Supported Education for Young Adults with Psychiatric Disabilities

by

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ABSTRACT

The purpose of Supported Education Student Survey study was to calculate the prevalence of psychiatric disabilities and assess the current need among Arizona State University undergraduates who identified as having a psychiatric disability. Three research questions were used to guide the study: what is the prevalence of psychiatric disabilities, student's active involvement in treatment, and the current service utilization and unmet needs for this specific population of students. An online survey was distributed to 2158 undergraduate students who were enrolled in one of the courses; PSY 101, SOC 101, SWU 171, and COM 100. A total of 76 students participated in the online survey. The prevalence of psychiatric disabilities within the total student sample, consisted of 25 (33%) students who self-reported as having been formally diagnosed by a medical professional with a psychiatric disability and an additional 41 (54%) students indicated that they had informally diagnosed themselves with a psychiatric disability. Results for active involvement in treatment showed that just over 13 % of the total student sample is currently in treatment, although twice as many had received treatment in the past. Close to 90% of the respondents report that they have never disclosed their disability to ASU faculty or staff members – presumably including staff in the Disability Resource Center, the Counseling Training Center, or the Student Health Center. Three out of the four primary areas offered in a Supported Education Programs Career Planning, Academic Survival Skills, and Direct Assistance were identified by the student sample as a potential resource to help supplement students with psychiatric disabilities current unmet needs.

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Statement of the Problem

Over the past few decades, the number of individuals diagnosed with a psychiatric disability has been rapidly growing. Mental Health America 2016 report states that approximately 43,778,000 people in the United States have been identified as having some form of mental illness. The first episodes of psychosis typically happen between the ages of 14 and 25 (NAMI, n.d.), impacting adolescents and young adults all over the country during their most crucial developmental stages of forming their identity and planning for their future. Many of these individuals go untreated, allowing for their emotional disturbances or mental illness to metastasize over time. Thus, young people's ability to attain economic and social independence is greatly affected, feeding into the unfortunate cycle of dropping out of high-school or college, increasing unemployment rates which often leads to higher chances of poverty, isolation, homelessness, substance abuse, involvement in the criminal justice system, and other social problems (Auerbach & Richardson, 2005).

Mental health issues affect people from across the spectrum of race, ethnicity, gender, sexuality, and socioeconomic background. Commonly, psychiatric disabilities are developed due to a combination of inherited traits and/or environmental exposure such as brain chemistry, pre-natal exposure, traumatic life events, etc. Psychiatric disabilities cover a wide range of conditions including schizophrenia, bipolar disorder, anxiety disorders, body dysmorphic disorders, and those that can be found in the Diagnostic and Statistical Manual of Mental Disorders (DSM-5). People with psychiatric disabilities do not only need to overcome their own personal barriers brought on by having a disability,

but are faced with external challenges and barriers such as social stigma, discrimination, and a variety of systematic flaws which can often lead to societal and personal perception of one being unworthy and/or incapable of living a meaningful life.

Individuals with psychiatric disabilities have proven over time their ability to maintain and live a sustainable and meaningful life much like the general population when they are provided with the proper tools, treatment, and support. For people living with a psychiatric disability, being actively engaged in their community through employment, being a student, and/or being part of club or organization greatly increases and promotes ones' health, recovery, and overall wellbeing (Herrman, Saxena, & Moodie, 2005). Despite this fact, many young adults with a psychiatric disability are still faced with inconsistencies, inaccessibility, or lack of proper prevention methods, intervention methods, support systems, treatment management plans, and/or academic attainment. One of the critical requirements to maintain and sustain a meaningful life is to gain employment. Most professional and skilled-based jobs that offer financial stability and job security now require some form of advanced degree and/or training (Unger, 1993). Currently, 60-80 percent of people with a psychiatric disability are unemployed and those who have been diagnosed as having a serious mental illness have a 90 percent unemployment rate ("Unemployment, " 2010).

The high unemployment rate of people living with a psychiatric disability could be due to the lack of support and resources throughout their college career that contributes to their inability to complete a college degree. Over four million young adults in the U.S. were unable to graduate from college due to an early onset psychiatric

disability (Mowbray et al., 2005). According to Mowbray et al. (1999), an average of 35% of individuals with psychiatric disabilities enroll into postsecondary education, but only 8% completed some course of study; compared to a 27% completion rate for others with disabilities such as hearing, visual, and other health impairments (Soydan 2004). Moreover, the high withdrawal rate indicates people with psychiatric disabilities are eligible and capable of operating in postsecondary institutions. However, the withdrawal rate suggests the institutions lack the supports necessary for students to sustain their higher academic pursuit to completion.

In theory, if young adults with psychiatric disabilities are provided the proper support, tools, and treatment management throughout the time they are pursuing their postsecondary education and/or training, they are more likely to complete their degree and/or certifications, allowing them to acquire opportunistic employment; in turn, this will lead to better overall life outcomes. The primary mission for implementing a supported education program is to empower the students to decide their own higher education direction and goals by gaining the tools necessary for them to complete tasks contributing to their postsecondary education, reach their highest potential, and be successful in their endeavors (Mowbray et al., 2005). Supported education program theory is to "engage students in the program through support and reassurance; to provide opportunities to develop a new, positive identity as student in contrast to the stigmatized role of psychiatric patient; and to enable students to take control of their disability, their environment, and their futures through knowledge and skill building practice (Mowbray et al., 2005)." Supported education programs addresses the gap that exist for people

living with a psychiatric disability, by providing them the proper support needed for them to successfully complete their college education.

Arizona State University is one of the largest universities in the country, and has the proper resources and capacity necessary to play an intricate role in provided such a program to this unique and capable population. The aforementioned problem and literature on individuals with psychiatric disabilities suggests there is value in developing a needs assessment for currently enrolled ASU students who could benefit from the implementation of an on-site supported education program.

The proposed needs assessment will address three indicators of implementing a supported education program at Arizona State University through three research questions:

- 1. Among currently enrolled ASU undergraduate students, what is the self-reported prevalence of psychiatric disabilities?
- 2. Among currently enrolled ASU undergraduate students, what is the current rate of active involvement in treatment for psychiatric disabilities?
- 3. Among currently enrolled ASU undergraduate students, what are the unmet needs in academic pursuits for students with psychiatric disabilities?

Literature Review

Emotionally Disturbed Children

Children are often shaped by their environment, education, and social exposure.

There are many moving parts that influence who the child will become as an adult and the impact they will have on society. Many disparities still exist for children who are born into unfortunate circumstances or are perceived to be outside the social mainstream. At a

very early age, these children are forced to endure many obstacles, which they must overcome to meet social norms and become contributing members to society.

Children with disabilities categorized as having an emotional disturbance have been identified in growing numbers over the last few decades. In the 2012-13 year, they found that 6.43 million or 12.95 percent of public school students were receiving special education services in the United States (Kena, Musu-Gillette, & Robinson, 2015). Out of the 12.95 percent of students receiving special education services, 6 percent or approximately 3,840,000 students were placed under the category of emotionally disturbed (Kena, Musu-Gillette, & Robinson, 2015). The World Health Organization predicts that by the year of 2020, mental disorders among youth are expected to rise by over 50% internationally, leading it to be one of the five most common causes of morbidity, mortality, and disability (National Institute of Mental Health, 2002). The implication is that youth identified as emotionally disturbed has considerably increased and has been recognized as a global problem in which the United States has made efforts and modifications to policy and procedures on how they address the primal effects for children with emotional disturbances.

The Individuals with Disabilities Education Act (IDEA) was enacted in 1975 and is formerly known as the Education for All Handicapped Children Act (EAHCA), which "mandates the provision of free and appropriate public school education for eligible children and youth ages 3 through 21 (Kena, Musu-Gillette, & Robinson, 2015)." The federal definition for the special education disability category of emotionally disturbed (ED) is stated as follows:

"Exhibiting one or more of the following characteristics over a long period of time, to a marked degree, and adversely affecting educational performance: an inability to learn which cannot be explained by intellectual, sensory, or health factors; an inability to build or maintain satisfactory interpersonal relationships with peers and teachers; inappropriate types of behavior or feelings under normal circumstances; a general pervasive mood of unhappiness or depression; or a tendency to develop physical symptoms or fears associated with personal or school programs. This term does not include children who are socially maladjusted, unless they also display one or more of the characteristics (Kena, Musu-Gillette, & Robinson, 2015)."

