SUPPORTING THE EDUCATION GOALS OF YOUNG ADULTS WITH PSYCHIATRIC DISABILITIES

TRANSITIONS RTC STATE OF THE SCIENCE PAPER
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This paper is part of a compilation of papers summarizing the state of the science in career development among young adults (ages 18-30) with psychiatric disabilities, entitled Tools for System Transformation for Young Adults with Psychiatric Disabilities. The purpose of these papers is to provide a summary of research-based knowledge about supports to help this population pursue postsecondary education and training and successfully move into adult working careers. These papers focus on knowledge that can inform the services these young adults can access in adult mental health and vocational rehabilitation systems, or other systems that provide them educational, training, or career supports at this age. These papers also propose future research agendas to strengthen this knowledge base.

Specifically, this paper is one of four papers: a framing paper that highlights issues shared across the subsequent papers, and three major papers, one each on education, employment, and system/policy issues. In order to provide multiple perspectives, a panel of various stakeholders reviewed each major paper. The reviewers' comments were then synthesized by one of the panel members into a response paper that is also included in this compilation.

For your convenience, these papers are available for download as individual papers. However, you will likely find it most useful to refer to the framework paper as well as the other two major papers available on our website at **http://labs.umassmed.edu/TransitionsRTC.**

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SUPPORTING THE EDUCATION GOALS OF YOUNG ADULTS WITH PSYCHIATRIC DISABILITIES

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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:

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

I. INTRODUCTION

In this brief report the authors attempt to canvass and synthesize the array of research, knowledge, and practice information that is available in the landscape of supports for students with psychiatric disabilities who have higher education goals or who are in educational settings. We do this in order to inform policy and system planners in the adult rehabilitation systems who are serving this population. Through this canvass, we also aim to generate an agenda for future research. Our topic is broad and covers many complex issues such as outcomes of postsecondary special education, policies and practices of colleges, and impact of supported education approaches. Thus, it is not possible to treat any one topic in great depth. The paper is divided into sections on: the scope of the challenge, current attempts to improve education outcomes among transition age youth and young adult students, lessons learned, and next steps for research.

This specific topic has a fairly limited peer reviewed literature, and in many instances the state of knowledge can be characterized as "pre-scientific." Thus we review understandings available in the peer reviewed literature and we describe program and policy innovations available in the "grey literature."

Though our age range is 16-30, we focus on young adults who are leaving the post-secondary system and are entering institutes of higher education. This is varied group with sub-populations such as young adults with first episode psychosis, special education graduates with serious emotional disturbance, or college students with significant mental health concerns. Given the intended brevity of review, we do not treat the sub-populations or specific cultural groups distinctively, though we acknowledge that their circumstances and needs are unique. Future research and practice innovations will need to take these sub-population variations into account.

II. SCOPE OF THE CHALLENGE

The Bureau of Labor statistics clearly demonstrates the relationship between educational attainment and employment outcomes for the general population and the fact that in aggregate, the higher the educational attainment, the lower the unemployment rate and the higher the wages a person receives (United States Department of Labor, 2010). Even before the current economic downturn, analysis of the impact of shifts in economic and other societal factors on the development of careers, demonstrated an increasing requirement for higher levels of postsecondary education or training (Settersten et al., 2005). In addition, career efforts during the young adult years in particular, have been found to be predictors of later career success (De Vos, De Clippeleer, & Dewilde, 2009). We consider valuable post-secondary educational settings to include vocational training schools, career colleges,

community colleges, on-line education, and apprenticeships. We use the term career to describe occupations undertaken for a significant period of a person's life, with opportunities for progress.

Educational attainment is likewise important for those with psychiatric disabilities. Indeed, educational attainment is a consistent predictor of later employment achievements (Burke-Miller et al., 2006; Cook et al. , 2005; Ellison, Russinova, Lyass, & Rogers, 2008; Rogers, Anthony, Lyass, & Penk, 2006; Tsang, Lam, Ng, & Leung, 2000). However, the onset of a psychiatric condition can be accompanied by a myriad of cognitive, emotional, symptomatic, social and academic difficulties. Serious mental health conditions (SMHC) translate into functional limitations that impact educational performance, such as, sustaining concentration, screening out stimuli, maintaining stamina, handling time pressure and multiple tasks, interacting with others, and test anxiety (Souma et al., 2006). When that onset occurs at a young adult age , (Corrigan, Barr, Driscoll, & Boyle, 2008; Nuechterlein et al., 2008; Waghorn, Still, Chant, & Whiteford, 2004), or during adolescence (Wagner, Newman, Cameto, et al. 2006) disruptions to educational attainment and vocational plans can result in a trajectory of unemployment, disability and poverty.

Strong educational attainment supports better employment, and opportunities for careers that sustain employment, over time in all young adults.

Students with psychiatric disabilities (SPD) struggle at every level of education. Over 50% of students with a mental disorder (ages 14 and older) drop out of high school, which is the highest dropout rate of any disability group (U.S. Department of Education, 2009, data for 2003-4). While 40% of the general population of young adults go on to attend a four year college, college attendance is only 11% among special education students with psychiatric disabilities , (Wagner & Newman, 2012), and 7-26% among other adolescents with psychiatric disabilities (see Davis & Vander Stoep, 1997). There are also longer delays in entering college (Newman, 2011). College students with SMHC have higher rates of part-time student status (Newman, 2011), high dropout rates (86%) and low graduation rates compared to typical college students (Kessler, Foster, Saunders, & Stang, 1995; Salzer, Wick, & Rogers, 2008).

