



NTACT

National Technical Assistance Center on Transition

Mental Health and Secondary Transition

Annotated Bibliography

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What Role Does Mental Health Play in Secondary Transition?

According to the Substance Abuse and Mental Health Services Administration (SAMSHA, 2013), 10.7% of adolescents between the ages of 12 and 17 had at least one depressive episode within a year of being interviewed and only 38.1% of these students reported receiving treatment for their mental health. The National Alliance on Mental Illness (NAMI) reported suicide as the (a) 10th leading cause of death in the United States, (b) 2nd leading cause of death for those aged 15-24, and (c) over 90% of children who die by suicide have a mental health disorder (MHD). A mental health disorder (MHD) or mental illness has been defined by NAMI as a medical condition(s) that disrupts a person's thinking, feeling, mood, ability to relate to others, and daily functioning. The Individuals with Disabilities Education Act (IDEA; 2006) defines emotional disturbance (ED) as "a condition exhibiting one or more of the following characteristics over a long period of time and to a marked degree that adversely affects a child's educational performance: (a) inability to learn that cannot be explained by intellectual, sensory, or health factors; (b) inability to build or maintain satisfactory interpersonal relationships with peers and teachers; (c) inappropriate types of behavior or feelings under normal circumstances; (d) a general pervasive mood of unhappiness or depression; and (e) tendency to develop physical symptoms or fears associated with personal or school problems." Because the current definition of ED may underrepresent the population of youth with emotional disabilities (Gresham, 2005), the term Emotional and/or Behavioral Disorder (EBD) has been used to include all children with either ED labels or Diagnostic and Statistical Manual of Mental Disorder (DSM) mental health diagnoses, regardless of the source of identification or setting of services received (Hollo, Wehby, & Oliver, 2014).

These statistics have led to an increase in national attention focused on awareness and a need to address mental health concerns in the school environments. The national focus on mental health in schools is critical since schools have been identified as a natural environment for implementing mental health effective practices and providing prevention services to youth who are experiencing mental health concerns (Anglin, 2003). However, schools are wrestling with identifying interventions and resources to support the increasing needs of student with MHD (Abrams, 2005; Davis, Jivanjee, & Koroloff, 2010; Teich, Robinson, & Weist, 2007).

Why is Mental Health Support in Secondary Transition Important?

Clark, Koroloff, Geller, and Sondheimer (2008) indicated a particularly susceptible group of students with mental health concerns includes those with disabilities who are beginning to transition from adolescence to adulthood. They reported over 60% of youth with mental health disorders fail to complete high school. These young adults experience difficulty in obtaining employment, attending postsecondary education, and living independently after high school. The Center for Disease Control (2011) reported the risk for behavior, mood, and substance use disorders increases sharply during adolescence. Furthermore, possibly the most concerning is the rate of involvement of students with emotional disorders (ED) and MHD with the criminal justice system. The percentage of youth who have been arrested increased significantly between 1990 (36%) and 2005 (60.7 %). Data from the United States Department of Justice indicated 65% to 70% of youth in contact with the juvenile justice system have a diagnosable MHD and 30% of those youth have disorders that are serious enough to require immediate and significant treatment (United States Department of Justice, 2011).

Prior research suggests students with disabilities are more likely to experience mental health concerns than their peers without disabilities (Emerson & Hatton, 2007; Taggart, Cousins & Milner, 2007). Additionally, Emerson and Hatton (2007) found individuals with intellectual disability were more than six times likely to develop a psychiatric disorder than their peers without an intellectual disability. Finally, over one-third (37%) of students with a MHD age 14-21 and older served under special education dropout and have the highest dropout rate of any disability group (U.S. Department of Education, 36th Annual Report to Congress, 2014). In addition to an increased probability individuals with disabilities may experience mental health concerns, previous research suggested individuals with disabilities and mental health concerns are at a higher risk for experiencing poor in-school and post-school outcomes.

Lastly, special education teachers serving students with MHD in school may not be aware of mental health services available or how to best meet those students needs. For example, Poppen, Sinclair, Hirano, Lindstrom, and Unruh (2016) investigated teacher perceptions using a survey design to on available mental health services for secondary students with disabilities. Results indicated five barriers, including (a) limited availability of resources, (b) student behaviors, (c) family characteristics and involvement, (d) lack of collaboration between stakeholders, and (e) need for professional development. The majority of the respondents (76%) indicated they wanted to receive additional training on mental health and reported they had limited training and knowledge on how to support and identify students with mental health concerns. The findings from this study suggest special education teachers may feel uncertain about how to address mental health concerns in their classrooms and how to include these needs within the student's Individual Education Program to enable students to achieve their goals.

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Newman, L., Wagner, M., Knokey, A. M., Marder, C., Nagle, K., Shaver, D., & Swarting, M. (2011). *The post-high school outcomes of young adults with disabilities up to 8 years after high school* (A report from the National Longitudinal Transition Study–2 [NLTS2;NCSEER 2011-3005]). Menlo Park, CA: SRI International.

