
- Catalano, R. F., Berglund, M. L., Ryan, J. A. M., Lonczak, H. S., & Hawkins, J. D. (2004). Positive youth development in the United States: Research findings on evaluations of positive youth development programs. *The Annals of the American Academy of Political and Social Science, 591*(1), 98–124. doi:10.1177/0002716203260102
- Chorpita, B. F., & Daleiden, E. L. (2009). Mapping evidence-based treatments for children and adolescents: Application of the distillation

and matching model to 615 treatments from 322 randomized trials. *Journal of Consulting and Clinical Psychology*, *77*(3), 566–79. doi:10.1037/a0014565

- Cobb, R. B., Lipscomb, S., Wolgemuth, J., & Schulte, T. (2013). *Improving post-high school outcomes for transition-age students with disabilities: An evidence review*. Retrieved from http://0-ies.ed.gov. opac.acc.msmc.edu/ncee/pubs/20134011/ pdf/20134011.pdf
- Deci, E., & Ryan, R. (Eds.). (2002). Handbook of self-determination research. Rochester, NY: University of Rochester Press.
- Duncan, B. L., Miller, S. D., Wampold, B. E., & Hubble, M. A. (2010). *The heart and soul of change: Delivering what works* (2nd ed.).
 Washington DC: American Psychological Association.
- Fraker, T., & Rangarajan, A. (2009). The Social Security Administration 's youth transition demonstration projects. *Journal of Vocational Rehabilitation, 30,* 223–240. doi:10.3233/ JVR-2009-0463
- Garland, A. F., Bickman, L., & Chorpita, B. F. (2010). Change what? Identifying quality improvement targets by investigating usual mental health care. *Administration and Policy in Mental Health*, *37*(1-2), 15–26. doi:10.1007/ s10488-010-0279-y
- Geenen, S. J., Powers, L. E., Hogansen, J. M., & Pittman, J. O. E. (2007). Youth with disabilities in foster care: Developing self-determination within a context of struggle and disempowerment. *Exceptionality*, *15*(1), 17–30. doi:10.1080/09362830709336923
- Gestsdottir, S., & Lerner, R. M. (2008). Positive development in adolescence: The development and role of intentional self-regulation. *Human Development, 51*, 202–224.

Gilmer, T. P., Ojeda, V. D., Fawley-King, K., Lar-

son, B., & Garcia, P. (2012). Change in mental health service use after offering youth-specific versus adult programs to transition-age youths. *Psychiatric Services*, *63*(6), 592–6. Retrieved from http://www.ncbi.nlm.nih.gov/ pubmed/22422015

- Gullan, R. L., Power, T. J., & Leff, S. S. (2013). The role of empowerment in a schoolbased community service program with inner-city, minority youth. *Journal of Adolescent Research, 28*(6), 664–689. doi:10.1177/0743558413477200
- Haber, M. G., Karpur, A., Deschênes, N., & Clark,
 H. B. (2008). Predicting improvement of transitioning young people in the partnerships for youth transition initiative: Findings from a multisite demonstration. *The Journal of Behavioral Health Services & Research*, 35(4), 488–513. doi:10.1007/s11414-008-9126-2
- Hagner, D., Malloy, J. M., Mazzone, M. W., & Cormier, G. M. (2008). Youth with disabilities in the criminal justice system: Considerations for transition and rehabilitation planning. *Journal of Emotional and Behavioral Disorders*, *16*(4), 240–247. doi:10.1177/1063426608316019
- Hawkins, M. T., Letcher, P., Sanson, A., Smart, D., & Toumbourou, J. W. (2009). Positive development in emerging adulthood. *Australian Journal of Psychology*, *61*(2), 89–99. doi:10.1080/00049530802001346
- Herz, D., Lee, P., Lutz, L., Stewart, M., Tuell, J., & Wiig, J. (2013). Addressing the Needs of Multi-System Youth: Strengthening the Connection between Child Welfare and Juvenile Justice. Washington, DC: Center for Juvenile Justice Reform, Georgetown Public Policy Institute, Georgetown University.
- Ho, B. C., Andreasen, N. C., Flaum, M., Nopoulos,P., & Miller, D. (2000). Untreated initial psychosis: Its relation to quality of life and symp-

tom remission in first-episode schizophrenia. *The American Journal of Psychiatry*, *157*(5), 808–15. Retrieved from http://www.ncbi. nlm.nih.gov/pubmed/10784476

- Karpur, A., Clark, H. B., Caproni, P., & Sterner, H. (2005). Transition to Adult roles for students with emotional/behavioral disturbances: A follow-up study of student exiters from Steps-to-Success. *Career Development and Transition for Exceptional Individuals, 28*(1), 36–46. doi:10.1177/08857288050280010601
- Kessler, R., Demler, O., & Frank, R. (2005). Prevalence and treatment of mental disorders 1990 to 2003. *New England Journal of Medicine*, *352*(24), 2515–2523.
- Kia-Keating, M., Dowdy, E., Morgan, M. L., & Noam, G. G. (2011). Protecting and promoting: An integrative conceptual model for healthy development of adolescents. *The Journal of Adolescent Health : Official Publication of the Society for Adolescent Medicine, 48*(3), 220–8. doi:10.1016/j. jadohealth.2010.08.006
- Koball, H., Dion, R., Gothro, A., Bardos, M.,
 Dworsky, A., Lansing, J., ... Manning, A. E.
 (2011). Synthesis of research and resources to support at-risk youth, OPRE Report # OPRE 2011-22. Washington DC: Office of Planning, Research and Evaluation, Administration for Children and Families, US Department of Health and Human Services.
- Lerner, R. M., Brentano, C., Dowling, E. M., & Anderson, P. M. (2002). Positive youth development: Thriving as the basis of personhood and civil society. *New Directions for Youth Development: Pathways to Development among Diverse Youth, 95,* 11–33.
- Lerner, R. M., Freund, A. M., Stefanis, I., & Habermas, T. (2001). Understanding developmental regulation in adolescence: The use of the selection, optimization, and compensation

model. *Human Development, 44, 29–50*.