Despite these outcomes, there are growing numbers of students on college campuses with mild to significant mental health problems (Eudaly, 2003; Heiligenstein & Keeling, 1995; Meaespitsel, 1998; Sharpe et al., 2004), with prevalence estimates ranging from 9% to 18% of all college students (Lewis, Farris, & Greene, 1999; Mowbray et al., 2006;. Sharpe, Bruininks, Blacklock, Benson, & Johnson, 2004; Souma, Rickerson, & Burgstahler, 2006; U.S. Department of Education, 2004). There are also substantial increases in the number

of students seeking services for psychiatric conditions (Sharpe & Bruininks, 2003) and high proportions of students reporting mental health symptoms or disorders (The American College Health Association's 2006 National College Health Assessment). Increases in college participation among student with serious mental health conditions are attributed in part to improving mental health treatment and medications, and improved access to effective services (Collins & Mowbray, 2008; Mowbray et al., 2006; Salzer et al., 2008; Watkins, Hunt, & Eisenberg, 2012).

Among students with SMHC in higher education, challenges to their success include: unwillingness to seek help (Osberg, 2004); or not getting needed help for reasons such as perceptions that student disability services offices are unknowledgeable or incompetent (Eisenberg, Golberstein, & Gollust, 2007; Collins & Mowbray, 2008). Cutting down on the amount of time spent doing/completing college work because of emotional problems is common among students with SMHC (Megivern, Pellerito, & Mowbray, 2003). Students with SMHC are also the most likely of any disability group to not inform the school of their disability status (21% do not report vs. 3 to 15% of students in other disability categories; Newman et al., 2011). Salzer (2012) found that among current and former college students with SMHC who obtained any type of academic support, the majority reported a fear of being stigmatized by faculty, and that faculty was uncooperative or unreceptive to their requests for accommodations or support. Further, these students reported less engagement on campus and poorer social relationships than their peers; factors that were also associated with lower graduation rates.

Finally, the scope of the challenge includes, students with pre-existing mental health conditions, or those who develop mental health problems during college years who are at higher risk for suicide ideation and attempts on campus (National Mental Health Association, 2002). Of great concern are the numbers of student suicides that are occurring on campus. Estimated rates of making a suicide plan are as high as one in 12 U.S. college students, and 7.1 deaths by suicide per 100,000 college students aged 20 - 24 (Neumann University, 2013). One study found the reported suicide rate to be higher in college students than non school-attending young adults (Mowbray et al., 2006).

Students with serious mental health conditions struggle with educational attainment at the high school and post-secondary levels. While increasing numbers of students with SMHC attend college, many barriers exist, such as stigma, ineffective disability services, and the impact of symptoms on successful college completion.

III. CURRENT ATTEMPTS TO IMPROVE EDUCATION OUTCOMES AMONG TRANSITION AGE AND YOUNG ADULTS STUDENTS

1II.A. Attempts to improve education outcomes in secondary school

Special Education. One of the largest efforts to improve secondary education outcomes for students with serious emotional disturbance (SED)[1] is the Individuals with Disabilities Education Act (IDEA; PL 94-142). This federal special education law mandates transition planning efforts and participation of youth starting at age 16. Transition planning involves, "a results-oriented process, that is focused on improving the academic and functional achievement of the child with a disability, to facilitate the child's movement from school to post-school activities, including post-secondary education, vocational education, integrated employment (including supported employment), continuing and adult education (Johnson, 2004). Recent analysis of the National Longitudinal Transition Studies (Wagner & Newman, 2012) examines the outcomes of students with emotional disturbance (ED) enrolled in special education services as they enter early adulthood. (The population of special education students with SED is considerably smaller than the whole population of students with mental disorders, many of whom are not enrolled in special education and do not receive special education services (Forness, et al., 2012).

Comparing results from 1990 to 2005 researchers found that the rate of high school completion among special education students with SED increased from 47.4% to 78.1%, and that the 2005 rate did not differ significantly from that of general education peers. Further, the percent of ED special education students who enrolled in post-secondary education (including training) jumped from 18% to 35% (though the latter rate is low compared to the 62.6% rate in the general population (Wagner & Newman, 2012).

Check and Connect. Check and Connect is a secondary education intervention designed to reduce dropout by pairing mentors to work with students and their families for two years. Mentors monitor attendance, grades, and problems ("Check"), and talk with students about school progress, relationship between school engagement and school completion, the importance of staying in school, and problem-solving steps to resolve conflict and cope with life's challenges ("Connect"). Mentors also maintain close communication with families.

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[1] IDEA defines emotional disturbance as follows: "…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) An inability to learn that cannot be explained by intellectual, sensory, or health factors. (B) An 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. (E) A tendency to develop physical symptoms or fears associated with personal or school problems. Retrieved from http://nichcy.org/disability/specific/emotionaldisturbance#def

When implemented with secondary students with emotional or behavioral disabilities in a randomized controlled trial, students involved in Check and Connect were less likely than their counterparts to have dropped out of school, and attended school with fewer prolonged absences (Sinclair, Christenson & Thurlow, 2005). In addition, a small randomized trial also produced encouraging results (What Works Clearinghouse, 2007). This model is currently being tested with special education students with SMHC in a large clinical trial.

1II.B. Attempts to improve outcomes at or by institutes of higher education (IHE)

Over the past twenty years several strategies have been used by, or recommended to institutes of higher education (colleges and universities) for promoting the successful academic outcomes and retention among students with SMHC. These recommendations reflect colleges as whole communities within a larger community, such as a city or county, and therefore incorporate recommendations for policies, leadership, infrastructure, mental health literacy and support within the college community, as well as coordination with the surrounding community. The following section describes developments in these areas. However, it is important to note that these developments to date, have undergone no rigorous testing and very limited evaluation. Thus, the stage of research is best characterized as pre-scientific speaking to the need for specification of the intervention and intended population, and rigorous testing of outcomes.