Poppen, M., Sinclair, J., Hirano, K., Lindstrom, L., & Unruh, D. (2016). Perceptions of mental health concerns for secondary students with disabilities during transition to adulthood. *Education and Treatment of Children, 39*, 221-246.

Taggart, L., Cousins, W., & Milner, S. (2007). Young people with learning disabilities living in state care: Their emotional, behavioral and mental health status. *Child Care in Practice, 13*, 401–416

Teich, J., Robinson, G., & Weist, M (2007). What kinds of mental health services do public schools in the United States provide. *Advances in School Mental Health Promotion, 1*, 13–22.

U.S. Department of Education, Office of Special Education and Rehabilitative Services, Office of Special Education Programs, *36th Annual Report to Congress on the Implementation of the Individuals with Disabilities Education Act, 2014*, Washington, D.C. 2014.

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What Does the Literature Say About Mental Health Support in Transition Planning?

The purpose of this annotated bibliography is to provide educators with sources that define the issues of mental health and offer suggestions for how to address mental health in the secondary transition planning process. The following information is organized by four categories: (a) overview of the issue, (b) prevalence and comorbidity, (c) professional, family, and student perceptions, and (d) interventions and strategies.

Overview of the Issue

Abram, K., Teplin, L., Charles D., Longworth, S., McClelland, G., & Dulcan, M (2004). Posttraumatic stress disorder and trauma in youth in juvenile detention. *Archives of General Psychiatry*, 61, 403-410.

- This study investigated the prevalence of exposure to trauma and 12-month rates of posttraumatic stress disorder (PTSD) among juvenile detainees by demographic subgroups (sex, race/ethnicity, and age).
- Using an epidemiologic study of juvenile detainees, researchers found 92.5% of participants had experienced one or more traumas in their lifetime.
- Significantly more males (93.2%) than females (84.0%) reported at least one traumatic experience.
- Additional results indicated more than half of the participants with PTSD reported witnessing violence as the precipitating trauma.

Baldwin, M. L., & Marcus, S. C. (2014). The impact of mental and substance-use disorders on employment transitions. *Health Economics*, 23, 332-344. doi:10.1002/hec.2936

- This study investigated the impact of mental and substance-use disorders on post-school employment of individuals with a serious mental illness/mental health disorder or substance-use disorder (SUD).
- Longitudinal data were collected from two waves of the National Epidemiologic Survey of Alcoholism and Related Conditions.
- Finding indicated transition across employment, unemployment, part-time employment, and full-time employment are common for all groups, but more frequent for persons with SUD.
- However, results also indicated individuals with SUD were more likely to transition from unemployment to employment than individuals with mental health disorders/mental illness and researchers suggested the stigma surrounding mental illness/mental health disorders could be a factor in those individuals gaining employment.

Davis, M., & Sondheimer, D. (2005). State child mental health efforts to support youth in transition to adulthood. *The Journal of Behavioral Health Services & Research*, 32, 27-42.

- The purpose of this study was to evaluate the extent to which transition support systems within the state child mental health systems were providing transition services including education, vocational/career, and independent living supports.
- Using qualitative interviews, researchers interviewed members of the National Association of the State Mental Health Program Directors (NASMHPD) Child, Youth and Families Division for the 50 US states and the District of Columbia.

- Results indicated most adolescents in state child mental health systems had access to none or few types of transition supports from the system.
- For example, transition support services offered by state mental health systems included: (a) supervised or supported housing at least one site (22 states); (b) specialized wraparound approaches (13 states); (c) standard wraparound approaches (10 states); (d) vocational support (11 states); (e) preparation in independent living (9 states); (f) supported education (7 states); (g) peer leadership or mentoring (3 states); (h) a transition specialist who supported youth, professionals, systems, and families (2 states); (i) an assertive community treatment model (1 state); and (j) offered programs such as a school-to-work program and a mental health clinic with a manual on how to support transition-age students (2 states). Also, 12 states reported not providing any transition support services through their state mental health system.
- Additional support services included information on interagency efforts, linkages with adult mental health providers, shared case management, and coordination with schools on transition planning.
- Implications for behavioral health included sharing ways to increase the priority of transition issues at the state or local level and how to overcome funding issues in providing transition support services.

Krezmien, M. P., Mulcahy, C. A., & Leone, P. E. (2008). Detained and committed youth: Examining differences in achievement, mental health needs, and special education status. *Education and Treatment of Children, 31*, 1-17.

- The purpose of this study was to examine information obtained during intake of incarcerated youth to determine if that information could predict special education status and placement in a detention or commitment setting.
- Researchers conducted an intake interview with 555 incarcerated youth in an all-male juvenile corrections facility and as part of the interview process they obtained information on participant's demographic, academic, and mental health characteristics.
- Results indicated participant's educational and mental health characteristics were predictive of special education status, but not for their placement.
- Findings revealed serious academic and mental health problems among this population of incarcerated youth including high rates of students identified with disabilities, particularly diagnosed with an emotional and behavioral disorder (EBD).

