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2018

**Improving Education, Training and Employment Outcomes
for Youth and Young Adults
with Serious Mental Health Conditions**



Annotated Bibliography



CONDUCTED BY:

**THE LEARNING & WORKING DURING THE TRANSITION TO
ADULTHOOD REHABILITATION RESEARCH & TRAINING CENTER,
A PART OF THE TRANSITIONS TO ADULTHOOD CENTER FOR RESEARCH**



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ANNOTATED BIBLIOGRAPHY 2014 – PRESENT

Introduction

This annotated bibliography highlights publications relevant to school and work supports for youth and young adults with serious mental health conditions that were published after 2013 through the present. Selected publications are limited to those specifically addressing serious mental health conditions; literature related to other disability groups is not included. This bibliography is intended to supplement the Learning and Working During the Transition to Adulthood RRTC's (L&W RRTC) previous State of the Science Paper (2013). We have also provided executive summaries from our 2013 State-of-the-Science Conference. To see proceedings from that conference, please visit https://www.umassmed.edu/TransitionsACR/publication/state_of_the_science_conference/.

Methods

We started with a sample of relevant publications in our field identified by the L&W RRTC faculty and staff. Within the PsycINFO (1967-present) database, we located the subject headings and key words associated with these publications and sorted them according to four key domains in our field of study: education, employment, young adulthood, and mental health (see Table 1).

In PsycINFO, we 'exploded' these search terms and key words (i.e. their related terms were searched as well). We sought all relevant publications that were categorized under the following:

- At least 1 'young adulthood' subject heading or key word;
- At least 1 'mental health' subject heading or key word; and,
- At least 1 'education' or at least 1 'employment' subject heading or key word.

Publications were further refined to include only those which were (1) published 2014 through present, (2) published in peer-reviewed journals, and (3) written in the English language.

Abstracts were reviewed to determine if search results were relevant. All relevant publications found using the above search criteria were included in this bibliography in addition to our initial sample of relevant publications.

Table 1. Subject headings and key words used

EDUCATION	EMPLOYMENT
Academic achievement	Disabled personnel
Educational quality	Meaning of work
Student engagement	Work
Education	Occupational health
School attendance	Management personnel
Educational program	Social security
College(s)	Unemployment
Educational placement	Employment
Academic under(over)achievement	Reemployment
Academic environment	Vocational rehabilitation
School-based intervention	Occupational guidance
Higher education	Career development
Educational aspirations	Supported employment
Schools	Income (economic)
Campuses	Occupations
University/universities	Jobs
YOUNG ADULTHOOD	MENTAL HEALTH
Life changes	Early intervention
Adult development	Treatment
Adjustment	Major depression
Peers	Counseling
Decision-making	Mental health
Self-concept	Help seeking behavior
Emerging adult	Mental disorders
Emerging adults	Psychotherapy
Emerging adulthood	Psychosis
Young adult	Psychological stress
Young adults	Dual diagnosis
Young adulthood	Adolescent psychopathology
Transition age youth	Mental health services
College students	Psychiatric disabilities
High school students	Psychopathology
University students	Stigma
University student	Mental illness (attitudes toward)
	Mental illness
	Symptoms
	Health insurance
	Schizophrenia
	Psychiatric symptoms
	Onset (disorders)
	Community mental health services

Format

This bibliography is sorted into two major sections: national publications (publications on research conducted in the United States) and international publications (publications on research conducted abroad). Within the national sources, we have sorted by the following categories:

1. Prevalence of serious mental health conditions among students or workers in this age group or school/work outcomes
2. Postsecondary education/training supports (these supports focus on academic success or coping skills or stigma, they do not include treatment of serious mental health conditions)
3. Employment supports for young workers
4. Supports for both education/training and working or career development (readiness for work)

An annotated bibliography is available for national publications. A reference list of international publications is provided.

National Publications

1. Prevalence of Serious Mental Health Conditions Among Students or Workers in This Age Group or School/Work Outcomes

Beiter, R., Nash, R., McCrady, M., Rhoades, D., Linscomb, M., Clarahan, M., & Sammut, S. (2015). The prevalence and correlates of depression, anxiety, and stress in a sample of college students. *Journal of affective disorders*, 173, 90-96.

Background: Over the past four years, the Franciscan University Counseling Center has reported a 231% increase in yearly visits, as well as a 173% increase in total yearly clients. This trend has been observed at many universities as mental health issues pose significant problems for many college students.

Objective: Investigate potential correlates of depression, anxiety, and stress in a sample of college students.

Methods: 374 undergraduate students between the ages of 18 and 24 attending Franciscan University in Steubenville, Ohio completed a survey consisting of demographic questions, a rating of their the levels of concern associated with challenges pertinent to daily life (e.g., academic, family, sleep), and the 21 question

version of the Depression Anxiety Stress Scale (DASS21).

Results: The results indicated that the top three concerns of student survey respondents were academic performance, pressure to succeed, and post-graduation plans. Demographically, the most stressed, anxious, and depressed students were transfers, upperclassmen, and those living off-campus.

Conclusions: With the propensity for mental health issues to hinder the success of college students, it is vital that colleges continually evaluate the mental health of their students and tailor treatment programs to specifically target their needs.

Leppink, E. W., Odlaug, B. L., Lust, K., Christenson, G., & Grant, J. E. (2016). The young and the stressed: stress, impulse control, and health in college students. The journal of nervous and mental disease, 204(12), 931-938.

Objective: Examine potential associations between perceived stress, academic achievement, physical/mental health, and impulse control disorders in young adults and better understand the mental and physical health status of the student population.

Methods: A total of 1,805 students from a large, state-affiliated Midwestern university completed an online survey in the spring of 2011. The survey collected information related to students' demographics, academic performance, and mental and physical health status. The survey included clinically validated screening tools and scales related to perceived stress, internet addiction, patient health, and impulsive disorders. Respondents were grouped by their overall score on the Perceived Stress Scale into mild, moderate, and severe categories.

Results: Severe perceived stress was associated with worse academic achievement and worse physical health, as well as higher rates of psychiatric and impulsive disorders. Female students, non-Caucasians, and non-heterosexual students endorsed significantly higher levels of perceived stress.

Conclusions: These findings may suggest associations between stress and numerous aspects of mental/physical health in young adult college students. College clinicians can work with students to establish effective and efficient coping strategies to address multiple concerns linked to perceived stress, including academic performance. Additionally, proactive stress management programming would appear to be a beneficial standard practice on campuses as a means of improving academic performance and mental health.

Zaff, J. F., Aasland, K., McDermott, E., Carvalho, A., Joseph, P., & Pufall Jones, E. (2016). Exploring positive youth development among young people who leave school without graduating high school: A focus on social and emotional competencies. *Qualitative psychology*, 3(1), 26.

Objective: Explore a component of the positive youth development (PYD) process, an individual's social and emotional competencies, among 27 youth (57.64% male, 45% African American and 24% Hispanic) who had previously left school without graduating.