Children and adolescents in general have proven to be impressionable and commonly seek acceptance and validation from those around them in their pursuit of personal identity and recognition of their own ability. Children given the label of "emotional disturbance" are confronted with a range of personal and social perceptions pertaining to their thoughts and behaviors. Negative feedback for these children and adolescents may lead to self-loathing and self-deception regarding their purpose.

Mowbray, Megivern, and Strauss (2002), demonstrated that when adolescents spoke of their own personal experiences of having an emotional disturbance, they often mentioned the following: "suffering and desperation; their sense of being 'marked,' invisible or very alone; their awareness of 'going crazy' and being 'such a disappointment'; and their traumatic encounters with providers." Students with emotional disturbances are often seen as misfits, which diminishes their own strengths and causes them to overlook their overall potential. Students with emotional disturbances often display poor social skills

and have a high incidence of disciplinary action at school, 72.9 percent of 13 through 17-year-olds with ED were either suspended or expelled from school, often more than once (Wagner et al., 2003). The National Longitudinal Transition Study-2 (NLTS-2), provides insight into some of the existing conditions for students with ED, reporting that 45.6 percent of high-school aged ED students were taking some form of disability-related medication, including stimulants (28.8 percent), antidepressants (28.9 percent), mood stabilizers (12.5 percent), antipsychotic (11.5 percent), and seizure medication (7.7 percent; Wagner et al., 2003).

Youth with ED commonly display untraditional behaviors at school that greatly influence their overall academic development and success. Social development for students with ED can be compromised due to delayed maturity and moral irregularities, which in turn can impact their capability of forming positive relationships, academic achievement, and social acceptance. Youth with ED may also display cognitive impairments like those evident in people who been categorized as having a learning disability. The National Longitudinal Transition Study-2 (NLTS-2) reported that youth identified under the category of emotional disturbed (ED) had co-occurring disabilities; 29.9 percent of them also had a learning disability and 63.1 percent of them had attention-deficit/hyperactive disorder (Wagner et al., 2003).

Youth who qualify for special education services in high school are federally required to receive accommodations, supports, and services designated to help special education students operate successfully while in school and prepare them for transitioning into young adulthood (Levine, Marder, and Wagner, 2004). Transitioning

youth (adolescents transitioning into young adulthood) with emotional disturbances (ED), who are provided no safety net after completing high school, may not become productive members in society; which, in turn, can lead to a high cost to society. The Wagner et al., 2015 study noted that more than 40% of young adults with ED, who had received services while attending high school, reported having unmet service needs after high school. In the same study, one third of the young adults with ED reported receiving absolutely no services after high-school, primarily because of the lack of information about how to obtain services (Wagner et al., 2015). An earlier study found that 72.8 percent of high school ED students reported having continued need for supports and services beyond high school; 41.6 percent identified the need for postsecondary accommodations; 38.7 percent needed vocational training, placement, or supports; 20.8 percent required behavioral intervention; 12.2 percent sought other mental health services; and 11.0 percent desired social work services (Cameto, Levine, and Wagner, 2004). Even though these needs were identified in the ED students' high school transition plans, parents described their children's post high school experience as analogous to "dropping off a cliff" as services were seemingly cut off (Stewart, Law, Rosenbaum, and Williams, 2001, p.13).

A successful transition into young adulthood is generally defined by society as having achieved educational goals and secured gainful employment, independence, financial stability, and social acceptance. As described in the literature, youths with ED can be troubled and discouraged as they transition into the adult world, which affects both the individuals and their family members. Because of the lack of collaboration

among mental health providers and services, these young adults are unable to easily find and maintain the support needed. Adult services have become a labyrinth of medical, social, and vocational rehabilitation (VR) systems (Committee on Disability in America, 2007), especially for young adults with disabilities and their family members (Revel, & Miller, 2009). Mann and Stapleton, 2012 described our systems as a "patchwork of state and federal disability support programs [with] pervasive inefficacies, including overlaps and gaps in services, misaligned incentives, and conflicting objectives." Adult services have reportedly been ill-prepared to serve the on-going needs of young adults with disabilities (Ward, Mallet, Heslop, & Simon, 2003).

Early prevention, support, and recovery are the key elements when helping individuals with psychiatric disabilities maintain stability throughout their life. When transitioning youth with emotional disturbances (ED) leave high school, they are forced to make decisions that will greatly impact their lives and future endeavors. Without the proper support systems or services in place, they are often left in limbo, delaying their progression toward seeking higher education or vocational training in preparation for gainful employment.

Education and Employment

Education attainment for anyone is shown to have a direct correlation with unemployment rates and earning potential. The United States Census Bureau, through its population survey, evaluated education attainment in the U.S. for the year of 2015 and their findings are cited in the following table.

Earnings and Unemployment Rates by Education Attainment, 2015		
Education Attainment	Median usual weekly earnings	Unemployment rate
Less than high school diploma	\$493	8.0%
High school diploma	\$678	5.4%
Some college, no degree	\$738	5.0%
Associates Degree	\$798	3.8%
Bachelor's Degree	\$1,137	2.8%
Master's Degree	\$1,341	2.4%
Professional Degree	\$1,730	1.5%
Doctoral Degree	\$1,623	1.7%
All workers	\$860	4.3%

^{*}Age 25 and over. Earnings are for full-time wage and salary workers.

The statistics show that people have significant increases in their weekly income after receiving a bachelor degree or higher, and are less likely to be unemployed.

The IES National Center for Education Statistics (Institute of Education Sciences) report showed similar findings when reviewing the annual earnings of young adults between the ages of 25 and 34 and unemployment rates for the same population, as shown in the following table.

Annual Earnings of Young Adults		
Median Annual Earnings for 25 to 34-year-olds		
Year	2012	2013
Total	\$38,600	\$40,000
With less than high school completion	\$23,200	\$23,900
Who completed high school as highest level	\$30,400	\$30,000
Who attained a bachelor's degree or higher	\$50,700	\$50,000

[&]quot;In 2013, young adults with a bachelor's degree or higher earn more than twice as much as those without a high school credential (\$48,500 vs. \$23,900) and 62 percent more than those that completed high school (\$48,500 vs. \$30,000)."

^{*}Source: U.S. Bureau of Labor Statistics, Current Population Survey

^{*}Source: IES National Center for Education Statistics (Institute of Education Sciences) The Condition of Education 2015

Employment Rates and Unemployment Rates by Educational Attainment			
Unemployment rates of 25 to 34-year-olds			
Year	2012	2013	
Total	8.0%	7.4%	
With less than high school completion	15.1%	13.7%	
Who completed high school as highest level	12.1%	10.5%	
Who attained a bachelor's degree or higher	3.6%	3.7%	

^{*}Source: IES National Center for Education Statistics (Institute of Education Sciences)
The Condition of Education 2015

The IES National Center for Education Statistics (Institute of Education Sciences) display significantly higher annual earnings among people with a bachelor's degree or higher, earning 20,000-dollar more in 2013 when compared to those who had only received a high school diploma. The unemployment rate in 2013 was 6.8 percent lower for those who had attained a bachelor's degree or higher, compared to those who had only completed high school.

The United States Census Bureau and The IES National Center for Education Statistics (Institute of Education Sciences) both demonstrate the relevance of higher education as it relates to the likelihood of securing employment and receiving substantially better earnings.

Employment. Disruptions in education for people with psychiatric disabilities often results in deficiencies in the basic academic skills needed for one to be successful in the current workforce (Bountin and Accordino, 2009). In the United States, 60 to 80 percent of people with psychiatric disabilities are unemployed, and those who have been diagnosed with serious mental illness have a 90 percent unemployment rate

("Unemployment, " 2010). In Arizona, the unemployment rate among people with mental illness is 82.9% (NAMI, 2012). Because individuals with mental illness often lack postsecondary education, employment opportunities for affected individuals are commonly short-term or low-paying positions, which typically lack employer-provided benefits such as insurance and retirement (Smith-Osborne, 2005). It consequently puts these individuals at risk of living in poverty (Loprest and Maag, 2007). Because lower wage earners tend to draw upon government assistance like the Supplemental Nutritional Income Program and Medicaid, finding a solution for these individuals to become selfsufficient through higher wages quells the burden on taxpayers. Young adults whose opportunities are hampered by psychiatric disabilities do not only suffer as individuals, the larger society suffers when these individuals are unable to become fully-utilized contributing members to the workforce and economy. According to the Arizona Health Care Cost Containment System (AHCCCS) 2015 Annual Report, 19,957 people with serious mental illness were enrolled in the state Medicaid program. Allowing the tens of thousands of people with mental health conditions on AHCCCS to successfully attain postsecondary education and gainful employment could reduce the high costs of Medicaid on Arizona taxpayers.