Wagner, M., & Davis, M. (2006). How are we preparing students with emotional disturbances for the transition to young adulthood? Findings from the National Longitudinal Transition Study-2. *Journal of Emotional and Behavioral Disorders, 14*, 86-98.

- The purpose of this study was to determine the extent to which five dimensions of best practices for secondary school programs and processes for transition planning with students with Emotional Disturbances (ED) were implemented for middle and high school students with ED.
- Using data from the National Longitudinal Transition Study-2, authors evaluated the implementation of best practices including relationships, rigor, relevance, attention to the whole child, and involving students and families in goal driving transition planning for middle and high school students with ED.
- Results indicated students with ED were generally exposed to best practices as much as students with other disabilities, however, fewer students with ED got along well with their peers or participated actively in their transition planning.
- In addition, results indicated students with ED attended larger schools and were less likely to attend schools in their neighborhood compared to their peers without disabilities which could keep them from developing positive relationships.
- Also, students with ED had lower rates of enrollment in vocational courses compared to their peers without disabilities.
- Implications for practice included (a) providing better supports for students with ED to develop relationships such as attending their neighborhood schools, (b) increased support for academic courses, (c) an increased connection between vocational interests of students with ED and preparing for work, (d) increased coordination in services across agencies, and (e) early transition planning and increased participation in transition planning for students with ED.

**Wagner, M., & Newman, L. (2012). Longitudinal transition outcomes of youth with emotional disturbances. *Psychiatric Rehabilitation Journal, 35*, 199-208.
doi:10.2975/35.3.2012.199.208**

- This study examined the differences and similarities in post-school outcomes between youth diagnosed with an Emotional Disturbance (ED) represented in NLTS (1990) and NLTS2 (2005) who had been out of high school up to 4 years; as well as, examined post-school outcomes in 2009 of young adults with ED who had been out of high school up to 8 years.
- Findings indicated a significant increase over time for students with ED in their rates of high school completion, postsecondary education attendance, and incarceration; as well as a significant decline in rates of employment.

- Additional results included (a) 82.5% completed high school, (b) 53% attended some postsecondary education, (c) 91.2% had been employed at some time since high school, (d) 49.6% were employed when interviewed, (e) 63.1% had lived independently, (f) 60.5% had been arrested, and (g) 44.2% had been on probation.

Young-Southward, G., Philo, C., & Cooper, S. (2017). What effect does transition have on health and well-being in young people with intellectual disabilities? A systematic review. *Journal of Applied Research in Intellectual Disabilities, 30, 805-823.* doi:10.1111/jar.12286

- This study examined the effects of transition on health and well-being in young people with intellectual disabilities through a systematically literature review.
- Authors conducted a systematic literature review and findings revealed 17 studies that met their inclusion criteria focused on health and well-being. Of those 17, five studies examined mental health disorders, three examined physical health, six focused on relationships and sexual health, and the remaining studies examined well-being in relation to quality of life.
- Overall results revealed data related to physical health concerns, however did not produce a comprehensive picture of physical health for this population during and following transition; however, studies in this review did reveal a more comprehensive indication of mental health and well-being including relationships and quality of life for young people with ID.
- Additionally, findings also indicated that the transition experience could have a negative impact on health and well being in young people with ID in the areas of obesity, sexual health, and social conflict.

Zigmond, N. (2006). Twenty-four months after high school: Paths taken by youth diagnosed with severe emotional and behavioral disorders. *Journal of Emotional and Behavioral Disorders, 14, 99-107.*

- The purpose of this study was to examine factors influencing the transition process and post-school outcomes of youth with EBD up to two years after high school.
- Participants in this study were being educated in a day treatment school within the community because their public school's special education program could not meet their needs.
- Researchers conducted interviews at 3, 6, 12, 18, and 24 months after high school to try to determine factors influencing the transition process for students with EBD.
- Results indicated the employment rate of holding either a part-time or full-time job increased from 45.4% at the three-month mark to 60.6% at the 24-month interview.

However, of those jobs, 40% were part-time and earning a little more than minimum wage and very few were receiving health or vacation benefits.

- Also, within the employment data many of the youth changed jobs regularly and at times left jobs as soon as they began working. There was a lot of variability in the weekly hours they worked and wages over the two-year period and no distinct upward trend.
- Additionally, attendance in postsecondary education or training programs were approximately 40% throughout the 24 months, except at the six month interview when attendance increased to 60%, however, it dropped back to 40% at the 12 month interview.

Prevalence and Comorbidity

Cooper, S., Smiley, E., Morrison, J., Williamson, A., & Allan, L. (2007). Mental ill-health in adults with intellectual disabilities: Prevalence and associated factors. *British Journal of Psychiatry, 190*, 27-35. doi:10.1192/bjp.bp.106.022483

- The purpose of this study was to examine how many adults with an intellectual disability have a co-occurring mental health disorder and to investigate associated factors.
- Data were collected by reviewing individual assessments and analyzed using regression analysis.
- Findings indicated 40% of adults with intellectual disability in the study had a clinical diagnosis of a mental health disorder.
- Additional results suggested the prevalence of a mental health disorder was associated with more traumatic life events, types of supports, and lower ability level.