Methods: An interpretive phenomenological approach was utilized in combination with the competency framework proposed by the Collaborative for Academic, Social, and Emotional Learning to examine whether (and if so, how) these youth expressed these social and emotional competencies.

Results: Contextualized within their lived experiences, we found that youth exhibited multiple competencies, including making responsible decisions, creating and implementing strategies for goal pursuit, and understanding how their thoughts, feelings, and experiences related to their development.

Conclusions: These findings could frame intervention strategies that recognize a young person's competencies and seek, for instance, to guide these competencies toward educational, vocational, or social goals. The passage of the Workforce Investment and Opportunity Act (WIOA), which is focused on the educational, workforce development, and life needs of reengaging youth, represents a chance to utilize this framework.

Burke, J.D., Rowe, R., Boylan, K. (2014). Functional outcomes of child and adolescent oppositional defiant disorder symptoms in young adult men. *Journal of child psychology and psychiatry* 55(3), 263-272.

Background: Oppositional defiant disorder (ODD) is considered to be a disorder of childhood, yet evidence suggests that prevalence rates of the disorder are stable into late adolescence and trajectories of symptoms persist into young adulthood. Little examination of functional outcomes in adulthood associated with ODD has been undertaken.

Method: Data for the present analyses come from a clinic referred sample of 177 boys aged 7–12 followed up annually to age 18 and again at age 24. Annual parental report of psychopathology through adolescence was used to predict self-reported functional outcomes at 24.

Results: Controlling for parent reported symptoms of attention deficit hyperactivity disorder (ADHD), Conduct disorder (CD), depression and anxiety, ODD symptoms from childhood through adolescence predicted poorer age 24 functioning, including having no one who would provide a recommendation for a job. CD symptoms predicted workplace problems, lower academic attainment, and other difficulties.

Conclusion: Oppositional defiant disorder is a disorder that significantly interferes with functioning into young adulthood, and is associated with poor employment and academic outcomes.

2. Postsecondary Education and Training Supports

(These supports focus on academic success or coping skills or stigma, they do not include treatment of serious mental health conditions.)

Supported Education

Biebel, K., Mizrahi, R., & Ringeisen, H. (2017). Postsecondary students with psychiatric disabilities identify core services and key ingredients to supporting education goals. Psychiatric rehabilitation journal. Online publication.

Objective: Conduct a case study examining the experiences of individuals with psychiatric disabilities receiving targeted, postsecondary education supports.

Methods: Three supported education sites were selected. The first site had a first episode psychosis focus and followed the principles of a specific supported education model (choose-get-keep). The second site was in a community mental health setting and did not adhere to a specified model. The third site was in a postsecondary education setting and did not adhere to a specified model. Four focus groups were held with 20 individuals receiving supported education across the 3 sites. Three focus groups included only young adults (ages 16-30) and one focus group included individuals over the age of 30. Focus group probes asked participants about what they thought were helpful services and “key ingredients” within effective supported education programs.

Results: Helpful supported education services identified through the focus groups were access to specialists (e.g., occupational therapists, education specialists), an emphasis on wellness (e.g., mindfulness), providing organizational skills support (e.g., help with time management, organizing class schedules, ensuring time for both academic and social activities), and facilitating accommodations (e.g.,

roleplaying conversations with professors about accommodation needs). “Key ingredients” identified included authentic and connected relationships, especially supported education program staff, flexibility and reliability (e.g. program staff visit individuals’ homes or campuses), and support of peers (e.g., sharing stories and experiences with others with psychiatric disabilities).

Conclusion: Findings can help develop an understanding of the wants and needs of students with psychiatric disabilities as they pursue their postsecondary goals. Findings can inform the modification or enhancement of supported education initiatives to ensure that they are as relevant, compelling, and effective as possible for the students they serve.

Ringeisen, H., Langer Ellison, M., Ryder-Burge, A., Biebel, K., Alikhan, S., & Jones, E. (2017). Supported education for individuals with psychiatric disabilities: State of the practice and policy implications. Psychiatric rehabilitation journal. Advance online publication.

Objective: Supported education (SEd) is a promising practice that supports and encourages educational goals and attainment among individuals with psychiatric disabilities. This paper provides insights into how SEd objectives are pursued in different settings, assesses the evidence base, and discusses policy implications.

Method: Insights from 3 data sources were synthesized: published literature, an environmental scan, and 3 site visits to programs that support the education goals of individuals with psychiatric disabilities.

Results: While setting, target populations, level of coordination with supported employment, and financing strategies varied, common SEd components emerged: specialized and dedicated staffing, one-on-one and group skill-building activities, assistance with navigating the academic setting and coordinating different services, and linkages with mental health counseling. The evidence base for supported education for individuals with psychiatric disabilities is growing; however, many published studies to date do not employ rigorous methodology.

Conclusions and Implications for Policy and Practice: Continued specification, operationalization, and testing of SEd core components are needed. The components of the evolving SEd model would benefit from rigorous testing to evaluate impact on degree completion and other key impacts such as employment; health, mental health, or recovery; and community participation. In addition to funding streams from special education and Medicaid, new opportunities for increasing the

availability of SEd include the Workforce Innovation and Opportunities Act (WIOA) reauthorization, which requires state vocational rehabilitation agencies to fund pre-employment services for transition-age individuals. Additionally, new “set-aside” requirements for the Mental Health Services Block Grant will increase funding for early intervention services for individuals with serious mental illness, potentially including SEd.

Vocational Rehabilitation

Honeycutt, T. C., Anand, P., Rubinstein, M., & Stern, S. N. (2017). Public provision of postsecondary education for transition-age youth with mental health conditions. *Psychiatric rehabilitation journal*, 40(2), 183.

Objective: We examine the role of state vocational rehabilitation (VR) agencies (SVRA) in providing postsecondary education support to transition-age youth with and without mental health conditions (MHC) to provide insights into who receives such supports and the association between the receipt of postsecondary education support and successful VR exits.

Method: We used data from SVRA administrative records (fiscal years 2002 through 2013) for a secondary analytical approach that relied on descriptive and regression methods, resulting in the identification of 436,883 VR youth clients who applied from 2002 to 2004. Linear regression models examined the relationships between youth demographic and service characteristics and each of 4 binary outcomes derived from the administrative records: (1) receipt of VR services, (2) receipt of college support (conditional on receiving services), (3) receipt of vocational training support (conditional on receiving services), and (4) exiting with employment.

Results: SVRAs had a wide range in the provision of postsecondary education support to clients with MHC, from almost none receiving such supports to more than half. VR youth clients with MHC were less likely than those without MHC to have received any VR services or college support. Receipt of postsecondary education support was positively associated with being employed at the time of VR exit, and the associations for those with MHC were not statistically different from those without MHC.

Postsecondary Transition Planning Interventions

LaPorte, T. M., Haber, M. G., & Malloy, J. M. (2016). Wraparound team composition, youth self-determination, and youth satisfaction in transition services. *The journal of behavioral health services & research*, 43(4), 611-629.