The United States spends annually approximately \$70-billion dollars in direct cost to treat severe psychiatric disabilities (Chavez et al., 1999), with an additional \$80-billion spent on indirect costs, including but not limited to lost wages and productivity, caregiving, and suicide prevention (National Alliance of Mentally III, 2002).

Individuals with psychiatric disabilities and the general population alike believe that employment is valued by our society, because it provides steady income, creates social relationships, improves status and acceptance in society, provides a sense of purpose and/or focus, encourages productivity and usefulness to others, affirms personal worth, and encourages personal development opportunities (Fossey and Harvey, 2010). Given the correlation between education and employment, it is important to recognize the increasing differences between employment status and income when comparing those who have only a high school diploma and those who have completed a bachelor's degree. Many barriers exist for the general population interested in earning a bachelor's degree, but even more barriers hinder individuals who have a psychiatric disability. By equipping people with psychiatric disabilities with the skills and support required to attain postsecondary education and an opportunity for gainful employment, it is possible to decrease their current unemployment rates.

Research has shown that well-educated people in general (despite disabilities, economic status, etc.) are less likely to be unemployed, retain full-time jobs, earn higher incomes, and experience fewer socio-economic hardships. People who are well educated have generally superior social-psychological resources, such as a higher sense of personal control, social support, and healthier lifestyle (Ross, C., & Wu, C., 1995).

Education. Higher educational fulfillment for individuals with psychiatric disabilities predicts increases in their lifetime earnings and other positive employment outcomes, even more strongly than in the general public (Leonard, E.J. & Bruer, R. A., 2007). People with psychiatric disabilities are able to pursue desired personal and career

goals due to the adoption of medications that improve cognition and advances in successful rehabilitative approaches (Mowbray et al., 2005). Education provides opportunities and can renew one's identity, by providing a clean slate for individuals to reestablish their place in society (Mowbray et al., 2005). Despite the obvious advantages of higher education, people with psychiatric disabilities continue to struggle and are unable to gain access to resources for educational purposes or maintain enrollment in educational environments (Cheney, Martin, & Rodriguez, 2000; Unger, 1998).

Psychiatric disabilities per se do not prevent academic achievement, but studies have found barriers in postsecondary education that make it more difficult for affected individuals to navigate the education pathway. Schindler and Kientz (2013) found that although barriers to education varied with an individual's specific situation, two main themes surfaced. First, the barriers to education were very similar to barriers to employment for individuals with psychiatric disabilities (Schindler & Kientz 2013). Second, the barriers often reflected conditions internal to the individual, which included: negative self-perception, stress, anxiety, and other symptoms of mental illness (Schindler & Kientz 2013). These barriers generally led to loss of motivation (Schindler & Kientz 2013). An article by Manthey T., Goscha R., and Rapp C. (2015), addressed some additional barriers for individuals with psychiatric disabilities interested in higher education, which included but was not limited to: "Stigma from students or instructors (Mowbray et al., 2005), lack of instructor empathy (Collins and Mowbray, 2005), lack of support from case managers (Goscha et al., 2013), lack of support from family or friends (Megivern et al., 2003), lack of transportation (Unger et al., 2000), financial aid or debt

load concerns (Mowbray et al., 2001) difficulty managing symptoms in the classroom or managing medication side effects (Collins and Mowbray, 2005), lack of accommodations or flexibility on campus (Mowbray et al., 2001), fear of discloser (Collins and Mowbray, 2005), lack of supported education services (Collins and Mowbray, 2005), lack of confidence or self-esteem (Weiner et al., 1996), and federal and state policies (Collins and Mowbray, 2005)." Consistent with what was said earlier about youth with emotional disturbances transitioning into young adulthood, many of these barriers (internally and externally) affect the ability to self-maintain all key factors at play when attempting to successfully complete a higher educational degree, without the guidance and support of mental health service providers and college campuses.

Psychiatric disabilities are sometimes described as "invisible," because there are no overt physical characteristics attributable to the affected individuals and the individuals are often unwilling to report or seek help. The withdrawal rate from college for students with psychiatric disabilities is a problem. With a withdrawal rate of 86% (Schindler & Kientz 2013), about twice as frequent as the general student body, academic institutions need to better understand the needs of this population. Students with psychiatric disabilities express interest in pursuing higher education and show themselves to be academically capable; however, the barriers to education often have a great impact on students during the process. It seems unlikely that high withdrawal rates are due to academic abilities, since the students could meet the academic criteria to be eligible for admission in the first place. Rather, the high withdrawal rates seem much more likely caused by a lack of resources that are specialized to the needs of this particular group.

Due to this fact, the Substance Abuse and Mental Health Services Administration (SAMHSA) has developed a program building tool-kit to help improve the existing gap for individuals with psychiatric disabilities interested in obtaining postsecondary education or training.

Supported Education

Academic institutions have services and resources in place for students with physical and learning disabilities; however, the nature of these services makes it difficult for students with psychiatric disabilities to connect with these resources (Mowbray et al., 1999). Therefore, more directed and specialized programs are required for this specific student group.

Supported Education programs provide a pathway and support system for individuals with psychiatric disabilities seeking to successfully complete their postsecondary education degree. Each program is intended to improve education and employment outcomes for individuals living with psychiatric disabilities. The theory of "supported education" is based on the premise that a network of specialized resources can be developed to enable students to learn skills, access supports, and identify the need for and use of academic adjustments to be successful in a course or degree program. Students supported through this theory are those that have psychiatric disabilities, and who require additional support to achieve academically (Manthey et al., 2015). Supported education originated from a psychiatric rehabilitation approach (Soyden, 2004), implementing interventions with the focus on key principles such as normalization, self-determination, support and relationships, hope and recovery, and systems change (Mowbray, 2004).

A Mowbray et al. (2005) article defines these key principles which are displayed in the following table.

V	Values and Principles of Supported Education
Норе	 Everyone is treated with respect and dignity, and as a developing person capable of growth and positive change. Assist individuals in identifying their vocational interest and setting short-term and long-term career goals.
Normalization	 The use of a non-stigmatized methods and settings. The use of vocational planning tools and interest inventories. Classroom, staff and/or offices on college campuses. All participating individuals are to be addressed as "students." Services are consistent with daily life routines within their community, such as following the colleges' semester schedule. Services are individualized, meeting the unique and changing needs of the students involved.
Self-determination	 Maximizing opportunities for choice. Students identify and explore their career interest and choose their future vocation, and the education and training needed to attain it. Give students the knowledge and skills to succeed in a postsecondary setting, by providing the tools and practice in effective self-advocacy along with the information necessary for campus resources and ways of accessing them. Students are to participate in all aspects of the Supported Education program, from planning session topics to designing evaluation. Students may also serve as a board member or advisory council, volunteer peer mentors, or be paid as staff, or research assistance.
Support and Relationships	 Support in acquiring and practicing skills and obtaining the resources to meet their career goals. Provide the opportunity for students to learn from each other and to develop an ongoing support group or supportive relationships with peers and mental health
	providers to assist with the pursuits of career goals.Support services are provided through the program for as

	long as needed.
	 Services are available and accessible
	 Widely publicized and with the staff readily
	available to advise those interested in enrollment.
	Barriers to participation of the students must be addressed
	• Supports are necessary for learning and goal achievement,
	students are to be encouraged to not only maintain
	relationships with the staff, but also with student services
	on campus, peers, family members, mental health workers,
	and other service providers.
Systems Change	 Engagement in proactive activities to support
	accommodations on the campus for students with
	psychiatric disabilities and to promote awareness of mental
	illness stigma and discrimination.
	• The program is to identify barriers in the social and
	economic environments that affect consumers' education
	goals and recovery potential
	 Such as negative attitudes of service providers,
	fears and overprotective behaviors of family
	members, and consumers' internalized mental
	illness stigma.
	 Incorporate empowerment strategies
	 Collaboration between stakeholders
	 Assistance with and teaching of self-advocacy
	 Shared access to valued resources
	 Non-hierarchical thinking
	 Open communication

Supported education (SEd) is an innovative service model that has improved vocational outcomes for individuals with psychiatric disabilities (Mowbray et al., 1999). Evaluations for Supported Education programs have increased client enrollments into colleges and improved self-esteem (Mowbray et al., 1999), and have shown improvements in rehabilitation in clients. Supported Education programs provide assistance, preparation, and supports to client defined goals through a psychosocial rehabilitation model centered around community health agencies (Manthey et al., 2015; Mowbray et al., 1999).