Deb, S., Thomas, M., & Bright, C. (2001). Mental disorder in adults with intellectual disability I: Prevalence of functional psychiatric illness among a community-based population aged between 16 and 64 years. *Journal of Intellectual Disability Research, 45*, 495-505

- The purpose of this study was to examine the prevalence of mental health disorders among individuals with intellectual disability (ID) in order to compare the rate of prevalence and types of mental health disorders between individuals with ID and individuals without ID.
- This study also sought to determine risk factors associated with mental health disorders for individuals with ID.
- Researchers conducted this study in two stages. During the first stage a trained psychiatrist interviewed 101 randomly selected adults with ID and their care givers using the Mini Psychiatric Assessment Schedule for adults with Developmental Disability (Mini PAS-ADD) to screen for psychiatric disorders.

- During the second stage a second trained psychiatrist, who was blind to the initial diagnoses made during the first interview, evaluated 19 out of 20 participants who were diagnosed as psychiatric cases during the first interview using the full PAS-ADD. Then, a final psychiatric diagnosis was made using *International Classification of Diseases – 10th Revision* (ICD-10) criteria.
- Results indicated 14.4% of the participants had a psychiatric diagnosis according to ICD-10 criteria including (a) schizophrenia (4.4%), (b) depressive disorder (2.2%), (c) anxiety disorder (2.2%), (d) phobic disorder (4.4%), and (d) delusional disorder (1%).
- Findings determined the overall rate (point prevalence) of functional psychiatric illness was similar to that in the general populations (14.4 % vs. 16%).
- However, rates of schizophrenic illness and phobic disorder were significantly higher in the study participants compared to those in the general population.
- Additional results indicated increasing age and the presence of a physical disability were significantly associated with the occurrence of a mental health disorder.

Merikangas, K. R., He, J., Burstein, M., Swanson, S. A., Avenevoli, S., Cui, L., ...& Swendsen, J. (2010). Lifetime prevalence of mental disorders in US adolescents: Results from the national comorbidity study-adolescent supplement (NCS-A). *Journal of the American Academy of Child and Adolescent Psychiatry*, 49, 980-989. doi:10.1016/j.jaac.2010.05.017

- The purpose of this study was to estimate the lifetime prevalence of DSM-IV mental disorders with and without a severe impairment, comorbidity across disorders, and related sociodemographic variables of a nationally representative sample of 10,124 US adolescents aged 13 to 18 years of age.
- Results indicated anxiety disorders were most common (31.9%), followed by behavior disorders (19.1%), mood disorders (14.3%), and substance abuse disorders (11.4%). Additionally, approximately 40% of those with one disorder also met the criteria for a second disorder.
- Findings also indicated the earliest onset for disorders included (a) age 6 for anxiety disorders, (b) age 11 for behavior disorders, (c) age 13 for mood disorders, and (d) age 15 for substance abuse disorders.
- Results suggested approximately one in every four or five youth in the United States met the criteria for a mental disorder and that common mental disorders emerge in childhood and adolescence.
- Implications suggested a need to focus on prevention and early intervention for youth with mental disorders.

Tureck, K., Matson, J. L., May, A., Whiting, S. E., & Thompson, E. D. (2014). Comorbid symptoms in children with anxiety disorder compared to children with autism spectrum disorder. *Journal Developmental and Physical Disability, 26*, 23-33. doi:10.1007/s10882-013-9342-4

- This purpose of this study was to investigate rates of comorbid symptoms in children with autism spectrum disorder (ASD) and children with anxiety disorders.
- Participants included 29 children with ASD, 25 children with anxiety disorders, and 31 children with no psychological disorder who served as the control group.
- Data were analyzed through multivariate and univariate main effect analyses with post-hoc comparisons using seven symptom subscales.
- Finding indicated children with ASD had higher rates of comorbid symptoms than children with anxiety disorders.
- Additionally, both children with ASD and anxiety disorders exhibited more comorbid symptoms than children in the control group.

Professional, Family, and Student Perceptions

Geenen, S. J., Powers, L. E., & Sells, W. (2003). Understanding the role of health care providers during the transition of adolescents with disabilities and special health care needs. *Journal of Adolescent Health, 32*, 225-233.

- This study evaluated the role of health care providers in the transition from pediatric to adult health care for adolescents with disabilities and special health care needs (SHCN) from both the families' and providers' perspectives.
- Results indicated a significant difference between providers and parents concerning both the level of provider involvement and the extent to which it was the provider's responsibility to assist in various transition activities.
- Finding also suggested a need for health care providers and parents to have discussions about the nature and extent to which providers assist families in key transition activities.