Objective: Examine the relationships between team composition and youth's perceptions of self-determination in the service planning process and youth service satisfaction in school-based programs using a specialized form of wraparound for transition services.

Method: Participants were 36 high-school students who were enrolled in seven RENEW school-based programs (RENEW is a Positive Behavioral Interventions and Supports (PBIS) approach to improving academic achievement, safety, general positive school culture, and reducing behavioral problems) for at least 6 months. The Youth and Family Involvement in Teams (YFIT) Survey was completed by youth and their parents to assess satisfaction with a variety of program features and objective experiences of service delivery, including the frequency of team meetings and team composition. Data analysis included a profile analysis and covariate analysis.

Results: Meeting participation by caregivers and professionals from both inside and outside of schools was common and regular participation by combinations of these types of adults was related to youth self-determination in the service planning process and youth service satisfaction.

Conclusions: This small sample study provides support for the capacity of secondary school-based wraparound programs that are developmentally tailored to transition age youth to involve various types of adults in the service planning process (e.g., teachers, human service professionals, parents).

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.

Introduction: There are many economic and social benefits to engaging in higher education, yet foster care youth enroll in higher education at lower rates than the general population and face many impediments to enrollment in higher education. Many foster care youth experience mental health challenges. Policy and practice enhancements in recent years have been aimed at promoting higher education for foster care youth, particularly those with mental health conditions. However, there are

just a few promising, validated programs in support of foster youth preparation and enrollment.

Better Futures Model: The Better Futures model is grounded in self-determination enhancement and is adapted from My Life self-determination enhancement model. The Better Futures Model design and implementation was guided by an Advisory Board of young people with foster care, mental health system, and higher education experiences, and adult professionals from relevant fields. The Better Futures intervention was delivered over approximately 10 months and consisted of: (1) a four day, three night Summer Institute on a university campus; (2) individual, bi-monthly peer coaching in identifying and pursuing self-defined postsecondary and related goals; and (3) five mentoring workshops attended by participants, peer coaches and professionals with expertise in foster care, mental health and postsecondary education.

Fidelity and social validity evaluation: Youth in foster care who lived in the targeted geographic area, were within a few years of secondary school completion, and had a diagnosed mental health condition were recruited through a listed created by a state child welfare agency. 36 eligible youth who agreed to participation were randomly assigned to a treatment group in a randomized clinical trial to receive the Better Futures model. There was high fidelity to the model based on high levels of participation by youth and coaches in all model components. On a project evaluation questionnaire, the vast majority of youth reported enjoying the program and finding it useful. Participants reported learning the most through peer coaching. They also reported it was most influential in helping them believe they could enter and be successful in college.

Discussion: Better Futures is the first model to be experimentally validated as effective for increasing the higher education participation and other related outcomes of young people in foster care with mental health challenges. Further research on the model is needed, particularly in regards to when in high schools students could most benefit from the program, and to find out how to more effectively assist youth in identifying and connecting with adult allies to support their educational goals. It is essential that promising models, such as Better Futures, continue to be rigorously tested so that the interventions that are most efficacious in making high education attainable for youth in foster care are clearly identified and further refined.

Conclusions and Implications for Practice: SVRAs have the potential to play a large role in the provision of postsecondary education support. Although those who received postsecondary education support were more likely to be employed at the time of VR exit, the provision of that support came at a cost—the high financial costs of that type of support relative to other services offered by SVRAs, as well as the opportunity cost of the client’s time.

Supports on College Campuses

Academics

Mullen, M. G., Thompson, J. L., Murphy, A. A., Malenczak, D., Giacobbe, G., Karyczak, S., ... & Gill, K. J. (2017). Evaluation of a cognitive remediation intervention for college students with psychiatric conditions. *Psychiatric rehabilitation journal*, 40(1), 103.

Objective: Given the poor educational outcomes associated with psychiatric conditions, we developed Focused Academic Strength Training (FAST), a 12-week strategy-focused cognitive remediation intervention designed to improve academic functioning among college students with psychiatric conditions. Here we report initial results from a randomized controlled trial of FAST.

Method: Seventy-two college students with mood, anxiety, and/or psychotic disorders were randomized to receive FAST or services as usual and were assessed at baseline and 4 months (posttreatment).

Results: Repeated-measures analyses of variance indicated FAST-associated improvements in self-reported cognitive strategy use ($p < .001$), self-efficacy ($p = .001$), and academic difficulties ($p = .025$). There were no significant treatment-related improvements in neuropsychological performance.

Conclusions and Implications for Practice: FAST may lead to an increase in self-efficacy and cognitive strategy use, as well as a reduction in academic difficulties among students with psychiatric conditions. Future analyses with follow-up data through 12 months will address the potential of FAST to improve academic functioning among this population.

Interdepartmental communication respecting confidentiality

Moss, L. S. (2017). Collaboration, confidentiality, and care. *Psychological services*, 14(4), 443-450.

Objective: Gain a greater understanding of how interdepartmental work is carried out on university campuses without compromising or breaching ethical or legal regulations as set by the Family Education Rights and Privacy Act (FERPA), the Health Insurance Portability and Accountability Act (HIPAA), and/or organizational standards like that of the International Association of Counseling Services Inc.

Method: Semi-structured conversations via telephone were conducted with 3 university housing and residence life professionals who were the author's colleagues while working in the university housing and residence life field. The case studies presented are an amalgamation of the author's personal experiences working in university housing and residence life as well as an aggregate from the information gathered during the telephone interviews.

Results: 3 case studies – Abe, Brian, and Viktor's staff

Abe - Abe, an Assistant Director for Housing and Residence Life, met with Amanda about alcohol and marijuana found in her dorm room. Abe noticed Amanda seemed to self-harm by actively picking scab during the meeting and Abe probed about self-injury Amanda confirmed she was actively self-injuring. Abe immediately connected Amanda with counseling services regarding the self-harm without mentioning her substance violations to counseling staff. Then, Abe filled in an electronic log that could be accessed by the campus's Student Care Team, thus activating another layer of institutional support for Amanda (academically, psychologically, spiritually, and socially).

Brian - Brian was found distraught by an RA and revealed he was actively suicidal due to various stressors in his life. Brian refused to consider speaking with a counselor when the RA suggested it. The RA reached out to their supervisor according to protocol, and this initiated a sequence of contacts to professionals from Residence Life, campus ministry, college counseling, and campus police who all became engaged in Brian's transport to a local hospital after he refused to agree to a safety contract. After the fact, incident reports were shared with a variety of on-campus departments.

Viktor's staff - Viktor is a Graduate Residence Coordinator who worked with a staff of RAs to develop a week of activities with a focus on healthy behaviors after RAs reported concerns about their residents' wellness habits. The RAs shared these concerns with Viktor without sharing any private or confidential information about their residents. Individuals from the counseling center, campus ministry, faculty, and a representative from the fitness center were invited as speakers during the week's activities.

Conclusions: The case studies examined highlight a few ways higher education professionals can carry out collaborative work, safeguard private and confidential information, and concurrently create an environment of care for each other and the student population.