Policies. Some college policies make it difficult for students with SMHC to complete their degree, such as forced absences for self-injuries or suicide attempts, or retracting student financial aid because of mental health issues (Clay, 2011). Other policies can also be deleterious for students with SMHC; highly restrictive or punitive policies for withdrawals, discriminatory application of medical leave policies, and arbitrary return policies after illness (Bazelon Center for Mental Health Law, 2008). Various authors have suggested alternatives that provide a blue print for policy revisions (Bazelon Center for Mental Health Law, 2008; Gruttadaro & Crudo 2012; Smith, Ackerman, & Costa, 2011) including:

1. Leave-of-absence protocols
2. Policies for self-harm other than zero tolerance
3. Individualized re-entry requirements
4. Protocols that encourages campus wide, multi departmental communication about a student in distress.
5. An emergency contact notification protocol where students are encouraged to sign release of information allowing notifications under specified circumstances
6. Memoranda of understanding with a local hospital for students in psychiatric crises.

Campus culture. Analyses of student experiences and college practices have produced

recommended steps to improve general mental health well-being on campus (Gruttadaro & Crudo, 2012; Mowbray et al., 2006) and include:

- ***Improving communication about mental health and campus supports***
  - Mental health education on college websites
  - More information on campus behavior, rules and policies
  - Ready access to information on counseling services such as, their location and hours
  - College websites displaying on-line screening tools with links informing students about the availability of accommodations
- ***Educating the college community***
  - For college staff, faculty, staff of disability student services, and campus police
    - recognition of early warning signs
    - approaching students in need
    - recognizing conditions
    - crisis training
  - For students
    - the importance of getting help
    - resources for dealing with stress
    - events to encourage help-seeking before the onset of psychiatric crises
- ***Campaigning to de-stigmatize mental illness***
  - Provide model success stories
  - Provide information on the commonness of mental health needs and success with treating it
  - Strategies to get students to reveal "secrets" about their mental health difficulties (Friday, 2011)
  - Make vivid and apparent the toll of campus –based suicides (Active Minds, 2013)

Good Supports and Interventions

Educational accommodations. Accommodations are, "any change in the work environment [orinstructional setting] or in the way things are customarily done that enables an individual with a disability to enjoy equal opportunities" (Costa, 2011). Similar to employment, reasonable accommodations are available for students with a qualifying disability by the Americans with Disabilities Act and later amendments (Souma et al., 2006). The types of educational accommodations used by students with SMHC include: extended time to complete assignments and tests, private feedback, and use of tape recorders in class (Salzer et al., 2008). Surveys have shown increasing awareness and use of educational accommodations over time among students with SMHC and use of accommodation are associated with better student outcomes (Salzer et al., 2008; Gruttadaro & Crudo, 2012). Barriers to accommodations use include:

- Lack of awareness of accommodations or their rights to receive them (Collins &

Mowbray, 2008; Dobmeier et al., 2011; Salzer et al., 2008)
- Fear of the consequences of disclosing their condition (mtvU, 2006; Salzer et al., 2008)
- Student disability offices that are ill-prepared to handle requests from students with SMHC (Collins & Mowbray, 2005; Collins & Mowbray, 2008)
- The "hidden" and episodic nature of psychiatric disabilities contributing to the need for creative and thoughtful assessment.

Research on student disability office practices suggests that the following practices are associated with higher enrollment of students with SMHC: staff in the office with a specific qualification in psychiatric disability, referrals to the office coming from student services, a specific and larger office, and access and knowledge of supported education services (Collins & Mowbray, 2008).

College-based mental health counseling. Counseling for students with a mental health condition is available to students on nearly all campuses. Such services are a frequently used resource for students with psychiatric conditions (The Jed Foundation, 2012). Campus counseling centers typically provide students free short term therapy or counseling, access to on-campus psychiatric evaluation and medication, and referrals to longer-term community mental health resources, and consultation to teachers and administrators.

The number and severity of problems among students seeking help from campus counseling centers are rising (Mowbray et al., 2006, Gallagher, 2012). Challenges that campus counseling centers face in addressing these emerging needs include: deficiencies in accessibility, issues related to confidentiality, emergency response capability, staff training in young adult development, and resistance from administrators to these centers embracing a truly therapeutic treatment role (Mowbray et al., 2006).

Several improvements for college counseling services have either been made (noted with a * from Gallagher, 2012) or recommended including:

- Making services easier to obtain (Watkins et al., 2012)
- Greater accessibility (such as weekend and evening hours) (Watkins et al., 2012)
- Using qualified mental health staff (not graduate students) (Watkins et al., 2012)
- Providing an on-call psychiatrist (Watkins et al., 2012)
- Better crisis management and prevention procedures/earlier identification*
  - Aggressive outreach (Watkins et al., 2012)
  - Anonymous online screening tools to enable campus mental health clinicians to reach out to students exhibiting warning signs (Watkins et al., 2012)

  - Communication campaigns as described above under campus culture (Watkins et al., 2012)
  - Peer counseling or peer education programs to take advantage of students' willingness to talk to peers (Watkins et al., 2012)
  - Providing 24/7 crisis teams or hotlines (Gruttadaro & Crudo, 2012)
  - Training, as described under Campus culture, especially around suicide issues (Watkins et al., 2012)
- Providing a complete diagnostic, psychosocial and functional assessment (Watkins et al., 2012)
- Providing seamless referrals to student health and disability services (Mowbray et al., 2006)
- More long–term services and expanded external referral networks*
- Improved coordination and follow-up with referrals to community based treatment (Watkins et al., 2012)
- Behavioral intervention team that meet to discuss students at risk or of concern (Gruttadaro & Crudo, 2012)
- Skills training for students to help them learn to tolerate and manage mild to moderate emotional discomfort without medication*
- Adjustments for changing student demographics*

Suicide prevention. There is little empirical examination of systematic college suicide prevention efforts (Joffe, 2008). One suicide prevention campaign has been evaluated. This campaign included a suicide prevention team, and mandated the use of a suicide incident report form, an assessment after incident, and four weekly counseling sessions following the incident. The team gave students with suicidal ideation consequences for not adhering to uniform university standards of "self-welfare" and "self-care". Team members also clarified for students referred for assessment that they may lose student status if they do not attend counseling sessions and if they had another suicide attempt. The evaluation examined the suicide rates over the 20 years during which the campaign was implemented and found a 45% reduction in the number of deaths by suicide among all students (Joffe, 2008). There were no comparable concurrent reductions in the county or for all other colleges.