Losinski, M., Maag, J. W., & Katsiyannis, A. (2015). Characteristics and attitudes of pre-service teachers toward individuals with mental illness. *Journal of Education and Practice, 6*, 11-16. Retrieved from <http://iiste.org/Journals/index.php/JEP>

- The purpose of this study was to examine the knowledge and attitudes of pre-service teachers towards mental health disorders.
- Using a descriptive design, authors surveyed 173 pre-service general education (n=94) and special education (n=6) majors, as well as, education minors (n=67) to determine

their attitudes toward mental health disorders as measured by the Community Attitudes toward Mental Illness (CAMI) measure.

- Results indicated three demographic variables contributed to pre-service teacher's attitudes toward mental health disorders including political orientation, knowing someone with a mental health disorder, and believing ADHD and ASD were mental health disorders.

Poppen, M., Sinclair, J., Hirano, K., Lindstrom, L., & Unruh, D. (2016). Perceptions of mental health concerns for secondary students with disabilities during transition to adulthood. *Education and Treatment of Children, 39*, 221-246. doi:10.1353/etc.2016.0008

- The purpose of this study was to examine teacher perceptions of mental health issues of transition age students with disabilities.
- Researchers surveyed 648 professionals across 49 states to determine how education and community professionals describe issues related to mental health concerns for students with disabilities at the secondary level, what barriers they encounter, and what strategies are used to help support students with disabilities who also have mental health concerns.
- Respondents indicated 48% of their students with disabilities had experienced some mental health concerns and these concerns were not always addressed in their Individualized Education Program (IEP) and transition planning process.
- Additionally, respondents reported major barriers included (a) limited resources, (b) family involvement and characteristics, (c) professional development needs, (d) student's challenging behaviors, and (e) lack of collaboration between all stakeholders.
- In addition, findings indicated the following strategies could be beneficial to improving outcomes (a) parent and family involvement, (b) increased access to services, (c) positive student-teacher relationship building, (d) student skill development, and (e) increased training and professional development focused on students with mental health concerns.

Repie, M. S. (2005). A school mental health issues survey from the perspective of regular and special education teachers, school counselors, and school psychologists. *Education and Treatment of Children, 28*, 279-298.

- This study examined perceptions of general and special education teachers, school counselors, and school psychologists on issues facing students, available community mental health services, community and family barriers to services, and mental health services provided in schools.

- Researchers survey 413 individuals across 50 states including 119 school psychologists, 117 special education teachers, 111 school counselors, and 61 general education teachers.
- Findings indicated school psychologists and counselors rated depression and suicidal thoughts and/or behavior as more serious, while regular and special education teachers rated issues such as attention deficit /hyperactivity as the most serious.
- Implications included providing careful assessment of problems faced by youth and ensuring resources are available to them in their schools and communities.

Reinke, W. M., Stormont, M., Herman, K. C., Puri, R., & Goel, N. (2011). Supporting children's mental health in schools: Teacher perceptions of needs, roles, and barriers. *School Psychology Quarterly*, 26, 1-13. doi: 10.1037/a0022714

- This study examined 292 teachers' perceptions of current mental health needs in their schools including their knowledge, skills, training experiences, training needs, roles in supporting student's mental health needs, and perceived barriers to supporting mental health needs in their school.
- Results indicated teachers perceived themselves as having primary responsibility for implementing classroom-based behavioral interventions; however, most believed school psychologists had a greater role in providing instruction on social emotional concepts.
- Additionally, teachers reported a lack of experience and training for supporting student's mental health needs.
- Implications included having school-based mental health services available could be vital for students with mental health disorders.

Simonoff, E., Pickles, A., Charman, T., Chandler, S., Loucas, T., & Baird, G. (2008). Psychiatric disorders in children with autism spectrum disorders: Prevalence, comorbidity, and associated factors in a population-derived sample. *Journal of American Academy of Child and Adolescent Psychiatry*, 47, 921-929. doi:10.1097/CHI.0b013e318179964f

- The purpose of this study was to identify the prevalence and types of psychiatric comorbidity in children with autism spectrum disorders (ASD) and examine variables that may be identified as risk factors for psychiatric disorders.
- Authors assessed 112 10-14 year-old children with ASD for other child psychiatric disorders through parent interviews using the Child and Adolescent Psychiatric Assessment.
- Results indicated 70% of participants had at least one comorbid psychiatric disorder and 41% had two or more. Most common comorbid diagnoses included (a) anxiety disorder (29.2%), (b) attention-deficit/hyperactivity disorder (ADHD; 28.2%), and (c) oppositional

defiant disorder (28.1%). Of those who had a comorbid diagnosis of ADHD, 84% had a second comorbid diagnosis.

Soderland, J., Epstein, M. H., Quinn, K P., Cumblad, C., & Petersen, S. (1995). Parental perspectives on comprehensive services for children and youth with emotional and behavioral disorders. *Behavioral Disorders, 20*, 157-170.

- This study investigated the perceptions of 121 parents of children and youth with EBD's perspectives on comprehensive services for students with EBD in order to build a foundation for the development of a comprehensive system of care for children and youth with EBD.
- Results indicated parents viewed the services their family received as favorable, however, they indicated needing information about community services, finding recreational activities for parents and children, and locating transition programs and alternative school options for their children.