Bettis, A.H., Coiro, M.J., England, J., Murphy, L.K., Zelkowitz, R.L., DeJardins, L., Eskridge, R., Adery, L.H., Yarboi, J., Pardo, D., & Compas, B. (2017). Comparison of two approaches to prevention of mental health problems in college students: Enhancing coping and executive function skills. *Journal of American college health, 65(5), 313-322.*

Objective: College students face a significant number of stressors, increasing risk for internalizing and externalizing psychopathology. This study examined two promising avenues of intervention aimed to reduce stress and prevent psychopathology in this population: a coping skills group and a cognitive training program.

Methods: 62 undergraduate students from two universities were recruited from 2013-2015. Students were randomized to a 6-week coping skills group or a cognitive training program and completed measures of stress, coping, executive function, and symptoms of anxiety, depression and Attention-Deficit Hyperactivity Disorder (ADHD) at pre- and post-intervention.

Results: Participants in both conditions reported significant decreases in social stress, executive function difficulties, and anxiety symptoms post-interventions. Students in the cognitive program improved significantly more on measures of behavior regulation and ADHD symptoms compared to the coping group at post-intervention.

Conclusions: Brief stress management interventions targeting coping and executive function may benefit college students at risk for psychopathology.

Hazlett-Stevens, H., & Oren, Y. (2017). Effectiveness of Mindfulness-Based Stress Reduction Bibliotherapy: A Preliminary Randomized Controlled Trial. *Journal of clinical psychology, 73(6), 626-637.*

Objective: This randomized controlled investigation examined the effectiveness of a self-help bibliotherapy format of the evidence-based mindfulness-based stress reduction (MBSR) intervention.

Method: College students seeking stress reduction were randomly assigned to a 10-week MBSR bibliotherapy (following A Mindfulness-Based Stress Reduction Workbook) intervention group (n = 47) or a no-treatment control group (n = 45). Self-report measures were collected at baseline and post-intervention.

Results: A total of 25 bibliotherapy and 43 control group participants provided final data following the intervention period. Compared to the control group, bibliotherapy participants reported increased mindfulness following the intervention. Significant decreases on measures of depression, anxiety, stress, perceived stress, and anxiety sensitivity also were reported post-intervention as well as increased quality of life in physical health, psychological, and environmental domains. No statistically significant group effects were found for social relationships quality of life domain, worry, and experiential avoidance measures.

Conclusion: This MBSR workbook may provide an acceptable and effective alternative for motivated individuals seeking to reduce stress, at least for a select group of individuals who are willing and able to sustain participation in the intervention.

Hintz, S., Frazier, P. A., & Meredith, L. (2015). Evaluating an online stress management intervention for college students. *Journal of counseling psychology*, 62(2), 137.

Objective: Assess the feasibility and effectiveness of a theory-based online intervention designed to improve stress management in undergraduate students. The intervention focused on increasing present control because it has been found to be associated with a range of positive outcomes, including lower levels of depression, anxiety, and stress, controlling for a range of other variables.

Method: Two pilot studies were first conducted to confirm that the intervention could increase present control. Psychology students (n= 292) who were prescreened to have lower scores on the present control subscale of the Perceived Control Over Stressful Events Scale were then randomly assigned to 1 of 3 conditions: present control intervention, present control intervention plus personalized feedback via email at predetermined points throughout intervention, and stress-information only.

Results: The 2 present control intervention groups had lower levels of stress, depression, and anxiety symptoms (on the Depression Anxiety Stress Scale; Lovibond & Lovibond, 1995) and perceived stress (on the Perceived Stress Sale; Cohen, Kamarck, & Mermelstein, 1983) relative to the stress-information only group at posttest and 3-week follow-up. Further analysis showed that these effects were mediated by changes in present control.

Conclusions: The intervention showed that present control can be increased using a brief online intervention, with medium to large effects. The hypothesis that the intervention would result in greater increases in present control relative to an intervention that only contained information about stress was confirmed. This intervention represents a potentially valuable tool for college mental health services

and constitutes a strong foundation from which to develop future iterations of this program.

Nguyen-Feng, V.N., Greer, C.S., & Frazier, P. 2017. Using online interventions to deliver college mental health resources: Evidence from randomized control trials. *Psychological services* 14(4) 481-489.

Objective: Evaluate the efficacy of internet-based stress management programs for college students.

Method: Students (n=365) were randomly assigned to a mindfulness plus present control intervention, a mindfulness only intervention, or a stress management information condition that served as an active comparison. Outcome measures were self-report measures of stress, anxiety, depression, and perceived stress completed online at pre-intervention, post-intervention, and 2 follow-ups (2-3 weeks and 4-5 weeks post-intervention). Linear mixed modeling was used to assess change over time.

Results: Participants in all 3 groups reported significant decreases on all primary outcomes. All time-by-intervention group interaction effects were nonsignificant, suggesting that the 3 conditions were equally effective.

Discussions: Results suggested that Internet-based interventions are effective for lowering distress among college students and that specific approaches may be differentially effective for certain subgroups of students. They also suggested that providing students with stress management information without providing training in 1 specific skill may be helpful.

Melnyk, B., Kelly, S., Jacobson, D., Arcoleo, K., & Shaibi, G. (2014). Improving physical activity, mental health outcomes, and academic retention in college students with Freshman 5 to thrive: COPE/Healthy lifestyles. *Journal of the American association of nurse practitioners*, 26(6), 314-322.

Objective: To assess the preliminary effects of a new course entitled Freshman 5 to Thrive/COPE Healthy Lifestyles on the cognitive beliefs, knowledge, mental health outcomes, healthy lifestyle choices, physical activity, and retention of college freshmen.

Methods: Measures included demographics, nutrition knowledge, healthy lifestyle beliefs, healthy lifestyle perceived difficulty, healthy lifestyle choices, Beck Youth Inventories-II (anxiety, depression, anxiety, and destructive behavior), step count via pedometer, and college retention.

Results: The experimental COPE (Creating Opportunities for Personal Empowerment) group had greater intentions to live a healthy lifestyle ($p = .02$) versus the comparison group. COPE students also significantly increased their physical activity ($p = .003$) from baseline to post-intervention and had a higher college retention rate than students who did not take the course. In addition, there was a significant decrease in depressive and anxiety symptoms in COPE students whose baseline scores were elevated.

Conclusions and implications for practice: The Freshman 5 to Thrive Course is a promising intervention that can be used to enhance healthy lifestyle behaviors and improve mental health outcomes in college freshmen.

3. Employment Supports for Young Workers

Supported Employment

Bond, G.R., Drake, R.E., & Luciano, A. (2015). Employment and educational outcomes in early intervention programmes for early psychosis: a systematic review. *Epidemiology and psychiatric services* 24(5): 446-457.

Objective: Young adults with early psychosis want to pursue normal roles – education and employment. This paper summarizes the empirical literature on the effectiveness of early intervention programmes for employment and education outcomes.

Methods: A systematic review of employment/education outcomes for early intervention programmes was conducted, distinguishing three programme types: (1) those providing supported employment, (2) those providing unspecified vocational services and (3) those without vocational services. We summarized findings for 28 studies.