Over the last decade research has made SAMSHA rethink the roles of individuals who were seeking assistance through *Supported Employment* programs, and learned that immediately placing them into the workforce did not always lead to promising outcomes. Typically, people who went into work immediately through a Supported Employment program would be placed into entry-level and unskilled positions where long-term employment prospects were problematic (Substance Abuse and Mental Health Services Administration, 2011). One study showed that 41% to 77% of clients were terminated within 6 months of employment. (Bond, Drake, Mueser, & Becker, 1997). The outcome challenges Supported Employment programs faced paved the way for the development of Supported Education, where individuals with psychiatric disabilities would be provided educational and training opportunities, which would in turn allow them to become better qualified for skilled jobs and professional careers (Baron & Salzer, 2000; Bond et al., 2001).

Supported Education is an evidence-based practice, assisting people who have been diagnosed with a psychiatric disability in an effort to guide them toward earning a higher education degree and/or training, as well as helping them find a meaningful job in their community (Substance Abuse and Mental Health Services Administration, 2011). Supported Education programs were designed to service individuals with psychiatric disabilities by providing them the opportunity to gain access and support in achieving their desired academic goals through the completion of postsecondary education (Substance Abuse and Mental Health Services Administration, 2011). Supported Education uses the "choose-get-keep" model, designed to assist consumers in making

decisions about educational goals (Substance Abuse and Mental Health Services Administration, 2011). The "choose-get-keep" model encourages individuals to "choose" the educational direction that they wish to pursue, "get" into the courses that meet their goals, and "keep" their place in education until they successfully complete the courses needed (Soydan, 2004).

Supported Education programs provide guidance and assistance for consumers pursuing their individual education goals to develop a sense of self-efficacy and independence (Substance Abuse and Mental Health Services Administration, 2011). It encourages consumers to be engaged in their own plan for the future by providing the proper steps and guiding them to identify their own strengths and abilities (Substance Abuse and Mental Health Services Administration, 2011). Supported Education is designed to adapt and change methods and approaches to accommodate each of the students' needs throughout their academic career.

Supported Education programs have some variations among service models, but try to encompass four consistent core services including (but not limited to) career planning, academic survival skills, direct assistance, and outreach as described in the following table (Substance Abuse and Mental Health Services Administration, 2011).

Supported Education: Core Services	
Career	Provide vocational assessment, explore potential career choices, and
Planning	develop an educational goal plan; provide assistance in course
	selection, instruction, support, and counseling.
Academic	Provide consumers information about their options of colleges and/or
Survival	training programs, disability rights and resources they have access to;
Skills	provide services and/or information about tutoring and mentoring
	services, time and stress management, and social support.

Direct	Provide assistance with enrollment, financial aid, education debt
Assistance	management, etc.
Outreach	Connect consumers to the proper campus resources, mental health treatment team members, and other services and agencies such as vocational rehabilitation.

Supported Education is based on a core set of eight practice principles, creating the foundation approach, listed in the following table (Substance Abuse and Mental Health Services Administration, 2011).

Practice and Principles of Supported Education	
1. Access to an education program with positive, forward progress is the goal	ıl
2. Eligibility is based on personal choice	
3. Supported Education services begin soon after consumers' express interes	st
4. Supported Education is integrated with treatment	
5. Individualized educational services are offered as long as they are needed	
6. Consumers preferences guide services	
7. Supported Education is strength-based and promotes growth and hope	
8. Recovery is an ongoing process facilitated by meaningful roles	

Supported Education services have identified three models of implementation such as self-contained classroom, on-site support, and mobile support (Substance Abuse and Mental Health Services Administration, 2011). Self-contained classrooms often are provided through an education program or mental health center. These classrooms have established curricula and students receive the instruction in a classroom environment with other students characterized as having psychiatric disabilities (Substance Abuse and Mental Health Services Administration, 2011). Students in a self-contained classroom are not generally integrated into regular classes, unless there is sufficient staff support to

supervise the students and permit them to progress into regular classes (Substance Abuse and Mental Health Services Administration, 2011). The Mobile Support model is designed to provide services where needed, and assist in student enrollment, access accommodations, and follow-along support (Substance Abuse and Mental Health Services Administration, 2011). Typically, in a mobile support model the staff is located at a community mental health agency, the staff will travel and meet with students at their campus or education program site whenever support for the student is needed (Substance Abuse and Mental Health Services Administration, 2011). On-site Supported Education models are typically implemented and managed through a postsecondary institution where students are able to have direct access to the services on their campus or education program (Substance Abuse and Mental Health Services Administration, 2011). Much like the mobile support model, an on-site Supported Education program often serves as a base for enrollment assistance, accommodations, and follow-along support (Substance Abuse and Mental Health Services Administration, 2011). The on-site model allows students to attend regular classes of their choosing, where they will matriculate and receive credit, and staff is located on campus to provide support services.

These three Supported Education program models have emerged over time as being effective and are based on evidence-based methodologies. SAMSHA's Supported Education program building tool-kit allows for flexibility and modifications can be made so it can be implemented and sustainable at any level.

Theoretical Justification for Supported Education

Education provides opportunities where one can renew their identity, by providing a clean slate for individuals to reestablish their place in society (Mowbray et al., 2005). Psychosocial and cognitive theories have been identified as being the most effective in understanding individuals who have a psychiatric disability. Social Cognitive Theory identifies student/employee self-efficacy as a key factor of human agency, mediating between the several differing determinates of competence (skill, knowledge, ability, and former achievements), and an individual's overall performance (Bandura, 2006). Social Cognitive framework focuses on understanding people's education and/or career choices and development.

Young adults with psychiatric disabilities who have a greater notion of self-efficacy are more likely to develop and accomplish goals and tasks, overcome barriers, and establish resiliency in detrimental situations. Disruptions in education for people with psychiatric disabilities often result in deficiencies in basic educational skills needed for one to be successful in the current workforce (Bountin and Accordino, 2009). Self-efficacy is a key variable due to the impact it can have one's motivation and willingness to learn.

Social Cognitive Career Theory (SCCT). The Social Cognitive Career Theory's foundation stems from Albert Bandura's (1986) Social Cognitive Theory that emphasized the complexity of people's mutual influence on one another through behaviors and environments (Strauser, D., 2013). The SCCT was specifically designed to promote understanding of career behaviors such as how people develop vocational interests, make

and revise occupational choices, achieve varying levels of career success and adjustment, and develop career self-management processes (Strauser, D., 2013).

SCCT has shown to be applicable to individuals with psychiatric disabilities by applying theoretical guidelines that allow for the development of intervention methods used to overcome challenges and enhance self-efficacy. SCCTS identifies "central person variables" that play key roles in a person's career development (Strauser, D., 2013) and can easily be applied to one's academic development during their pursuit of a meaningful career.

SCCT: Central Person Variables		
Variables	Definition	
Self-efficacy Beliefs (Strauser, D., 2013)	 Peoples' judgement of their capacity to organize and execute courses of action required to attain designated types of performance. Functions as an intervening link between ability and interest. Set of self-beliefs that are linked to a particular-performance domain and activities. Beliefs about personal capabilities may be acquired and modified via four primary types of learning experiences: Personal performance accomplishments Vicarious learning (or modeling) Social persuasion Physiological and affective states Personal accomplishments may exert the greatest influence on self-efficacy. 	
Outcome Expectations (Strauser, D., 2013)	 Beliefs about consequences or outcomes of performing a precise-behavior. Imagined consequences of one's choice of action Academic and career paths from a variety of direct and vicarious learnings. Perceptions of outcomes they have personally experienced in the past Information or feedback they acquired from others about different academic and career fields. 	