Interventions and Strategies

Carter, E. W., Lane, K. L., Crnobori, M., Bruhn, A. L., & Oakes, W. P. (2011). Self-determination interventions for students with and at risk for emotional and behavioral disorders: Mapping the knowledge base. *Behavioral Disorders, 36*, 100-116. Retrieved from <http://www.jstor.org/stable/43153528>

- This study investigated interventions focused on self-determination of students with, or at-risk for, EBD and examined gaps in self-determination literature with students with, or at-risk for, EBD.
- Authors conducted a systematic literature review of school-based intervention studies that included nine components of self-determination for students with, and at-risk for, EBD.
- Results identified 81 studies primarily addressing a narrow range of self-determination components within the intervention (i.e., self-management and self-regulation, problem solving, goal setting and attainment) or outcome measures (i.e., self-efficacy, problem solving), and few studies were conducted with students from culturally diverse backgrounds.
- Findings suggested additional research is needed to address key gaps in student demographics, school settings, and to provide more detail concerning specific contexts within which self-determination intervention components are delivered.

Carter, E. W., Lane, K. L., Pierson, M. R., & Glaeser, B. (2006). Self-determination skills and opportunities of transition-age youth with emotional disturbance and learning disabilities. *Exceptional Children, 72*, 333-346. doi: 10.1177/001440290607200305

- This study investigated the self-determination of 85 high school students with either emotional disturbance (ED; n=39) or learning disabilities (LD; n=46) from the perspectives of special educators, parents, and students themselves.
- Findings indicated differences in self-determination ratings between both disability groups and respondent type (i.e., student, parent, teacher).
- Specifically, adolescents with ED were found to have lower ratings of self-determination than students with LD, with the most pronounced differences evident from the teacher perspective.
- Furthermore, students with ED identified infrequent opportunities at school and home for engaging in self-determined behavior, whereas educators and parents differed in their assessments of opportunities in each setting.

Carter, E. W., & Lunsford, L. B. (2005). Meaningful work: Improving employment outcomes for transition-age youth with emotional and behavioral disorders. *Preventing School Failure: Alternative Education for Children and Youth, 49*, 63-69. doi:10.3200/PSFL.49.2.63-69

- The purpose of this study was to review secondary educational programming components that could assist in improving employment outcomes for students with EBD.
- The authors discussed four key skill areas for instruction including social, vocational, academic, and self-determination.
- Authors also discussed the development of social and emotional supports including student and family involvement, employment supports, and working with community agencies.
- Implications for practitioners included recommendations on how to increase students' skills in these areas and how to develop the supports discussed.

Carter, E. W., & Wehby, J. H. (2003). Job performance of transition-age youth with emotional and behavioral disorders. *Exceptional Children, 69*, 449-465.

- The purpose of this study was to investigate the job performance of students with EBD.

- Researchers administered a questionnaire to 47 adolescents 15 to 20 years of age with EBD who were currently employed and their immediate supervisors at work.
- The questionnaire consisted of four sections: (a) participant information; (b) employment skills performance (i.e., task-related social behaviors, non-task related social behaviors, work performance behaviors, general work behaviors); (c) employment skills importance; and (d) job satisfaction. Supervisors were asked not to answer the job satisfaction portion of the survey.
- Results indicated large differences between employers' ratings of job performance and student's ratings.
- Adolescents with EBD rated their work performance significantly higher than their supervisor's ratings of their job performance. Employer's ratings were significantly lower in the areas of (a) importance of task-related social behavior, (b) non-task related social behavior, (c) work performance, and (d) general work behavior.
- Lastly, results found job satisfaction ratings of adolescents were positively correlated to their pay and their own evaluation of their work performance, but not their supervisor's ratings.

Jivanjee, P., Kruzich, J. M., & Gordon, L. J. (2009). The age of uncertainty: Parent perspectives on the transitions of young people with mental health difficulties to adulthood. *Journal of Child and Family Studies, 18*, 435-446. doi: 10.1007/s10826-008-9247-5

- The purpose of this study was to explore the perspectives of family members of transition-age youth with mental health disorders on their role in supporting their children with the transition to adulthood and their level of community integration.
- Using qualitative focus groups, researchers explored the experiences and perceptions of 42 family members supporting their children with mental health difficulties during the transition period.
- Findings included family's desires to support their children with mental health disorders in achieving their goals related to employment, education, and relations; as well as, participate in their community.
- Additionally, majors themes included family member's ideas concerning the importance of access to opportunities that will assist transition-age students achieve their goals and develop healthy relationships with their peers.
- Major barriers to integrating their communication included (a) lack of preparations for adult life, (b) difficulty forming relationships with others, (c) lack of community resources to meet their mental health needs, and (d) the stigma surrounding mental health by others.

- Implications for service providers included (a) connecting transition-age youth with practical assistance, (b) providing supportive mentoring relationships, and (c) considering parents and family members as resources and collaborators in providing support for youth with mental health disorders.