Findings: Eleven studies evaluated early intervention programmes providing supported employment. In eight studies that reported employment outcomes separately from education outcomes, the employment rate during follow-up for supported employment patients was 49%, compared with 29% for patients receiving usual services. The two groups did not differ on enrollment in education. In four controlled studies, meta-analysis showed that the employment rate for supported employment participants was significantly higher than for control participants, odds ratio = 3.66 [1.93–6.93], $p < 0.0001$. Five studies (four descriptive and one quasi-experimental) of early intervention programmes evaluating unspecified vocational services were inconclusive. Twelve studies of early intervention programmes without vocational services were methodologically heterogeneous, using diverse methods for evaluating vocational/educational outcomes and precluding a satisfactory meta-analytic synthesis.

Among studies with comparison groups, 7 of 11 (64%) reported significant vocational/education outcomes favoring early intervention over usual services.

Conclusion: In early intervention programmes, supported employment moderately increases employment rates but not rates of enrollment in education. These improvements are in addition to the modest effects early programmes alone have on vocational/educational outcomes compared with usual services.

Ellison, M. L., Klodnick, V. V., Bond, G. R., Krzos, I. M., Kaiser, S. M., Fagan, M. A., & Davis, M. (2015). Adapting supported employment for emerging adults with serious mental health conditions. *The journal of behavioral health services & research*, 42(2), 206-222.

Objective: In order to meet the need for effective services to assist young people with serious mental health conditions, especially those who had intensive adolescent mental health service utilization, successfully transition to employment or education, a modification of the IPS model, the Supported Employment/Supported Education Emerging Adult (SE/SEd EA) IPS model, and its feasibility were tested.

Method: SE/SEd EA was implemented at the Thresholds Young Adult Program (YAP), a residential psychiatric treatment program for young adults in Illinois. Adaptions made to IPS for the SE/SEd EA modification included: (1) Employment specialists were trained in the principles of supported education in addition to supported employment - their title was changed to SE/SEd specialists, (2) YAP program graduates were hired and thoroughly trained to provide peer mentorship to and (3) Employment specialists adopted a career-focused philosophy.

Results: Participants were 17-20 years old. Most were African American, under the custody of the state, and had a primary mood disorder diagnosis and substantial educational impairments. Two additional and unplanned modifications were made to SE/SEd EA: (1) creating a separate Education Specialist role instead of having combined SE/SEd specialists. SE/SEd specialists were found to focus on employment instead of becoming comfortable providing educational assistance; and, (2) removing the requirement for peer mentors to be YAP graduates. Hiring qualified graduates and retaining them proved difficult; hiring peer mentors who were not YAP graduates, a little older (28-30 years old), and shared characteristics with participants proved more successful. Most participants chose to meet with both an employment and an education specialist at least once over the 12 months. Approximately 50% of participants worked or enrolled in an education program.

Conclusions: This study's service engagement findings suggest that the adapted SE/SEd model of IPS can be implemented successfully in a specialized emerging adult psychiatric treatment program. Creating a separate education specialist role was beneficial but education outcomes could still use considerable improvement. Utilizing peer workers in SE/SEd programs necessitates culture shifts within an organization.

The Recovery After Initial Schizophrenia Episode (RAISE) Intervention

Humensky, J.L., Essock, S.M., & Dixon, L.B. (2017). Characteristics associated with the pursuit of work and school among participants in a treatment program for first episode psychosis. *Psychiatric rehabilitation journal* 40(1): 108-112.

Objective: Examine the pursuit of education and employment among participants in the Recovery After Initial Schizophrenia Episode (RAISE) Connection Program (Dixon et al., 2015; Essock et al., 2015), a first-episode psychosis (FEP) treatment program emphasizing participation in school and work.

Method: Data were collected between 2011 and 2013 from all 65 individuals in the RAISE Connection Program. Descriptive statistics, analysis of variance, and multinomial logit random-effects models were used to examine rates and predictors of work/school participation.

Results: Most participants who eventually engaged in vocational activities did so within the first year of participation. Many engaged in both school and work. Those working (alone or with school) had better premorbid functioning and cognition and less severe concurrent symptoms.

Conclusion and Implications for Practice: Participants in FEP programs emphasizing school and work can have high rates of vocational participation and early engagement, often simultaneously in work and school.

Kane, J. M., Robinson, D. G., Schooler, N. R., Mueser, K. T., Penn, D. L., Rosenheck, R. A., ... & Marcy, P. (2015). Comprehensive versus usual community care for first-episode psychosis: 2-year outcomes from the NIMH RAISE early treatment program. *American journal of psychiatry*, 173(4), 362-372.

Objective: The primary aim of this study was to compare the impact of NAVIGATE, a comprehensive, multidisciplinary, team-based treatment approach for first-episode psychosis designed for implementation in the U.S. health care system, with

community care on quality of life. The NAVIGATE treatment approach is a part of the Recovery After Initial Schizophrenia Episode (RAISE) Initiative.

Method: Thirty-four clinics in 21 states were randomly assigned to NAVIGATE or community care. NAVIGATE is an experimental treatment with four components: medication management, family psychoeducation, resilience-focused individual therapy, and supported employment and education. In this way, school and work supports are embedded within this treatment program. Community care was treatment as usually provided in a participant's community. Participants (mean age, 23) with schizophrenia and related disorders Participation in work or school was captured during monthly interviews with participants completed by research assistants utilizing a Service Use and Resource Form.

Results: The 223 recipients of NAVIGATE remained in treatment longer, experienced greater improvement in quality of life and psychopathology, and experienced greater involvement in work and school compared with 181 participants in community care.

Conclusions: Comprehensive care for first-episode psychosis, including supported education and employment, can be implemented in U.S. community clinics as a means to increase the rates of work and school involvement for young people who have experienced a psychotic episode. Effects are more pronounced for those with shorter duration of untreated psychosis.

Rosenheck, R., Mueser, K. T., Sint, K., Lin, H., Lynde, D. W., Glynn, S. M., ... & Kane, J. M. (2017). Supported employment and education in comprehensive, integrated care for first episode psychosis: Effects on work, school, and disability income. *Schizophrenia research*, 182, 120-128.

Objective: Contribute to previous first episode psychosis (FEP) research by (1) examining whether participation in supported education and employment (SEE) mediates gains in instrumental functioning when offered in an effectiveness study as one component within a comprehensive specialty care program and is compared to usual care; (2) extending FEP outcome analyses to include employment earnings and receipt of public income supports (including payments from Social Security Disability and Supplemental Security Income programs); and (3) examining the broader relationship between receipt of public support income receipt and work-school participation.