Supported Education's primary focus is to empower students throughout their academic pursuits and career through normalization, self-determination, support and relationships, hope and recovery, and systems change. Supported Education provides support and resources that encourage each student to take the driver's seat for their future endeavors. Supported Education models identify variables similar to SCCT that play an important role in development during young adulthood. Self-efficacy can occur through self-determination and normalization, while allowing students to acknowledge and build upon their strengths and change their opinions about themselves over time. Expectation outcomes in Supported Education exist by implementing appropriate supports and relationships for students within their environments that allow for the development of positive beliefs about their overall progress. Personal goals are indicators of hope and recovery for individuals with psychiatric disabilities.

Interventions that incorporate concepts of Social Cognitive Theory into their methods will encourage empowerment and independence for these individuals and allow students to identify and utilize their own abilities, strengths, and resilience. In turn, guide themselves towards living a more meaningful life on their own terms.

Supported Education Program at Arizona State University

Arizona State University (ASU) is one of the largest universities in the country, and has the resources and capacity necessary to provide such a program to this unique and capable population. Reiterating the importance of education and its effect on employment, people who obtain a bachelor's degree or higher education are far more likely to achieve gainful employment and financial stability. Students that are enrolled into the university directly from high school are better able to complete their bachelor's degree without the disruption of transitioning from institution to institution, unlike those who start at a community college.

Implementing a Supported Education program at ASU will help in addressing the existing gaps and barriers for enrolled or prospective students with psychiatric disabilities seeking to complete their bachelor's degree. The Supported Education program at ASU will be guided by evidence-based methods of "SAMSHA's Supported Education Toolkit," and will potentially be modeled after the highly successful SALT Center at University of Arizona (UA), designed for those with learning and attention difficulties. The Supported Education program at ASU will adopt characteristics of both models, resulting in a unique program design adapted to meet the needs of ASU students; providing academic and social support services aimed to help those with psychiatric disabilities to matriculate, obtain a college degree, and future career goals. The support and services will be provided to the students throughout their academic career at ASU or for whatever period of time they remain enrolled in the Supported Education program.

ASU possesses the proper resources and community access to potentially launch and develop a pilot Supported Education program of their own.

Methodology

Research Questions

Based on the literature presented, a needs assessment will address three indicators of the demand or value of implementing a Supported Education program at Arizona State University, based upon the following three research questions:

- 1. Among currently enrolled ASU undergraduate students, what is the self-reported prevalence of psychiatric disabilities?
- 2. Among currently enrolled ASU undergraduate students, what is the current rate of active involvement in treatment for psychiatric disabilities?
- 3. Among currently enrolled ASU undergraduate students, what are the unmet needs in academic pursuits for psychiatric disabilities?

Research Design

A cross-sectional research study will be conducted through the distribution of an online survey. Cross-sectional studies are typically used when answering descriptive or exploratory research questions and have no randomized assignment to groups (Krysik and Finn, 2013). The study uses a needs assessment methodology to help determine the nature of the problem and whether the problem warrants for services and/or program (Krysik and Finn, 2013). More specifically, the needs assessment helps in determining if the implementation of a Supported Education program at Arizona State University would be beneficial to students with psychiatric disabilities. The needs assessment identifies the

most effective approach to creating such a program, the extent of the existing need, and establish understanding of the type of services students with psychiatric disabilities are interested in receiving if such a program were to be implemented at Arizona State University.

Measure

The method of conducting a cross-sectional research study through the creation and distribution of an internet survey. Internet surveys provide generalizable information about the perceived needs (Krysik and Finn, 2013). The survey consists of 36 close-ended questions with pre-defined responses. The survey instrument consists of informative demographic characteristics and multiple Likert scales to examine the current use, helpfulness of the existing campus services and potentially useful support services that could be implemented based off the Supported Education model that are specifically designed for students with psychiatric disabilities at ASU. The online survey was used as a method for quantitative data analysis, evaluating the three research questions addressing the current prevalence of students with psychiatric disabilities enrolled at ASU, their active involvement in treatment, ASU service utilization, and any unmet service and/or resource needs for current ASU undergraduate students who self-reported as having been diagnosed with psychiatric disabilities.

Participants and Sampling

The sampling method for the cross-sectional research design will be using a convenience sampling method, due to the survey participants being currently enrolled undergraduate students at ASU. Students were enrolled in one of the four Spring 2017

pre-requisite courses Introduction to Psychology (PSY 101), Introductory Sociology (SOC 101), Introduction to Human Communication (COM 100), and Introduction to Social Work (SWU 171).

Selecting these four ASU Spring 2017 prerequisite courses allowed for better control of survey distribution rates through the professors, course section number, and current student enrollment number for each course. A total of 40 professors were identified as teaching one or more of the course sections in their designated subject. Professors from these pre-selected departments were contacted through email asking for them to share and distribute the online survey to students taking one of their introductory prerequisite courses. Professors that commit to the distribution of the online survey were asked to provide the number of students registered in their Spring 2017 course, which would permit the calculation of response rate from the sampled participants. The number of professors who commit to survey distribution determined the overall sample size of student who participate in the Supported Education Student Survey.

Data Collection

The survey data was collected via *Qualtrics*, an online survey tool. The survey was left open for three weeks allowing enough time for an adequate sample size to be collected. Once a large enough sample size of statistical data was collected from the online survey, it was evaluated to gauge the prevalence and needs of the current undergraduate student population that self-reported as having a psychiatric disability. The statistical data allowed for the study to gain knowledge and understanding, as well as conclude whether there is sufficient need for Arizona State University to develop and

launch a pilot on-site supported education program for enrolled students or prospective students with psychiatric disabilities. The results of the study help in determining whether there is significant value for such a program to be implemented at ASU. Further evaluation based on the results and findings of the initial study introduce the potential for a longitudinal research study to be done. Specifically, through the implementation of a Supported Education pilot program at Arizona State University that contributes and produces more current data and literature on best methods, practice, treatment, outcomes, and impact for participating students with psychiatric disabilities.

Results

The total number of students to whom the survey was distributed was 2,158: a figure based on the course, section numbers, and total numbers of students enrolled in courses taught by the eight committed professors at the initial opening of the survey. Out of the 2,158 undergraduate students to whom the survey was distributed, 76 students participated (N=76, 3.5%).

Demographics and Student Characteristics

Table 1 shows the frequencies and percentages of the 76 Arizona State University undergraduate respondents in the sample, along with relevant demographics and student characteristics.

Table 1. Student Demographics and Characteristics N=76			
		N	%
Gender			
Fema	le	54	71.1
Ma	le	18	23.7
Missir	ıg	4	5.3
Race/Ethnicity			
White/Caucasia	ın	45	59.2
Hispanic/Latir	0	13	17.1

Black/African American Asian		
Asian	4	5.3
	8	10.5
Multiracial	3	3.9
Pacific Islander	1	1.3
Middle Eastern	1	1.3
Missing	1	1.3
Sexual Orientation		
Heterosexual	66	86.8
Homosexual	1	1.3
Bisexual	5	6.6
Asexual	1	1.3
Pansexual	1	1.3
Other	1	1.3
Missing	1	1.3
Type of Student		_
In-Person Courses	30	39.5
Online Courses	8	10.5
Both Online and In-Person Courses	36	47.4
Missing	2	2.6
Full-Time Student	57	75
Part -Time Student	3	3.9
Missing	15	19.7
Undergraduate Student Status		
Freshman (0-30 credits)	40	52.6
Sophomore (31-60 credits)	15	19.7
Junior (61-90 credits)	15	19.7
Senior (91-120 credits)	5	6.6
Missing	1	1.3
Course and Section Number	2	2.6
Introduction to Psychology (PSY 101)	2	2.6
Section #: 17439	1	1.3
17442 Introductory Sociology (SOC 101)	1 45	1.3 59.2
11865	8	10.5
17140 18003	12	15.8 22.4
19502	17	1.3
19302	1	1.3
21004	4	5.3
21884 22668	4	ر.ن
22668	21	
22668 Introduction to Social Work (SWU 171)	21	27.6
22668 Introduction to Social Work (SWU 171) 11726	3	27.6 3.9
22668 Introduction to Social Work (SWU 171) 11726 11742	3	27.6 3.9 1.3
22668 Introduction to Social Work (SWU 171) 11726	3	27.6 3.9

Demographically, the results indicate that majority of the student survey participants in the sample were White/Caucasian, heterosexual, female, with a mean age of 21.78 years and a standard deviation of 8.38. Student Characteristic results section shows that majority of the participants were full-time, freshman (0-30 credits) students, enrolled in both in-person and online courses, with a mean GPA of 3.331 and a standard deviation of 0.495. Majority of the student sample was enrolled in course SOC 101 section numbers 17140, 18003 and course SWU 171 section number 13970.