Luciano, A., Drake, R. E., Bond, G. R., Becker, D. R., Carpenter-Song, E., Lord, S., ... Swanson, S. J. (2014). Evidence-based supported employment for people with severe mental illness: Past, current, and future research. *Journal of Vocational Rehabilitation, 40*, 1-13. doi:10.3233/JVR-130666

- The purpose of this study was (a) to review past research on Individual Placement and Support (IPS) and identify major findings, (b) to describe current research studies that are in the field, and (c) to propose future research topics.
- Conducting an electronic search of qualitative and quantitative IPS studies, the authors summarized 20 years of literature on IPS to describe studies in the field by using databases, such as MEDLINE/PubMed, PsycINFO, Cochrane Database of Systematic Reviews, and Google Scholar.
- Results indicated research showed IPS is the most effective and cost-effective approach for helping people with psychiatric disabilities find and maintain competitive employment. Employment improves clinical, social, and economic outcomes.
- Also, results showed current studies on IPS address several research gaps: IPS modification, generalizability, program settings, international dissemination, cultural awareness, and supportive technology
- Results suggested future research should include studies that report long-term outcomes, financing mechanisms, cost offsets, and standardized supported education models.

Malloy, J. M., Cheney, D., & Cormier, G. M. (1998). Interagency collaboration and the transition to adulthood for students with emotional or behavioral disabilities. *Education and Treatment of Children, 21*, 303-320.

- The purpose of this paper was to report outcomes from a previous study on Project RENEW (Cheney et al., 1998) and focus on aspects of interagency care and collaboration emphasized within the project.
- Authors provided an overview of Project RENEW and described participants, how it was implemented, three features of interagency collaboration within the model, and shared data from the first 18 months of Project RENEW in the areas of interagency participation, education, and work.

- Findings indicated 58% of the participants who had not yet graduated from high school when they entered the project graduated or received a GED as a result of their involvement in Project RENEW.
- In addition, half of the project's 10 high school graduates enrolled in postsecondary education programs including three in a two-year technical college programs, one in a registered apprenticeship, and two in continuing adult education classes.
- Also, 16 of the 17 (94%) of the participants had competitive employment, and 13 (76%) were still employed at the completion of the project and the average wage during their participation in the project grew from \$5.80 to \$7.06 per hour.
- Results suggested building on students with EBD's interests resulted in progress in their self-confidence and competence regarding their education and employment goals. Additionally, interagency participation and collaboration increased through Project RENEW and progress was made in increasing cross system efforts to support youth with EBD in achieving their post-school goals.

Marrone, J., Burns, R., & Taylor, S. (2014). Vocational rehabilitation and mental health employment services: True love or marriage of convenience? *Journal of Vocational Rehabilitation*, 40, 149-154. doi:10.3233/JVR-140672

- The purpose of this article was to examine pockets of excellence and promising practices regarding interventions to assist clients with psychiatric disabilities within state vocational rehabilitation (VR) systems to attain and retain employment leading towards economic self-sufficiency.
- The authors described three VR agencies in particular Delaware, Maryland, and Oregon. These VR agencies served in many ways as excellent exemplars in using the multiple resources, skills, and services models that produced better employment results.
- This article described each state's specific partnership strategies. It concluded with findings from each as well as an overall analysis of key issues that should be applicable more generally vis-à-vis VR-MH collaboration on employment interventions.
- In addition, the authors indicated it is important to understand these collaborative efforts are driven by the need to create systemic change in terms of employment outcomes for people with psychiatric disabilities. Five signs were provided for people to identify system change: change in power, change in money, change in habits, change in technology or skills, and change in ideas or values.

Netto, J. A., Yeung, P., Cocks, E., & McNamara, B. (2016). Facilitators and barriers to employment for people with mental illness: A qualitative study. *Journal of Vocational Rehabilitation, 44*, 61-72.

- The purpose of this study was to examine experiences of individuals with mental illness including what employment meant to them, their employment goals, and perceived facilitators and barriers they encountered while engaging in employment activities.
- Findings indicated individuals interviewed felt employment was meaningful and a way to re-establish their sense of self-worth and identity. They also stated they pursued paid employment because they wanted to make money, have financial security, be able to socialize, and feel a sense of achievement.
- Identified factors they felt facilitated their access to employment included mental health services providers, family, and friends.

Nguyen, T., Embrett, M. G., Barr, N. G., Mulvale, G. M., Vania, D. K., Randall, G. E., & DiRezze, B. (2017). Preventing youth from falling through the cracks between child/adolescent and adult mental health services: A systematic review of models of care. *Community Mental Health Journal, 53*, 375-382. doi: 10.1007/s10597-017-0098-7

- The purpose of this review was to identify and compare models that have been used to assist in the transition from child and adolescent mental health services (CAMHS) and adult mental health services (AMHS); as well as examine trends and implications for practice and future research.
- Findings identified three models of care including (a) Framework for Understanding Mental Health Service Utilization (FUMHSU), (b) Transition to Independence Process Model (TIP), and (c) Transition Service Integration Model (TSIM).
- All three models included a comprehensive approach to transition by including services outside of healthcare to meet students' needs related to employment, independent living, housing, and community participation.
- Findings from the three models suggest an integrated and collaborative approach can be effective in supporting students as they transition from CAMHS to AMHS.
- Implications included building capacity among policy makers in order promote collaboration between various systems of care in order to provide transition services jointly.