Method: FEP participants (N = 404) at thirty-four community treatment clinics participated in a cluster randomized trial that compared usual Community Care (CC) to

NAVIGATE, a comprehensive, team-based treatment program that included ≥ 5 h of SEE services per week, grounded in many of the principles of the Individual Placement and Support model of supported employment combined with supported education services. The NAVIGATE treatment approach is a part of the Recovery After Initial Schizophrenia Episode (RAISE) Initiative. All study participants were offered SEE regardless of their initial interest in work or school. Monthly assessments over 24 months recorded days of employment and attendance at school, days of participation in SEE, and both employment and public support income (including disability income). General Estimation Equation models were used to compare CC and NAVIGATE on work and school participation, employment and public support income, and the mediating effect of receiving ≥ 3 SEE visits on these outcomes.

Results: NAVIGATE treatment was associated with a greater increase in participation in work or school ($p = 0.0486$) and this difference appeared to be mediated by SEE. No group differences were observed in earnings or public support payments.

Conclusion: A comprehensive, team-based FEP treatment approach was associated with greater improvement in work or school participation, and this effect appears to be mediated, in part, by participation in SEE.

Vocational Supports

Klodnick, V.V., Sabella, K., Brenner, C.J., Krzos, I.M., Ellison, M.L., Kaiser, S.M., Davis, M., & Fagan, M.A. (2015). Perspectives of young emerging adults with serious mental health conditions on vocational peer mentors. Journal of emotional and behavioral disorders 23(4): 226-237.

Objective: Explore the feasibility of vocational peer mentors for early emerging adults with serious mental health conditions.

Methods: Peer mentors were added to the Individual Placement and Support model of supported employment for 17- to 20-year-olds receiving residential and psychiatric care. Open-ended satisfaction surveys and the Working Alliance Inventory were administered to mentees at 12 months. Survey results underwent thematic analysis.

Results: Findings indicated it is important for peer mentors to be authentic, flexible, and a graduate of a mental health program where vocational services are based. Valued relational processes include the act of talking in the community, feeling understood, and forming a bond with peer mentors. Mentees with positive peer mentoring experiences reported stronger working alliances.

Conclusions: This study sheds light onto near-age mentoring relational processes for this population, which can inform future research of mentoring processes and intervention design.

Davis, M., Sheidow, A.J. (2018). Vocational coaches for justice-involved emerging adults. Under review - Psychiatric Rehabilitation Journal.

Objective: The purpose of this study was to determine whether vocational supports for emerging adults with serious mental health conditions who are at high risk for re-arrest are more effectively served using Multisystemic Therapy for Emerging Adults (MST-EA) through vocationally enhanced MST-EA Coaches or through referral to state vocational rehabilitation services for vocational supports.

Methods: A pilot randomized control trial examined two MST-EA coaching approaches. In the Standard Coach + VR condition (n=16), MST-EA Coaches delivered standard skills curricula to participants and referred them to state vocational rehabilitation (VR) services for vocational supports. In the Vocational Coach condition (n=16), MST-EA Coaches delivered the standard skills curricula enhanced with extensive employment components. Analyses included pre- to post-treatment comparisons of vocational outcomes, and between groups comparisons of fidelity, satisfaction, and service utilization.

Results: Those in the Vocational Coach condition had a twelve-fold increase in post treatment employment compared to this in the Standard+VR condition.

Conclusions and Implications for Practice: The Vocational Coach will be included in all future clinical trials of MST-EA to maximize impact on reducing recidivism, and supporting emerging adult functioning.

Torres Stone, R.A., Delman, J., McKay, C.E., & Smith, L.M. (2015). Appealing features of vocational support services for Hispanic and non-Hispanic transition age youth and young adults with serious mental health conditions. The journal of behavioral health services and research 42(4), 452-464.

Objective: to identify unique and common perspectives of the general vocational needs of Hispanic and non-Hispanic transition age youth and young adults (TAYYAs) to (1) inform the future direction of vocational support services for this population and (2) build prevention programs that could help stem the high unemployment rates for

TAYYAs.

Methods: In person qualitative interviews were conducted with 57 non-Hispanic and Hispanic TAYYAs with SMHCs enrolled in three vocational support programs in MA (Vocational Rehabilitation, Individual Placement and Support; the Clubhouse Model as described by the International Center for Clubhouse Development).

Results: Six themes emerged from the data: three themes were identified as social capital (supportive relationships, readily available workplace supports, and vocational preparation), two themes related to human capital (effective educational supports and work experience), and one theme related to cultural capital (social skills training). Unique features (Spanish-speaking staff and/or familiar in Latino culture, familial-like staff support) were frequently noted by Hispanic TAYYAs.

Conclusion: Findings indicate that social, cultural, and human capitals play crucial roles in determining the success of TAYYAs. TAYYA were concerned with negative judgement or discrimination (e.g. loss of hours, being fired, not being trusted) as a result of their mental health condition. Vocational support programs that serve TAYYAS do not directly address these concerns. As a result, if employed, many were hesitant to disclose their condition or request accommodations, and if unemployed, many did not feel ready for a job. TAYYA appreciated workplace relationships that were respectful and responsive to their needs. Compared to their white counterparts, Hispanics viewed workplace relationships as reaching the level of family.

Career Planning/Development

Luciano, A., & Carpenter-Song, E. A. (2014). A qualitative study of career exploration among young adult men with psychosis and co-occurring substance use disorder. *Journal of dual diagnosis*, 10(4), 220-225.

Objective: Explore the meaning and importance of career exploration and career development in the context of integrated treatment for young adults with early psychosis and substance use disorders (i.e., co-occurring disorders).

Method: Twelve young adult men (aged 18 to 35 years) with co-occurring disorders recruited from a private treatment center completed a series of three semi-structured in-depth qualitative interviews. Data were transcribed verbatim and analyzed using thematic analysis. Purposive sampling ensured participants represented a range of substance abuse treatment stages.

Results: Participants had a mean age of 26, identified as white, came from middle- to upper-class families, and were diagnosed with a range of mental health conditions (two-thirds were diagnosed with schizophrenia-spectrum disorders) and substance use disorders (e.g., cannabis, cocaine, alcohol). Participants described past jobs that did not align with future goals as frustrating and disempowering, rather than confidence building. Most participants began actively developing their careers in treatment through future-oriented work or school placements. They pursued ambitious career goals despite sporadic employment and education histories. In this way, treatment engagement and satisfaction appeared to be linked with career advancement prospects.

Conclusions: Integrating career planning into psychosocial treatment is a critical task for providers who serve young adults with co-occurring disorders. Whether integrating career planning within early intervention treatment planning will improve clinical, functional, or economic outcomes is a promising area of inquiry for rehabilitation researchers and clinicians.

Nochajski, S. M., & Schweitzer, J. A. (2014). Promoting school to work transition for students with emotional/behavioral disorders. *Work*, 48(3), 413-422.

Objective: The purpose of this model demonstration project, funded by the US Department of Education, was to develop a program based on identified best practices to facilitate successful school to work transition for students with Emotional Behavioral Disturbance (EBD).

Methods: 47 students with EBD between the ages of 14 and 19 were participants in this project. The majority of participants in the project were white males with a generic diagnosis of a disruptive personality disorder. Five cohort groups of students participated in a four phase program; Phase 1 – School-based Learning, Phase 2 – Community Involvement, Phase 3 – Paid, Supported Work Experience, and Phase 4 – Competitive Employment and Follow-Up.