Prevalence of Psychiatric Disabilities

Table 2 displays the frequencies and percentage of the original student sample who self-reported as having been formally diagnosed by a medical professional with a psychiatric disability, or reported to have self-diagnosed themselves with a psychiatric disability.

Table 2. Prevalence of Psychiatric Disabilities							
DIAGNOSES	Diagnos	ed N=25	Self-Diag	nosed N=41	Total N=76		
	N	%	N	%	N	%	
Attention Deficit Hyperactive Disorder	5	6.6	4	5.3	9	11.8	
Anxiety	19	25	23	30.3	48	63.2	
Depression	17	22.4	23	30.3	40	52.6	
Post-Traumatic Stress Disorder	2	2.6	4	5.3	6	7.9	
Obsessive Compulsive Disorder	1	1.3	3	3.6	4	5.3	
Eating Disorder	2	2.6	8	10.5	10	13.2	
Substance Abuse	1	1.3	2	2.6	3	3.6	
Borderline Personality Disorder	0	0	5	6.6	5	6.6	
Bipolar	2	2.6	2	2.6	4	5.3	
Autism Spectrum Disorder	2	2.6	0	0	2	2.6	
Other	0	0	2	2.6	2	2.6	
No Diagnoses Reported	0	0	0	0	35	46.1	

Note: Diagnosed and Self-Diagnosed groups are not mutually exclusive, 18 students identified both formal and informal diagnoses.

Table 2 shows that a little over half of the total student sample self-reported as having Anxiety and Depression. Eating Disorders and Attention Deficit Hyperactive Disorder were also found to be prevalent among the student sample.

Active Involvement in Treatment

Table 3 shows the frequency and percentages of the student participants who reported being formally diagnosed or self-diagnosed with a psychiatric disability, coupled with their active involvement in treatment and their rate of discloser to ASU faculty.

Table 3. Active Involvement in Treatment						
	Diagnosed N=25			Self-Diagnosed N=41		N=76
TREATMENT STATUS	N	%	N	%	N	%
Currently in Treatment	10	40	6	14.6	10	13.2
Received Past Treatment	21	84	19	46.3	24	31.6
Seeking Treatment	9	36	10	24.4	14	18.4
Disclosed to ASU Faculty or Staff	6	24	4	9.8	8	10.5

The survey results displayed in Table 3 show that just over 13 % of the total student sample is currently in treatment, although twice as many had received treatment in the past. Close to 90% of the respondents report that they have never disclosed their disability to ASU faculty or staff members – presumably including staff in the Disability Resource Center, the Counseling Training Center, or the Student Health Center.

Service Utilization and Unmet Needs

Table 4 show the frequency and percentages of student participants who self-reported being formally diagnosed or self-diagnosed themselves with a psychiatric disability and their utilization of student services provided through ASU.

Table 4. ASU Student Service Utilization							
	Diagnos	ed N=25	Self-Diagn	Total N=76			
	N	%	N	%	N	%	
Disability Resource Center	3	11.5	3	7.3	6	7.9	
Counselor Training Center	2	7.7	5	12.2	7	9.2	
Student Health Center	5	19.2	11	26.8	16	21.1	
Faculty Advising	6	23.1	9	22	15	19.7	

The survey identified student services that can be utilized by ASU students experiencing any kind of psychiatric condition or disability; the services include the Disability Recourse Center, the Counselor Training Center, the Student Health Center, and formal/informal faculty or staff advising. The results show the two most frequently used services in the student sample were the ASU Student Health Center and informal/formal faculty advising.

Table 5 show the frequency and percentages of student participants who self-reported being formally diagnosed or self-diagnosed themselves with a psychiatric disability and the rate of helpfulness for students who reported using student services provided through ASU.

Table 5. ASU Student Service Helpfulness									
	Disa	Disability		Counselor Training		Health	Formal/Informal		
	Resourc	e Center	Ce	nter	Cen	Center		Faculty Advising	
	N	%	N	%	N	%	N	%	
Not at All Helpful	1	1.3	1	1.3	1	1.3	1	1.3	
Kind of Helpful	2	2.6	1	1.3	2	2.6	3	3.9	
Neutral	6	7.9	8	10.5	6	7.9	6	7.9	
Helpful	1	1.3	1	1.3	5	6.6	4	5.3	
Very Helpful	0	0	2	2.6	4	5.3	9	11.8	

One-third of the student participants that used one of more of the ASU services reported the level of helpfulness as "neutral" or "not helpful at all." The highest rated service in terms of helpfulness was informal/formal faculty advising.

Table 6 shows which Supported Education services student participants reported they would like to have at ASU.

Supported Education Service Areas	Diagnosed N=25			Self-Diagnosed N=41		1 N=76
CAREER PLANNING	N	%	N	%	N	%
Career Exploration	9	36	19	46.3	32	42.1
Vocational Assessment	5	20	11	26.8	16	21.1
Educational Goal Plan Development	13	52	21	51.2	30	39.5
Course Selection Instruction	11	44	21	51.2	29	38.2
Counseling Services	10	40	15	36.6	21	27.6
ACADEMIC SURVIVAL SKILLS						
Information on Rights and Resources	8	32	11	26.8	15	19.7
Tutoring	14	56	17	41.5	28	36.8
Mentoring	10	40	16	39	26	34.2
Academic Support Groups	11	44	13	31.7	22	28.9
Time and Stress Management	14	56	18	43.9	29	38.2
Social Support Groups	8	32	15	36.6	22	28.9
Social Skill Building Workshops	11	44	16	39	24	31.6
Campus and Course Orientation	8	32	10	24.4	17	22.4
Assignment and Course Orientation	11	44	15	36.6	24	31.6
DIRECT ASSISTENCE						
Assistance Choosing Courses	13	52	18	43.9	30	39.5
Financial Aid Assistance	14	56	16	39	27	35.5
Managing Educational Debt	13	52	17	41.5	27	35.5
Planning Future Expenses	15	60	21	51.2	33	43.4
OUTREACH						
Classroom Accommodations (DRC)	6	24	8	19.5	13	17.1
Mental Health Treatment Team	5	20	9	22	12	15.8
Assistance with Advocacy	4	16	7	17.1	10	13.2

Table 6 results evaluated the types of services within the four areas that students with psychiatric disabilities would most likely use if a Supported Education Program were to be implemented at Arizona State University. In the area of *Career Planning*, over 50% of the students in both self-reported categories (formally diagnosed and self-diagnosed) expressed that they would like to have educational goal plan development, career exploration, and psychiatric counseling services. In the second area of focus *Academic Survival Skills*, student participations expressed their greatest interests in tutoring (36.8%), academic support groups (28.9%), time and stress management (38.2%), social skill building workshops (31.6%), and assignment and course orientation (31.6%). The third area of focus, *Direct Assistance*, found participants ranking all four services as important, including assistance in choosing courses (39.5%), assistance with financial aid (35.5%), guidance managing educational debt (35.5%), and planning future expenses (43.4%). The final area, *Outreach*, showed the lowest interest in this sample of students.