Phillips, L. A., Powers, L. E., Geenen, S., Schmidt, J., Wings-Yanez, N., McNeely, I. C., ...& Bodner, C. (2015). Better futures: A validated model for increasing postsecondary preparation and participation of youth in foster care with mental health challenges. *Children and Youth Services Review, 57*, 50-59. doi:10.1016/j.childyouth.2015.07.010

- The purpose of this article was to describe Better Futures, an experimentally validated model effective for increasing higher education participation and other post-school outcomes of youth in foster care with mental health disorders.
- Better Futures included a four-day on-campus summer instituted, coaching by older peers who have experiences with foster care and/or mental health issues, and workshops that bring together youth, coaches, and guest speakers to share information provide mutual support.
- This article provides information on the theoretical and component features of the Better Futures model, results of intervention fidelity, participants' evaluation of the program, and implications for future research and changes to the model.

Powers, L. E., Geenen, S., Powers, J., Pommier-Satya, S., Turner, A., Dalton, L. D., Drummond, 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*, 2179-2187. doi:10.1016/j.childyouth.2012.07.018

- This study evaluated the efficacy of the TAKE CHARGE self-determination intervention for improving the transition outcomes of at-risk youth with disabilities and who are in both foster care.
- Authors conducted a longitudinal randomized trial study with 69 participants (age 16-17) who were randomly assigned to either the TAKE CHARGE self-determination intervention or to the foster care independent living program.
- Results indicated differences between groups in self-determination, quality of life, and utilization of community transition services.
- Students in the TAKE CHARGE group completed high school, were employed, and engaged in independent living activities at higher rates than those in the comparison group.
- Additionally, results indicated self-determination was a partial mediator of enhanced quality of life.

Ringeisen, H., Ellison, M. L., Burge, A. R., Biebel, K., & Alikhan, S. (2017). Supported education for individuals with psychiatric disabilities: State of the practice and policy implications. *Psychiatric Rehabilitation Journal*, 40, 197-206. doi:10.1037%2Fprj0000233

- The purpose of this study was to share the current state of supported education practice, identify gaps in the evidence base of supported education's effectiveness, and discuss policy implications, opinions of experts, and preliminary findings from three program site visits.
- Authors conducted a literature review combined with an environmental scan, and site visits.
- Results indicated while setting, target population's, level of coordination with supported employment, and financing strategies varied, common supported education components included (a) specialized and dedicated staffing, (b) one-on-one and group skill-building activities, (c) assistance with navigating academic settings, (d) coordination of different services, and (e) linkages to mental health counseling.
- Findings suggested the components of the supported employment model should be tested to evaluate the impact on degree completion, employment, health, mental health, recovery, and community participation.
- Policy implications included funding streams from special education, Medicaid, and new opportunities for increasing the availability of supported education include the reauthorization of the Workforce Innovation and Opportunities Act (WIOA, 2014), which requires state vocational rehabilitation agencies to fund pre-employment transition services.

Weist, M. D. (2005). Fulfilling the promise of school-based mental health: Moving toward a public mental health promotion approach. *Journal of Abnormal child Psychology*, 33, 735-741. doi:10.1007/s10802-005-7651-5

- The purpose of this article was to describe the need for a public health promotion approach in order to advance school based mental health (SBMH).
- This article described critical elements needed in order to pursue public health promotion and advance SBMH including training, quality assessment, improvement (including research supported practices), and policy/advocacy.
- This article discussed themes related to each of these elements and how they could be implemented at the state and local level.

Weist, M. D., Bruns, E. J., Whitaker, K., Wei, Y., Kutcher, S., Larson, T., ...& Short, K. H. (2017). School mental health promotion and intervention: Experiences from four nations. *School Psychology International*, 38, 343-363. doi:10.1177/0143034317695379

- The purpose of this article was to describe developing international networks for school mental health.
- The article used five critical themes identified by School Mental Health International Leadership Exchange (SMHILE) for the advancement of global health including (a) cross-sector collaboration in building systems of care, (b) meaningful youth and family engagement, (c) workforce development and mental health literacy, (d) implementation of evidence-based practices, and (e) ongoing monitoring and quality assurance to describe progress in each country.
- Findings indicated two countries showed progress (United States and Canada), one demonstrated moderate progress (Norway), and one beginning the work (Liberia).
- Implications and future directions included continuing (a) the development of partnerships between schools and other youth-serving systems focusing on providing more comprehensive approaches to providing mental health services, (b) multi-tiered systems of support (MTSS), and (c) to focus on the five themes identified by SMHILE to monitor progress across countries.

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