Results: At the conclusion of the project, 30% of the project participants were competitively employed. Students had the most difficulty in Phase 3, but 81% of those who successfully completed Phase 3 obtained and retained competitive employment for a least one year. Four case studies are presented to illustrate findings.

Conclusions: The School to Work Transition Program model shows promise for providing interventions to promote successful transition for students with EBD. Further research on the effectiveness of the overall model, as well as specific components of the model, is needed.

Sowers, J. A., & Swank, P. (2017). Enhancing the Career Planning Self-Determination of Young Adults with Mental Health Challenges. *Journal of social work in disability & rehabilitation*, 16(2), 161-179.

Objective: Study the impact of an intervention on the self-determination and career planning engagement of young adults with mental health challenges.

Methods: 67 young adults, 20 to 30 years of age, with mental health diagnoses (e.g., depression, bipolar disorder) and who had received mental health services in the prior 2 years were randomly assigned to intervention and control groups. Those assigned to the intervention group received a career visions guide, intervention description, and weekly meetings with thoroughly trained and supervised career advisors. Control group participants meet with a career advisor only once shortly after enrollment to review the career vision guide. Participants were asked to complete instruments related to self-determination, career planning activity engagement, career decision self-efficacy, and mental health recovery at baseline and at varying time points throughout the study.

Results: Statistically significant greater increases were made by the intervention group versus the control group for self-determination and career planning engagement, and self-determination at least partially mediated increases in career planning engagement.

Conclusions: With career planning self-determination interventions, young adults with mental health challenges might be able to achieve better career and life outcomes than is typical for this population. This study adds to existing evidence that teaching individuals with disabilities the component skills of self-determination and how to apply these skills to career and other life planning can increase their level of self-determination and engagement in activities.

International Publications

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EXECUTIVE SUMMARIES FROM THE LEARNING AND WORKING CENTER'S 2013 STATE-OF-THE-SCIENCE CONFERENCE

Education
Employment

These summaries were prepared with support from the Transitions Research and Training Center (Transitions RTC; now known as the Transitions to Adulthood Center for Research) at the University of Massachusetts Medical School. The Transitions RTC is funded by the US Department of Education, National Institute on Disability & Rehabilitation Research, and the Center for Mental Health Services, Substance Abuse & Mental Health Services Administration - SAMHSA (NIDRR grant H133B090018). Additional funding provided by University of Massachusetts Medical School's Commonwealth Medicine division. The content of this report does not necessarily reflect the views of the funding agencies and you should not assume endorsement by the Federal Government.

Abstract

The Learning and Working During the Transition to Adulthood Rehabilitation Research & Training Center, University of Massachusetts Medical School, successfully conducted a state of the science conference, “Tools for System Transformation for Young Adults with Psychiatric Disabilities.” The conference was held at Georgetown University National Technical Assistance Center for Children’s Mental Health on September 24-25th, 2013. Please see https://www.umassmed.edu/TransitionsACR/publication/state_of_the_science_conference/ for the proceedings from this conference.

We had two goals for this conference. Our first goal was to share and discuss the current state of research knowledge regarding practice and policy supports for strong educational and employment outcomes in young adults (ages 18-30) with psychiatric disabilities. We focused on implications for adult mental health and rehabilitation service systems, and the young adults with psychiatric disabilities in those systems. Our second goal was to engage all attendees in prioritizing the knowledge that future research should address, to guide these systems’ efforts, to better launch and support these young adults’ long-term careers.

The process of the conference included, presentations of three state of the science papers that were written and completed prior to the event in the domains of employment, education, and system and policy as well as an introductory framework paper. Subsequently, a summary of written responses to each paper were prepared and presented by a panel of stakeholders which included: researchers, young adults, family members, and individuals representing underserved populations. The papers, responses, and an introductory framework were made into a compendium which was distributed to all conference participants, both before, and at the conference.

In attendance at the state-of-the-science conference, were federal and state directors and administrators of disability service systems, especially in the areas of employment and education, as well as those with experience and expertise as family and young adult representatives and researchers.

The structure of the conference included:

- Welcoming remarks from Charlie Lakin, Director, National Institutes on Disability Rehabilitation Research (NIDRR)
- Welcoming remarks from Jim Wotring, Director, National Technical Assistance Center for Children’s Mental Health
- Welcoming remarks from Paolo Del Vecchio, Director, Substance Abuse and Mental Health Services Administration
- Presentation by Maryann Davis, Director, Transitions Research and Training Center, on conference goals and framework for understanding young adults with psychiatric disabilities

SUPPORTING THE EDUCATION GOALS OF YOUNG ADULTS WITH PSYCHIATRIC DISABILITIES

By: Marsha Langer Ellison, Ph.D.,
E. Sally Rogers, ScD., and
Amanda Costa, B.A.

State-of-the-Science 2013 Conference Proceedings

Executive Summary

The opportunity:

Over time, higher educational attainment leads to better employment, higher wages, and opportunities for careers, among all adults, including young adults with psychiatric disabilities.

The challenge:

Students with psychiatric disabilities struggle with educational attainment at the high school and post-secondary levels including high drop-out rates and poor retention in college. The educational trajectory of post-secondary outcomes for students in special education with psychiatric disabilities suffers compared to typical students.

While increasing numbers of students with psychiatric disabilities attend college, many barriers to successful college completion exist, such as, unsupportive campus policies, cultures, or services.

Current attempts to improve education outcomes:

Research has shown recent gains in high school completion among special education students with serious emotional disturbances and there are other promising interventions in the secondary education arena.

There are numerous recommendations made for campus-based initiatives to improve the retention of college students with psychiatric disabilities. However, none have undergone systematic evaluation or rigorous testing. Some of these initiatives include: modification of campus policies regarding mental health, adjustments to “campus culture” such as communication to increase awareness of mental health needs, efforts to reduce stigma, and improved provision of supports such as educational accommodations, peer support groups, and suicide prevention efforts.

There may be significant opportunities for increasing young adults’ educational outcomes through the services offered by state agencies of vocational rehabilitation.

Supported education services for young adults with psychiatric disabilities is a critical

policy and research issue. Supported education has the potential to address normal young adult developmental tasks, as well as to prepare young adults for careers rather than low-wage jobs. However, there is no systematic body of evidence demonstrating its success, nor its long-term impact on employment and careers.

Testing of some adaptations of supported education to meet the specific needs of young adults is underway, but more innovation is needed to address the sub-populations of young adults with psychiatric disabilities and the variety of systems that serve them.