Discussion

The purpose of this study was to calculate the prevalence of psychiatric disabilities and the current needs among Arizona State University undergraduates. Three research questions were used to guide the study that attempts to gauge the prevalence of psychiatric disabilities, student's active involvement in treatment, and the current service utilization and unmet needs for this specific population of students. Online surveys were distributed to 2158 undergraduate students who were enrolled in one of the aforementioned courses; PSY 101, SOC 101, SWU 171, and COM 100. A total of 76

students participated in the online survey. Within that total student sample, 26 students reported having been formally diagnosed with a psychiatric disability and 41 students indicated that they had self-diagnosed themselves with a psychiatric disability.

Limitations to the Study

As of 2016, Arizona State University reported having 79,442 undergraduate students enrolled at one of their campus or online. The studies external validity is compromised in terms of capturing an accurate picture of the current student population due to the small percentage of undergraduate students who participated in the overall survey study. The Supported Education Student Survey was intentionally distributed only to students enrolled in one of the following ASU courses: Introduction to Psychology (PSY 101), Introductory Sociology (SOC 101), Introduction to Human Communication (COM 100), and Introduction to Social Work (SWU 171). The intention behind selecting these four ASU prerequisite courses was to have better control of the survey distribution rates through the professors, section numbers, and current student enrollment numbers for each course. In the study, 40 professors where identified as teaching one of the four courses; yet, only eight responded and committed to distributing the survey among their students via email or posting it to their *Black Board*, where students would have immediate access to the *Qualtrics* Supported Education Student Survey link.

The low rate of student participation may be due to the lack of incentives for participating in the initial survey study, or the length (total of 36 questions) and time (approximately 15 minutes) it took to complete the survey. Limited time constraints for the distribution of the survey being open to students (3 weeks) and data collection may

also have been a key component for both professor commitment, and the number of students who participated in the survey. Survey questions provided a narrow window of information to be gained from the student sample relative to the original research questions. Additional questions pertaining to diagnoses, treatment, and unmet needs as well as open ended questions would have allowed for quantitative and qualitative analysis of the study potentially providing more abundant feedback and information pertaining to all three areas of focus in the study.

The lack of commitment rates from the 40 professors asked to distribute the survey to their students, may be due to the existing stigma that currently exist for people with psychiatric disabilities. If the professors had any bias towards the initial topic of the study, that may have influenced their decision not to respond to the email request nor commit to distributing the survey to their current students in their prerequisite courses. Another implication for the lack of response and commitment from 32 of the 40 professors may be due to the current culture that exist at a University level, such as the lack of involvement in student projects outside of their own course setting. As well as their willingness to spend extra time on something that is not directly related to themselves or the students enrolled in their courses.

Prevalence of Psychiatric Disabilities at Arizona State University

The first portion of research study on Supported Education for Young Adults with Psychiatric Disabilities asks the question, "Among currently enrolled ASU undergraduate students, what is the self-reported prevalence of psychiatric disabilities?" The findings from the student survey sample indicate that there is currently a representation of

undergraduate students who are experiencing one or more psychiatric disabilities within the ASU student body. These identified students with either formal diagnosed or selfdiagnosed psychiatric disabilities have overcome some the first challenges in pursuing a postsecondary education. This, however, does not put them out of harm's way and are still at risk for withdrawing from ASU in the future if their mental, physical, and emotional well-being is not maintained properly over the course of time. The prevalence of psychiatric disabilities within the ASU student sample, consisted of 25 (33%) students who self-reported as being formally diagnosed with a psychiatric disability, which supports Mowbray et al. (1999) study stating that an average of 35% of individuals with psychiatric disabilities enroll into postsecondary education. Mowbray et al (1999) also concluded that only 8% completed some course of study, which could suggest similar withdraw rates for the future of this student population. With the high rates of selfreported Anxiety, Depression, and other prevalent psychiatric disabilities among the student sample show relevance in the importance of providing these students at Arizona State University the proper information, education, and services to increase the chances for academic attainment and prevent the likelihood of them withdrawing from the university.

Active Involvement in Treatment

The second portion of research study on Supported Education for Young Adults with Psychiatric Disabilities addresses the question, "Among currently enrolled ASU undergraduate students, what is the current rate of active involvement in treatment for psychiatric disabilities?" People with psychiatric disabilities continue to struggle and are

unable to gain access to resources for educational purposes or maintain enrollment in educational environments (Cheney, Martin, & Rodriguez, 2000; Unger, 1998). The study further evaluated the threat or risk for these students by looking at the rate at which they are actively involved in treatment. Student participants who reported not currently being in treatment are at greater risk for academic disruption due to unforeseen situations or symptoms of their psychiatric disability. This could later result in students having a more reactive response which is detrimental to their academic and future pursuits, as opposed to having in place more preventative measures that include consistent and ongoing medical treatment.

The Supported Education Student Survey results indicate a much higher percentage of students who had received treatment in the past but are not currently in treatment now for their initial psychiatric disability. These results may be due to Wagner et al., 2015 study's original findings that one-third of young adults with emotional disturbances (ED) or psychiatric disabilities, reported receiving no services or treatment after high-school, primarily because of the lack of information about how to obtain services (Wagner et al., 2015). The greatest risk for this population of students is a lack of knowledge, guidance, and information about how to navigate through Arizona's complicated adult mental health care system. These students find themselves having to balance academic expectations, independence, and personal responsibilities without the same treatment, support, and resources they may have received while they were minors.

Psychiatric disabilities are often thought "invisible," having no overt physical characteristics attributable to the affected individuals; hence, many individuals are

unwilling to report or seek help due to social stigma and the intentional or unintentional consequences of disclosure. Close to 90% of the respondents report that they have never disclosed their disability to ASU faculty or staff members. Education on psychiatric disabilities for both ASU faculty and the student body may help desensitize some of the stigma and discrimination for individuals with psychiatric disabilities and allow for them to feel more welcome and secure in trusting that the faculty members and peers won't hold their initial diagnoses against them and recognize that having a psychiatric disability is only a part of who they are but does is not their overall identity.

Service Utilization and Unmet Needs

The final portion of research study addresses the question, "Among currently enrolled ASU undergraduate students, what are the unmet needs in academic pursuits for students with psychiatric disabilities?" Based on the results, the low rate of service utilization may be evidence of lack of information and knowledge that the students may be eligible or have the right to access any of these services. Academic institutions have services and resources in place for students with physical and learning disabilities; however, the nature of these services makes it difficult for students with psychiatric disabilities to connect with these resources (Mowbray et al., 1999). Therefore, more directed and specialized programs are required for this specific student group.

Strengthening these service areas to better meet the needs of students with psychiatric disability, along with further educating ASU faculty and staff members on best-practices, methods, and approaches when working with this student population will enhance students overall experience and contribute to greater academic achievements. As well as

encourage empowerment for students with psychiatric disabilities by building supportive relationship between the affected students and their academic institution.

The primary mission for implementing a supported education program is to empower students to decide their own higher education direction and goals by gaining the tools necessary for them to complete tasks contributing to their postsecondary education, reach their highest potential, and be successful in their endeavors (Mowbray et al., 2005). The sample of students with psychiatric disabilities identified specific Supported Education Services they would utilize and feel that they could benefit if offered at ASU such as educational goal plan development, career exploration, psychiatric counseling services, tutoring, academic support groups, time and stress management, social skill building workshops, assignment and course orientation, assistance in choosing courses, assistance with financial aid, guidance managing educational debt, and planning future expenses. The results provide student-informed Supported Education methods of specific services that should be immediately implemented if ASU were to launch a Supported Education Program.

Conclusion

Implementing a Supported Education program at ASU encourages the continuation of research and evaluation on service methods in higher education environments when working with students with psychiatric disabilities who are seeking to complete their bachelor's degree. Future studies should evaluate different methods of research to ensure stronger results and encourage larger sample sizes to receive a better understanding of this particular population. Future studies may also benefit from

including focus groups with this population of students, identified ASU faculty members who work with this population, along with interviews and data collection from the ASU service agencies that were identified in the original study including the Disability Resource Center, the Student Health Center, and the Counselor Training Center.