An unevaluated, but notable college suicide prevention model comes from the JED foundation via their "Guide to Mental Health Action Planning". This guide describes a step by step program for mental health promotion and suicide prevention that targets social and environmental risk factors associated with student mental health. The guide includes steps that involve different levels of system change (e.g., campus policy, counseling center practices) (Jed Foundation, 2008; Joffe, 2008).

There are current federal efforts to identify and test strategies to reduce campus suicide rates, such as the Garrett Lee Smith (GLS) Memorial Act that has provided 74 college campus grants for suicide prevention efforts (Goldston et al., 2010), and the Campus Suicide Prevention program funded by the Substance Abuse and Mental Health Services Administration (Clay, 2011; Joffe, 2008). These programs support colleges and universities in their efforts to prevent suicide among students and to enhance services for students with depression, substance abuse, and other behavioral health problems that put them at risk of suicide. One such program is the "Student Support Network". This is a training program for student peer leaders (e.g., sports team captains, fraternity/sorority leaders) on recognizing mental health issues in students and providing that important first line of response (Morse & Schulze, undated).

Peer advocacy and peer support. An untested but promising strategy for supporting students with SMHC at college is college student peer groups on mental health issues. One such group is "Active Minds" a national organization of students that sponsors college based chapters. Through campus-wide events and national programs, Active Mind aims "to remove the stigma that surrounds mental health issues, and create a comfortable environment for an open conversation about mental health issues on campuses nationwide" (Active Minds, 2012). Another student peer group is "NAMI on Campus," which tackles mental health issues on campus. By joining a NAMI on campus club, students are part of a broader mental health grassroots movement, and are provided with direct support and exclusive access to national resources (NAMI, 2013).

In addition to providing peer groups on mental health issues, including the perspective of young adults in the decision-making process for design of new programs and policies can be an effective use of advocacy on campus. While not yet tested on a college campus, incorporating youth voice has been shown to improve student outcomes and the success of school reform in secondary education settings (Mitra, 2004). When the conditions are in place, involving youth in decision-making is a powerful strategy for positive change (Zeldin, McDaniel, Topitzes & Calvert, 2000).

Institutes of higher education may improve educational completion among students with SMHC through changes in policies, infrastructure, training, communication, coordination with surrounding services when needed, and improvements in disability office and counseling center services. The impact of specific approaches has yet to be measured in systematic ways.

III. C. Attempts to improve education outcomes by state agencies of vocational rehabilitation

State agencies of vocational rehabilitation (VR) are designed to promote employment of people with disabilities. When creating an Individualized Plan for Employment (IPE) VR will consider providing any service that is needed to achieve an agreed upon vocational goal, such as payment for education or training, including college tuition and related supplies (Whitney, Smith, & Duperoy, 2012). VR agencies are seen as one important resource for the transitioning of youth from special education to employment as adults. There are standards specific to youth as a special population in VR agency annual reports. Moreover, youth (ages 16 -24) represent nearly one third of the population that VR agencies serve (Honeycutt, Thompkins, Bardos & Stern, 2013), and on average 25% of the youth population served by VR has a primary disability that is psychiatric. For some states, youth with psychiatric disabilities comprises the largest proportion of the youth population served (Honeycutt, Thompkins, Bardos & Stern, 2013). Thus, there is a significant opportunity to increase young adults' educational outcomes through the VR system. Analysis of VR outcomes for 2011 shows a modest application of educational programming for young adult VR participants with psychiatric disabilities[2]. Approximately 10%, or nearly 3500, young adults with a primary psychiatric disabling condition served in VR (ages 14 – 26 upon entrance to services), were provided educational assistance for college. Among these young adult clients, 47.6% were successfully closed by VR services, meaning that they had achieved their IPE goal and had been employed for 90 consecutive days (the standard for VR closure of services). A comparison with 2006 data showed similar findings. Although, we do not know if the educational services provided were directly related to the later employment goal.

There may be significant opportunities for increasing young adults' educational outcomes through the VR system.

III.D. Attempts to improve education outcomes in supported education rehabilitation programs.

Supported education (SEd) can be broadly described as services provided largely to individuals with psychiatric disabilities, that enable a person to define an educational goal, pursue activities needed to achieve the goal, and then maintain those steps and activities until the goal is achieved (Soydan, 2004).

Service components of SEd can include educational counseling, assistance with financial aid, development of educational accommodations, preparatory coursework, assistance with organization of school tasks and activities, as well as others (Mowbray, Collins, & Bybee,

[2] Frank Smith. Personal Communication. Analysis of Vocational Rehabilitation State Agency Data, Institute forCommunity Inclusion, Boston, MA

1999; Waghorn et al., 2004). According to Waghorn et al. (2004), there are ten components of supported education: 1) coordination of supported education with mental health services; 2) use of specialized supported education staff (not just generic case managers); 3) availability of career counseling, vocational counseling and planning; 4) assistance with financial aid; 5) assistance to develop skills needed to cope with a new academic environment; 6) provision of on-campus information about rights and resources; 7) on or off campus mentorship and personal support during the educational training period; 8) facilitation of access to courses and within-course assistance; 9) access to tutoring, library assistance and other academic support; 10) access to general support (e.g., referral for mental health services).