- Li, J., & Julian, M. M. (2012). Developmental relationships as the active ingredient: A unifying working hypothesis of "what works" across intervention settings. *The American Journal of Orthopsychiatry*, 82(2), 157–66. doi:10.1111/j.1939-0025.2012.01151.x
- Luecking, D. M., & Luecking, R. G. (2013). Translating research into a seamless transition model. *Career Development and Transition for Exceptional Individuals,* Advance online publication. doi: 10.1177/216514341.
- Marsenich, L., & Kelch, D. (Ed.) (2005). *A roadmap to mental health services for transition age young women: A research review*. Sacramento, CA: California Institute for Mental Health.
- Masten, A. S., Burt, K. B., Roisman, G. I., Obradović, J., Long, J. D., & Tellegen, A. (2004).
 Resources and resilience in the transition to adulthood: Continuity and change. *Development and Psychopathology*, *16*(4), 1071–94.
 Retrieved from http://www.ncbi.nlm.nih.gov/pubmed/15704828
- National Collaborative on Workforce and Disability. (2013). *Guideposts for success (2nd ed.)*. Washington, DC: Author.
- Podmostko, M. (2007). *Tunnels & cliffs: A guide* for workforce development practitioners and policymakers serving youth with mental health needs. Washington DC.
- Pottick, R., Bilder, S., & Vander Stoep, A. (2008). US patterns of mental health service utilization for transition-age youth and young adults. *Journal of Behavioral Health Services* & *Research*, *35*(4), 373–389.
- Powers, L. E., Geenen, S., Powers, J., Pommier-Satya, S., Turner, A., Dalton, L. D., ... Swank, P. (2012). My Life: Effects of a longitudinal, randomized study of self-determination enhancement on the transition

outcomes of youth in foster care and special education. *Children and Youth Services Review, 34*(11), 2179–2187. doi:10.1016/j. childyouth.2012.07.018

- Salmela-Aro, K. (2010). Personal goals and well-being: How do young people navigate their lives? *New Directions for Child and Adolescent Development, 2010*(130), 13–26. doi:10.1002/cd
- Schmid, K. L., Phelps, E., & Lerner, R. M. (2011).
 Constructing positive futures: Modeling the relationship between adolescents' hopeful future expectations and intentional self regulation in predicting positive youth development. *Journal of Adolescence, 34*(6), 1127–35. doi:10.1016/j.adolescence.2011.07.009
- Slesnick, N., Kang, M. J., Bonomi, A. E., & Prestopnik, J. L. (2008). Six- and twelve-month outcomes among homeless youth accessing therapy and case management services through an urban drop-in center. *Health Services Research, 43*(1 Pt 1), 211–29. doi:10.1111/j.1475-6773.2007.00755.x
- Snyder, C. R., Rand, K. L., & Sigmon, D. R.
 (2002). Hope theory: A member of the positive psychology family. In C. R. Snyder & S. J.
 Lopez (Eds.), *Handbook of positive psychology* (pp. 231–243). New York: Oxford University Press.
- Styron, T. H., O'Connell, M., Smalley, W., Rau, D., Shahar, G., Sells, D., ... Davidson, L. (2006). Troubled youth in transition: An evaluation of Connecticut's special services for individuals aging out of adolescent mental health programs. *Children and Youth Services Review*, *28*(9), 1088–1101. doi:10.1016/j. childyouth.2005.10.010

- Unruh, D., Waintrup, M., & Canter, T. (2010). Project STAY OUT: A facility-to-community transition intervention targeting incarcerated adolescent offenders. In D. Cheney (Ed.), *Transition of secondary students with emotional or behavioral disorders (2nd ed.)* (pp. 347–374). Champaign, IL: Research Press.
- Walker, J. S. (n.d.). A theory of change for positive developmental approaches to improving outcomes among emerging adults with serious mental health conditions.
- Walker, J. S., & Gowen, L. K. (2011). Community-based approaches for supporting positive development in youth and young adults with serious mental health conditions. Portland, OR: Portland State University, Research and Training Center for Pathways to Positive Futures.
- Walker, J., Gowen, K., Jivanjee, P., Moser, C., Sellmaier, C., Koroloff, N., & Brennan, E. M. (2013). *Pathways to Positive Futures: Stateof-the-science conference proceedings (part* 1). Portland, OR: Portland State University, Research and Training Center for Pathways to Positive Futures.
- Walker, J. S., Flower, K. (n.d.). *Provider perspectives on principle-adherent practice in empirically-supported interventions for emerging adults with serious mental health conditions.*
- Walker, J. S., Geenen, S., Thorne, E., & Powers,
 L. E. (2009). Improving outcomes through interventions that increase youth empowerment and self-determination. *Focal Point: Research, Policy, and Practice in Children's Mental Health, 23*(2), 13–16.