Future Research Needs - Education

1) Additional data about the barriers to and facilitators of increased educational attainment for youth

2) New models of educational support services that address the needs/wants of this stage of life

- a) Combining supported education and supported employment to address the many young adults with SMHC who need to alternate between school and work, or do both simultaneously
- b) Developing more supports for high school dropouts with serious emotional disturbance
- c) Continued testing and evaluation of transition services for secondary students with serious emotional disturbance

3) Specification and rigorous testing of supported education services for young adults

- a) Supported education needs adaptation and trials for different populations of young adults with SMHC (high school drop-outs, foster care, criminal justice involvement) and in systems other than mental health.
- b) Adaptation of supported education for secondary education to have a remedial focus and thus improve high school completion rates.
- c) Long-term longitudinal follow up studies of supported education services through college completion (certificate/2 year/4 year) and through to employment and career launch.

4) Innovation and rigorous evaluation of approaches for supporting students with psychiatric disabilities on campuses. Approaches such as:

- a) Modification of campus mental health policies to better support the retention of students with psychiatric disabilities
- b) Changes in campus culture such as communication strategies, training of “frontline” staff and faculty anti-stigma campaigns, and campus “mental wellness” programs

EMPLOYMENT AND CAREERS IN YOUNG ADULTS WITH PSYCHIATRIC DISABILITIES

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Executive Summary

We examined peer- and non peer-reviewed research, and communicated with other researchers to assess findings about the development of strong work lives during young adulthood (ages 18-30) among those with psychiatric disabilities, and practices during young adulthood that support strong career development. The following is a summary of the findings from that examination:

- Young adulthood is a critical time for launching careers, but employment is compromised in young adults with psychiatric disabilities. We use the term career to describe occupations undertaken for a significant period of a person's life that provide opportunities for growth. Developing the foundation of strong careers at this stage of life, when typical young adults are doing the same, should prevent or reduce later financial dependency and unemployment. Thus, interventions need to both support young adults' immediate employment goals and help them develop the necessary tools for successful careers and financial independence. Research is needed to better understand how to help young adults with psychiatric disabilities achieve strong careers.
- Adult vocational support interventions for those with psychiatric disabilities that have been researched include general vocational rehabilitation (VR) services, Clubhouses, Assertive Community Treatment, and supported employment focused on the Individualized Placement and Support (IPS) model. IPS is for individuals who want to work. One of the hallmarks of IPS is a place-then-train approach in which the aim is to help individuals succeed while on the job rather than delaying entry into work through lengthy preparatory activities.
- Because of the success of the place-then-train approach, adult vocational supports have moved away from historical practices that employed an array of "career development" approaches that slowly prepared individuals for competitive employment. In practice, these approaches appear to have non-beneficially delayed adults' entry into competitive employment.
- Though research has established that the IPS model and other supported employment improves employment in adults with psychiatric disabilities compared to usual services and other models, the jobs obtained remain mostly part time and low wage. Evidence

supporting other widely available vocational interventions is nonexistent, or suffers from weak methods or outcomes.

- There is no evidence that any career or vocational intervention improves careers (i.e. satisfying jobs and income that improve over time) in individuals with psychiatric disabilities of any age.
- The impact of standard adult vocational models on the employment of young adults with psychiatric disabilities is not well studied. The limited research suggests that standard IPS produces better employment outcomes in young adults than standard services but, for the most part, these outcomes are still only part-time, low-wage jobs with many weeks not employed. Other research suggests that supported employment has no better impact than usual services in the youngest adults (i.e., ages 18-24), but heightened impact in older young adults (i.e. ages 25-30).
- An adaptation of IPS supports both employment and education in young adults with early psychosis (IPS-EP-1) and has encouraging evidence for its ability to improve employment outcomes among this group of young adults. Its ability to improve educational outcomes is less clear. The success of IPS-EP has not yet been examined in sites where these young adults are receiving typical (rather than cutting-edge) clinical services.
- Another IPS-EP model (IPS-EP-2) added a concurrent course in workplace skills and knowledge, and family information sessions to supported employment and education with encouraging outcomes in both schooling and working. Either version of IPS-EP may be a good basic model for other young adults with psychiatric disabilities. An IPS model is under development that adds Peer Mentors to assist young adults with a history of intensive mental health treatment in adolescence. Elements to specifically enhance career development, such as using the work experience to explicitly enhance cognitive underpinnings of careers (e.g. self-efficacy, outcome expectations) may also improve the long-term outcomes of IPS and its versions.
- Unnecessarily delaying employment for purposes of career development is detrimental at any age. However, typical young adults have access to a variety of career-enhancing activities, such as summer internships, apprenticeships, Job Clubs, career coaching/mentoring, and formal career training through postsecondary education or training opportunities. These activities are based on a deeply researched theoretical literature on career development in typical individuals. Though not rigorously researched, there is consistent evidence in typical youth of the positive impact of some of these activities on important career elements such as making a good career choice, developing career-related skills, or conducting successful job searches. Some of these activities overlap with those viewed by VR counselors as centrally important for students transitioning out of high school. The degree to which these types of career development activities enhance career outcomes is a promising avenue for future research in this age group.
- Several new vocational approaches for young adults with psychiatric disabilities are in the early stages of research. These approaches share an emphasis on career exploration, assessment, and planning, and support of concurrent employment and education or training. These approaches put young adults in the captain's seat for

making career choices, and teach skills for developing and implementing career plans. Several also actively include family members as potential supports. These models need to progress through the research stages of developing strong evidence for their efficacy for employment or careers in young adults with psychiatric disabilities.

Future Research Directions - Employment

- 1. Identifying factors unique to young adult career paths.** It is difficult to develop interventions when the target[s] of the intervention is not well understood. Research to date does not reveal what the factors are in young adults with psychiatric disabilities that impede competitive employment, employment that supports fiscal independence, or strong longer-term careers (i.e. satisfying employment that involves better jobs and better income over time). Many factors that have been found to relate to successful competitive employment in mature adults, such as job placement, likely apply to young adults as well, but should be confirmed. The factors associated with strong careers in typical young adults should be examined in young adults with psychiatric disabilities. Factors that may be unique to young adults or immature careers may hold the keys to more effectively helping them launch successful careers. Research should focus on factors that interventions could impact.
- 2. Applying research findings to improve interventions.** Research from #1 should be used to develop or adapt interventions to target those factors. These interventions should undergo rigorous testing.
- 3. Research to improve young adult career outcomes with IPS.** Since IPS has the strongest evidence of employment efficacy in young adults, several lines of research examining IPS could help elucidate alterations to it that could strengthen outcomes.
 - a. The longitudinal impact of each IPS version on young adults' careers should be examined, including the quality of employment and the capacity for employment to improve over time.
 - b. The research that can fully establish their efficacy should be completed for the young adult IPS versions.
 - c. Research in young adults in IPS is needed to identify subgroups that experience better or worse outcomes, and/or conditions associated with better or worse outcomes. Findings could inform IPS modifications, or the development of alternative or complementary approaches.
 - d. Research is needed to illuminate the specific mechanisms of IPS that produce better employment outcomes in young adults. Findings would also help inform improvements in IPS or other approaches.
- 4. Continue research with developing models to test their career development efficacy.** Current developing models that show promise need to establish their efficacy for improving current employment and developing careers. Those that establish efficacy and/or effectiveness should be further examined for the issues identified in points 3a, c, & d relative to the new intervention.



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