Collins and Mowbray (2005) describe 4 models of supported education, some of which have been subject to research and evaluation:

- The classroom model in which students with psychiatric disabilities attend closed classes on campus designed for the purpose of providing supported education services;
- The onsite model which is sponsored by a college or university and provides supported education in an individual rather than group setting;
- A mobile support model that provides services through a mental health agency;
- And a more recent classification or model they call the "free-standing model," which is located at the organizational setting sponsoring the supported education program, such as a clubhouse or on site at a college.

For the most part, supported education models have been developed and tested in the adult mental health system, but may be applicable with adaptation for young adults. For example, the values and principles of supported education such as the need to develop educational goals, to exercise choice and self-determination, to develop skills and supports to achieve educational goals, may be applicable across the lifespan. However, the activities, the supported education providers, the likely educational settings, the means of supporting and communicating with young adults, all may differ. Existing supported education programs and services can be adapted so that they are instrumental in assisting young adults to re-engage with critical developmental tasks, to explore their vocational identity, to pursue educational roles and subsequent career development. Thus focusing on supported education among young adults appears to be a critical policy and research issue

Effectiveness of Existing Supported Education Models

In a recent systematic review of SEd programs and services, researchers found a dearth

of rigorous studies on SEd and very little data to support its effectiveness. There are numerous descriptions in the literature of innovative models of SEd service delivery (Isenwater, Lanham, & Thornhill, 2002; Lieberman, Goldberg, & Jed, 1993; Mowbray et al., 1999; Unger, 1993) but no randomized or quasi-experimental study which suggested that participation in an SEd intervention resulted in significantly greater educational attainment or vocational success (Rogers et al., 2006; Rogers, Kash-Macdonald, & Maru, 2010). In addition, many older studies focused on models that are no longer considered feasible or integrated (e.g., the "classroom" model) (Mowbray et al., 1999). In the one large randomized trial of SEd, Mowbray and colleagues found no significant difference in the employment rates at follow-up of individuals participating in a SEd intervention versus those not participating (Mowbray et al., 1999). Other uncontrolled evaluations of SEd have suggested improvements in employment and educational status as a result of participation in a supported education intervention but these data are methodologically weak and the majority of studies are not current (Best, Still, & Cameron, 2008; Cook & Solomon, 1993; Hoffmann & Mastrianni, 1993; Unger et al., 1991; Unger, Pardee, & Shafer, 2000; Unger & Pardee, 2002). Missing in the literature are longitudinal tests of supported education on the longer term impacts, especially for career outcomes.

Studies and data speak to the need to develop and test new models of supported education. More recently, measures of the fidelity of supported education interventions have been developed (Manthey, et al., 2012; Unger, 2013) which may be useful in guiding program development and assessing outcomes. However, no published research studies could be found that incorporate these fidelity measures to date.

Anecdotally, SEd is viewed as a viable intervention for many individuals to meet their goals for educational advancement, personal development, and better jobs (Mowbray, Bybee, & Shriner, 1996), but the data are insufficient to strongly support these assertions. Studies and data speak to the need to develop and test new models of supported education. In addition, the majority of studies on supported education have been carried out with adults in the mental health system and there is no evidence or information testing the effectiveness of these interventions with young adults.

Need for new models and research that focuses on the young adult

There are several studies underway that promise to provide more methodologically sound data. This includes a program housed at UCLA that integrate supported employment (see related paper on career development supports) and SEd for persons with recent onset schizophrenia (Nuechterlein et al., 2008). A simple version of integrated SEd and supported employment for early psychosis has produced positive vocational outcomes in a small randomized trial in Australia (Baksheev et al., 2012). The NIMH-funded RAISE

project (Recovery After Initial Schizophrenia Episode) has a SEd component within a quasi-experimental study, but no data are currently available on the effectiveness of those services[3] Most individuals in early stages of schizophrenia are young adults. A recently funded randomized study of SEd (Salzer, 2013) with a special emphasis for young adults is also underway (Transitions Research and Training Center, 2012), but effectiveness data are not yet available. The Center for Psychiatric Rehabilitation is conducting an exploratory study of a combined supported education and employment model service delivery for young adults, but that study is underway and does not yet have information about its effectiveness.[4] Also, supported education trials to date have not focused on specific sub-populations of young adults with psychiatric disabilities, such as those emerging from foster care or from juvenile justice systems.

Supported education has the potential to address normal young adult developmental tasks, prepare young adults for careers rather than minimum wage jobs, and perhaps disrupt the path of disability and poverty. Adaptations of SEd for young adults is needed as is rigorous testing of specific SEd models, with longitudinal examination of career outcomes.

IV. LESSONS LEARNED

We summarize the numerous "lessons learned" and next steps in promoting the educationalattainment and eventual employment success of young adults with psychiatric disabilities.

- Policy innovation in special education appears to have had a beneficial impact on high school students with SMHC, through the precise "active ingredient" of this innovation is unknown.
- Nonetheless high school and post-secondary outcomes of students with SMHC still lag behind those of the general population as well as behind other disability groups.
- Students with SMHC are increasingly on college campuses, but college campuses seem unprepared to assist with the challenges these students face.
- The literature includes descriptions of a variety of strategies to support students with SMHC on campuses, but almost none are tested.
- Supported education needs considerable innovation and testing to assure that is a feasible,appealing service for young adults with SMHC, as most studies were completed with mature adults and with adults in the mental health system.

[3] E.S. Rogers, Personal communication with Kim Mueser on status of the RAISE project, August
[4] E.S. Rogers, Personal communication with Dori Hutchinson, on the Supportive Employment and Supported Education project, August 2013.

- Further innovation is needed for those young adults who are transitioning from foster care and juvenile justice systems.

- There are virtually no supported education studies that capture long-term outcomes including degree completion or especially career outcomes.

V. NEXT STEPS FOR RESEARCH

The information gleaned from labor statistics, developmental psychology, surveys of campus mental health issues, and information about both education and employment for young adults with mental health conditions, point to the strong need for:

1. Additional data about the barriers to and facilitators of increased educational attainment for youth.
2. New models of services that address the needs/wants at this stage of life, for example:
    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, for example:
    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

"front line" staff and faculty, anti-stigma campaigns, and campus "mental wellness" programs.

c. Campus based supports for students with SMHC e.g., educational peer support, campus mental health counseling centers, provision of educational accommodations, and student disability support services.

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SUMMARY OF RESPONSES TO PAPER: "SUPPORTING THE EDUCATION GOALS OF YOUNG ADULTS WITH PSYCHIATRIC DISABILITIES"

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8/5/13

The following reflects the reactions of the seven reviewers. Most comments were made by a single reviewer. Attempts were made to indicate when comments were made by more than one reviewer. I did not identify any conflicts in the comments made by the reviewers. Most reviewers commented on the incredible complexity of the issues that are being discussed and the lack of depth in many places.

Strengths and key points of agreement

- Excellent synopsis of the importance of higher education to employment.
- Good discussion of the current state of educational attainment for this population.
- Described great resources and programs that will be helpful for young adults.
- Good start at a review of lessons learned and future research directions.

Identify any omissions and why important

- One reviewer commented on the significant heterogeneity of the target population and the need to adequately address this heterogeneity.
- Concerns were expressed about the brevity of the review of the current literature and brief section on lessons learned and next steps for research.
- There was concern about mentioning programs where there is no peer-reviewed research (e.g., Active Minds, etc.). Could mention, but express caution about the lack of demonstrated effectiveness. The description of efforts by post-secondary educational institutions includes lists of possible policies and recommended lists to improve general mental health and barriers to accommodation. If this is a summary of the "state of the science" in this area, we can say that the work is in the pre-scientific phase. No data are presented, no analytic framework, and no conclusions about what appears to work.
- Provide more of a discussion in the introduction about the importance of higher education for career development rather than just focusing on employment.
- At least two reviewers commented that the mention of suicide on page 2 seems disconnected from the rest of the Introduction. This is an important topic that needs to be effectively connected.
- Good SEd should actually be similar for young adults and mature adults. Not sure that adaptation for young adults is necessary. A stronger case needs to be made, with evidence, if you are advocating for adaptation of current SEd models for young adults.
- The section on the role of the state VR system in helping young adults achieve educational goals provides the statistic that about 10% of all young adults with a primary psychiatric disabling condition receive help with educational goals and that almost half of these "achieve" their educational goal. While these data are informative, they do not provide much guidance regarding policy recommendations, nor do the authors offer any

insight whether VR's role is relatively minor or major or whether VR should do more, do less, or continue as is.

- There is a good review of the SEd outcome research, but more attention is needed on the program models studied, the fidelity scales used (or not used) to assess adherence, the designs and outcome measures used, or the actual findings.
- One reviewer made some suggestions on additional areas to cover and references to add
  - More rigorous review of recent early psychosis literature, which includes an accumulating number of rudimentary program evaluations and rigorous studies (Rinaldi et al., 2010).b Miles Rinaldi in England, Geoff Waghorn in Australia, Tamara Sale in Oregon all have pertinent data. Killackey now has two recent studies (Killackey et al., 2012; Killackey, Jackson, & McGorry, 2008). My reading of that literature is that, outside Nuechterlein's study, early psychosis programs have a disappointing track record in the education area. But a careful systematic review is needed.
  - There have been a couple surveys attempting to document the prevalence of support education in the mental health field; these data seem pertinent (Manthey et al., 2012; Mowbray, Megivern, & Holter, 2003).
  - Linda Carlson and colleagues have made trenchant comments regarding the difficulty measuring outcomes in this area (Carlson, Eichler, Huff, & Rapp, 2003). Also should include a solid review by Chandler (2008).
- First section switches back and forth between data for students served in special education, general college student population with mental health needs, and those with new diagnoses versus those with long histories of psychiatric disabilities. Related to this, it needs to be clear that the paper is focusing on addressing the educational needs of students with mental health issues rather than the mental health needs of students. The mention of suicide and counseling programs on college campuses, for example, seems to confuse the reader on the focus of the paper. If it is the latter, than need to mention the numerous school-based mental health programs in secondary educational settings.
- Expand discussion about the mechanisms used to help the 48% served by VR to obtain their education and or employment goals. Additionally, do VR counselors have specific training on how to best meet the educational/vocational needs of transitioning youth adults with serious mental health conditions? In general, more discussion about how VR can uniformly support educational goals could be useful.
- Include the mention of more peer and self-advocacy programs.
- Need to provide a more detailed discussion about the rationale for targeting young adults separately from more mature adults. What are the developmental factors and illness career factors that make this specific focus important?

Present the points of views of special considerations (some of the topical representatives)

- Document was easy to read and was written very clearly, which is very important to multiple stakeholders who are not necessarily researchers
- Perspectives of young adults need to be considered in the design of new programs, especially program goals.
- More attention is needed on the potential impact of racial, gender, and other sociodemographic factors on educational attainment for this group, especially identifying potential disparities.
- More attention is needed to students from marginalized cultural groups as students who are over-identified or under-identified for Special Ed services.
- Interventions must attend to cultural differences.

Final summary, what we still need to know/research

- More than one reviewer believes that if supported education is ever to move beyond description, and conduct higher quality outcomes studies, than researchers will need to rigorously define program models. Unger's fidelity scale is widely used, but there are others (e.g., Manthey et al., 2012). More work is needed to define and measure the critical ingredients. Evaluations of the effectiveness of programs need to consider the perspectives of young adults.
- What is the policy innovation in special education that has had a beneficial impact? Are you suggesting that having a transition plan in place by age 16 is the key? What do we know about these transition plans? Who do they work for and what should be included in them?
- Need research on the lack of academic preparedness of classified students in high school and the need for higher academic standards and early vocational preparation for this group
- Need more research and discussion about lack of knowledge/skill of the students with SMHC advocate on campus, i.e, Office of disability services, and the potential long-term impact of lack of advocacy, expertise and protections for this group on campus.
- More research is needed to examine differences in educational attainment, access to services, outcomes, etc. by gender, race/ethnicity, socioeconomic status to identify disparities.

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ADDENDUM TO THE EDUCATION DOMAIN.

This addendum provides a summary of the salient points discussed during the state of the science conference presentation on the education domain. We review the discussion by the audience and break-out groups, break-out group balloting results, and present final conclusions for future research directions.

State of the Science conference audience and breakout discussions. Several overall themes emerged from the audience discussion. There was widespread affirmation and recognition of the importance of higher education and training for career development for young adults with SMHC. At the same time there were passionate recountings of the many profound obstacles to academic /training completion, derailing many dreams of achieving ones potential in schooling and employment. The audience seconded issues of how concerns about stigma will prevent student help-seeking, academic policies that were inflexible and punitive, campus mental health counseling that was unable to respond to significant mental health needs, and student disability offices that lacked knowledge of how to accommodate mental health conditions. The audience also noted the profound lack of rigorous research in this area and the need to specify education models and outcomes to promote better testing and to establish evidence for practices.

Discussions in the break out session touched on many of the numerous and complex issues raised in the presentations and papers. Among them was the importance of including vocational/technical secondary and post secondary training in any education research going forward. The audience was interested in a better understanding of what state vocational rehabilitation agencies can do to support those with education goals. Workgroup members also stressed that viewing educational supports through a cultural lens was imperative to understanding disparities and "what works for whom". Workgroup members were interested in promoting self-advocacy skills, and in attention to building networks of support among students with SMHC, and to improve outreach and engagement of these youth with available supports. Needs for better knowledge about transition planning for secondary schools to higher education was noted as was preparing students for the absence of supports in post-secondary schools relative to special education supports in high school.

Balloting results. During the breakout session in which there was balloting , among 14 research needs listed on the ballot, the one with the highest number of endorsements was the need for longitudinal follow-up studies of supported education through post secondary education and training and through to employment (N=14). Such studies could empirically test the assertion that supported education will eventually lead to greater employment and career achievements. Very close behind this research need (N=13), was endorsement of

the need for rigorous evaluation of innovations to campus culture (such as better training of staff, anti-stigma campaigns, or improved communication of mental health needs.) Four other research needs were rated highly rounding out the upper half of research needs endorsed: a) examining differences in educational attainment by culture and demographics to better identify disparities in educational attainment (N=11); b) testing models of supports that combine supported education and supported employment (N=10); c) developing more supports for high school dropouts with SMHC (N=9); and, d) assessing the impact of improved self-advocacy and peer supports on student outcomes (N=9) .

Conclusions for future research directions. Taken together, the overall conclusions were that there is a need for more research in the education domain at all points in the education trajectory (secondary, transition from secondary to post secondary, and within post secondary colleges and training programs, through to later employment and career development). There is a need for research that examines the effects and outcomes on the individual level (such as disparities according to individual characteristics or individualized rehabilitation strategies such as supported education) as well as how external and environmental supports (such as stigma reduction and improved campus policies) can improve student achievements. Problems for the conduct of this research reside in need for greater specification of intervention models and of educational outcomes. A problem that bedevils education research is that the outcomes tend to be long in the making (such as college completion) whereas research funding tends to be more time limited. Nonetheless, there is a call to find a way to conduct longitudinal research for this domain.

EDUCATION TOTALS TALLY

	Orange Mark Salzer	Green Nancy Koroloff	Blue Chuck Lidz	Red Krista Kutash	Yellow Kathryn Sabella	Total
1. Additional information about the barriers to and facilitators of increased educational attainment for youth and young adults such as:						
1a. Examine differences in educational attainment, access to services, outcomes, etc. by gender, race/ethnicity, and socioeconomic status to identify disparities	4	2	1	3	1	**11**
1b. Discern the "active ingredients" responsible for recent gains in special education outcomes among students with serious emotional disturbance		1	1	1	2	**5**
1c. Examine transition plans for special education. Are they effective, who do they work for, and what should be included in them?				1	2	**3**
2. New models of educational support services that address the needs of this stage of life:						
2a. Assess the impact of higher academic standards and early vocational preparation			1			**1**
2b. Develop more supports for high school dropouts with psychiatric disabilities.		1	3	4	1	**9**
2c. Combine supported education and supported employment to address the many needs of young adults with psychiatric disabilities (such as needing to alternate between school and work, or do both simultaneously).	1		3	4	2	**10**
3. Specification and rigorous testing of supported education services for young adults:						
3a. Clearly describe supported education program models and its components in order to be able to conduct replicable and rigorous tests	1	1				**2**
3b. Adapt supported education models and test them among difference populations of young adults with psychiatric disabilities (high school drop-outs, foster care, criminal justice involvement) and in systems other than mental health.	1	1	1	1	2	**6**
3c. Adapt supported education for secondary education to have a remedial focus and thus improve high school completion rates				2		**2**
3d. Conduct long-term longitudinal follow up studies of supported education services through college completion (certificate/2year/4yea) and through to employment and career launch	6	1	4	3		**14**
3e. Consider the perspectives of young adults in all evaluations and research of supported education services		3	1	1		**5**
4. Rigorous evaluation of innovative approaches that support students with psychiatric disabilities on campuses:						
4a. Modify and test campus mental health policies so as to better support the retention for students with psychiatric disabilities	1	2			1	**4**
4b. Implement changes that effect campus culture such as communication strategies, training of staff, anti-stigma campaigns, and campus "mental wellness" programs.	3	6	3		1	**13**
4c. Improve and assess the impact of greater student self-advocacy and peer supports on...		2	2	3	2	**9**

Write in's/Question Edits/Flipchart Notes By Group:

Orange	**Write In's:**
	• None
	
	Question Edits:
	• 1a. Add "culture" (noted 2x)
	3a. For other educational efforts other than college
	• 3d. Add "any post education" (noted 2x)
	• 3d. Add "Vocational/Technical (noted 2x)
	• 4. Add all post secondary education
	• 4b. Add "culture"
	
	Flipchart and Notes:
	• Rehabilitation rights
	  ○ How do we change the college campus especially for students with PD?
	  ○ Networks to change campus disability services common
	  ○ What are the barriers and facilitators?
	• What are the service supports needed of students with PD?
	• What are the learning designs and supports (e.g. WDL) that can increase access to all students
	• What supports are being eliminated resulting from FERPA
	• What are the implications of when parents attend service meetings
	• Topics are not helpful when applying the cultural lens (e.g. tribal community)
	• What are the considerations of culture and race
	  ○ Considerations of when one leaves their community and are in environment where they are considered "other)
	• Large discussion of dead end jobs and career development
	• How do we change campus culture? This includes disability workers
	• What are universal design supports and learning methods that can be utilized by students with SMHC
	• Looking at new models focused on choices and self-determination

Green	**Write In's:** • Understanding skill set young adults with PD will need to self manage, advocate and participate in institution
	Question Edits: • 1b. Is this specific to Wagner? • 1d. Functional classifications needed because diagnosis information is needed • 3e. Should engage young adults in all levels • 4b. Examine models of family support • 4b. Assess capabilities to self advocate via Myers Briggs • 4b. Who is taking psychiatric disability well on campus? • 4e. How can you preserve confidentiality and still incorporate perspectives of family in supporting students? • 4b should add faculty and staff. **Flipchart and Notes:** • Who is doing PD well across all educational environments • When we refer to educational attainment should refer to all post secondary educational settings and not just college. • Can we get access to functional information from large datasets that are often used to address questions about education and functioning? • Transition plans should include health related goals and concerns • We need to consider alternative modes of education—what are the alternative models in HS and beyond and how do we support people in those alternatives? Examples are online forms of high school and post secondary ed. Long list of testing SEd • Need a participatory approach to conducting research-need to involve young adults in research and design of services. • Need to better identify kids in public schools who are at risk for failing particularly for reasons due to their psychiatric disability. • How do we change the culture of campuses? • What about characteristics of students themselves that allow them to advocate for themselves to get needed support? • We need to extend the support in #4 to be across educational environments not just campuses.
Blue	**Write In:** • More Research on the impact of family support and connectedness • Assess(?) role of engaging students (17-22) in social ____ development (writing issues) • Assess(?) impact of work-based learning, career exploration, career planning (writing issues) **Flipchart Comments:** • Trauma informed issues: what is the role of trauma in education? • Supported education at a high school level

	• High school dropout rates are high: why is it so high and how do we work on prevention? • Research on youth and t-he impact of family support • Youth involvement- helping to identify what works and what is helpful • What is the key to engagement and how do we use engagement and technology to reach youth?/how do we create social connectedness in youth? • Research needed on on-campus groups (i.e. Active Minds/NAMI on campus) • What modalities of learning work best with this group (pd)? • What happens with lots of high school supports dropping to no supports after high school? • Follow up with dropouts- what are they doing with their time • How to improve resilience in YA's • How do you create community connection and engagement • Is there a higher rate of success in young adults if there is social community connectedness?
Red	**Write In's:** • Combine supported education and supported employment **Question Edits:** • 1a. Add "expectations" • 1b. What we learn could help us reach those we don't know about potentially • 3b. Change among to "within" different population groups • 4c. Add design
Yellow	**Write In's:** • Stakeholder driven research CBPR • Look at the general population for key elements then divide into A based specifically on that • Base 2 on the supported employment en-base • Career technical education • Transitions between environments: I.e. high school to college • What does the research tell us about factors that generate problems and success • Elements from supported employment that can be generalized/combo since supported employment has better en-base **Question Edits:** • 2. Base on supported employment en-base • 3. Don't do because there's not a model unified of supported education

	Flipchart and Notes: • Stakeholder- driven needs assessment, what are the processes we need to target? • ID elements for supported employment that can be generalized to supported education or combined due to large evidence base of supp emp. • Does the research tell us what factors generate/sustain education/work problems and education/work successes? Especially general population research • Develop intervention that targets those factors (in bullet above) using ways that the individual can target the factors (individual meaning the EA and family/adult allies) • Non college assistance seem to be missing. Technical education? Is this under supported employment umbrella? • Self-determination issues: effective transition planning needs to include specific skill development • Secondary Education level mental health needs of youth not identified in special education • Looking at community colleges and veterans • Difference in disorders and outcomes, programs that work for each