Arizona State University has the resources and capacity necessary to provide an abundance of services and support that will contribute to the academic success of this unique and capable student population. The initial student survey results imply that there are current gaps that exist within our mental health systems on a state, local, and institution (college or university) level that potentially are having an adverse impact on this growing population. The current prevalence of undergraduate students with psychiatric disabilities at ASU is a prime example of why more services are currently needed that better cater to their specific requirements in both an academic and personal level. By not acknowledging the present risks for this population's future in academia and potential career path, they are being denied an equal opportunity to sustain and manage their overall wellbeing, as well as a more promising gateway for their success in life. There are still many individuals with psychiatric disabilities who are currently struggling to transition successfully into young adulthood and by providing them a haven at an academic level where they will provide the proper supports and tools needed, will substantially increase their interest and likelihood of enrolling into a university immediately or shortly after graduating from high school.

Also, Higher education institutions must consider the current stigma and discrimination that many of these individuals have faced they may have started at a very

early age causing them to be hesitant in their initial discloser and contributed to negative encounters they may have endured over time. By eliminating stigma at an institutional level for people with psychiatric disabilities through proper education for both faculty and fellow students, will empower and encourage young adults with psychiatric disabilities to disclose their current condition and will be more likely to seek out all services and supports needed for them to manage their disability.

ASU has the opportunity to not only work within the institution to better meet these areas of concern but also build relationships and collaborate with outside services agencies and local school districts. Ensuring that these students are better able to transition into adult mental services and higher education services successfully, without any delay or discouragement in their pursuits of becoming contributing members of society and living a meaningful life. Implementing a Supported Education program at ASU will help address some of the existing gaps and barriers in services for this student population. Current conditions for students with psychiatric disabilities pursuing higher education are in desperate need of further evaluation so that this population of students is better equipped and able to sustain a healthy and meaningful life.

References

- Akabas, S. H., Gates, L. B. (2000). A social work role: Promoting employment equity for people with serious and persistent mental illness. Administration in Social Work. 23(3/4), 163-184
- American Psychiatric Association (2013). DSM-5 Self-Rated Level 1 Cross-Cutting Symptom Measure—Adult [Assessment Instrument]. Arlington, Va; Retrieved from https://www.psychiatry.org/psychiatrists/practice/dsm/educational-resources/assessment-measures#Disorder
- Anthony, W. A. (1996). Integrating psychiatric rehabilitation into managed care. Psychiatric Rehabilitation Journal. 20. 39-44.
- Auerbach, E.S., & Richardson, P. (2005). The long-term work experience of persons with severe and persistent mental illness. Psychiatric Rehabilitation Journal, 28, 267-273.
- Austin, T. (1999). The role of education in the lives of people with mental health difficulties. In C. Newnes, G. Holmes, & C. Dunn (Eds.), This is madness (pp. 253-262). Wiltshire, England: Redwood Books.
- Baron, R., & Salzer, M. (2000). The career patterns of persons with serious mental illness: Generating a new vision of lifetime careers for those in recovery. Psychiatric Rehabilitation Skills, 4, 136–156.
- Bond, G. R., Drake, R. E., Mueser, K. T., & Becker, D. R. (1997). An update on supported employment for people with severe mental illness. Psychiatric Services, 48, 335–346.
- Brown R. & Saunders L. (1991). CAGE-AID Questionnaire [Screening Instrument]. Retrieved from http://www.integration.samhsa.gov/clinical-practice/screeningtools
- Center for Mental Health Services. (2003). Child, adolescent & family. Retrieved from http://www.mentalhealth.ord/emhs/childrenscampaign.asp
- Chavez, N., Hymman, S. E., Arons, B. S., & Satcher, D. (1999). Mental Health: A report of the surgeon general. U.S. Public Health Service. Retrieved from http://www.surgeongeneral.gov/library/mentalhealth/home.html.
- Cheney, D., Martin, J., & Rodriguez, E. (2000). Secondary and postsecondary education: New strategies for achieving positive outcomes. In H.B. Clark & M. Davis (Eds.), Transition to adulthood (pp.55-74). Baltimore: Paul H. Brookes.

- Clark, R. E. (1998). Supported employment and managed care: Can they coexist? Psychiatric Rehabilitation Journal. 22(1), 62-68.
- Cullinan, D., & Sabornie, E. J. (2004, Fall). Characteristics of Emotional Disturbance in Middle and High School Students. Journal of Emotional and Behavioral Disorders, 12(3), 157-167. doi:10.1177/10634266040120030301
- Davis, M., & Vander Stoep, A. (1997, September). The transition to adulthood for youth who have serious emotional disturbance: Developmental transition and young adult outcomes. The Journal of Mental Health Administration, 24(4), 400-427. doi:10.1007/BF02790503
- Herrman, H., Saxena, S., & Moodie, R. (2005). Promoting mental health: Concepts, emerging evidence, practice. Geneva: World Health Organization.
- Kena, G., Musu-Gillette, L., & Robinson, J. (2015). The Condition of Education 2015.
 Washington, D.C.: U.S. Dept. of Education, National Center for Education Statistics.
- Kessler, R. C., Foster, C. L., Saunders, W. B., & Stang, P. E. (1995). Social consequences of psychiatric disorders: I. Educational attainment. American Journal of Psychiatry, 152, 1026–1032.
- Leonard, E.J. & Bruer, R. A. (2007). Supported education strategies for people with severe mental illness: A review of evidence based practice. International Journal of Psychosocial Rehabilitation, 11, 97-109.
- Marsh, D. T. (2004). Serious emotional disturbance in children and adolescents: Opportunities and challenges for psychologists. Professional Psychology: Research and Practice, 35(5), 443-448. Retrieved from http://search.proquest.com/docview/614393631?accountid=4485
- Mowbray, C. T., & Megivern, D. (1999). Higher Education and Rehabilitation for People with Psychiatric Disabilities. Journal of Rehabilitation, 31-38.
- Mowbray, C. T., Collins, M. E., Bellamy, C. D., Megivern, D. A., Bybee, D., & Szilvagyi, S. (2005). Supported education for adults with psychiatric disabilities: An innovation for social work and psychosocial rehabilitation practice. Social Work, 50, 7-20.
- National Alliance of Mentally Ill (2002). NAMI policymaker's fact sheet on mental illness. No. 1-02.

- National Institute of Mental Health (2002). Brief notes on the mental health of children and adolescents. Retrieved from http://www.nimh.nih.gov/publicat/childnotes.cfm
- Newman, D. L., Moffitt, T. E., Caspi, A., Magdol, L., Silva, P. A., & Stanton, W. R. (1996). Psychiatric disorder in a birth cohort of young adults: Prevalence, comorbidity, Clinical significance, and new case incidence from ages 11–21. Journal of Consulting and Clinical Psychology, 64, 552–562.
- Newman, L., Wagner, M., Knokey, A.-M., Marder, C., Nagle, K., Shaver, D., Wei, X., with Cameto, R., Contreras, E., Ferguson, K., Greene, S., and Schwarting, M. (2011). The Post-High School Outcomes of Young Adults with Disabilities up to 8 Years after High School. A Report from the National Longitudinal Transition Study-2 (NLTS2) (NCSER 2011-3005). Menlo Park, CA: SRI International
- Ross, C., & Wu, C. (1995). The Links Between Education and Health. American Sociological Review, 60(5), 719-745. Retrieved from http://www.istor.org/stable/2096319\
- Ryan, C. L., & Bauman, K. (2016, March). Education Attainment in the United States: 2015. United States Census Bureau, 1-11. Retrieved from http://www.census.gov/content/dam/Census/library/publications/2016/demo/p20-578.pdf
- Smith-Osborne, A. (2005, Winter). Antecedents to Postsecondary Educational attainment for Individuals with Psychiatric Disorders: A Meta-Analysis. Best Practices in Mental Health, 1(1), 15-30.
- Schindler, V. P., & Kientz, M. (2013). Supports and barriers to higher education and employment for individuals diagnosed with mental illness. Journal of Vocational Rehabilitation, 39, 29-41.
- Soydan, A. S. (2004). Supported Education: A Portrait of a Psychiatric Rehabilitation Intervention. American Journal of Psychiatric Rehabilitation, 7(3), 227-248. doi:10.1080/15487760490884531
- Staff, U. C. S. (2002). TITLE 42 THE PUBLIC HEALTH AND WELFARE CHAPTER 126 EQUAL OPPORTUNITY FOR INDIVIDUALS WITH DISABILITIES. United States: United States Government Printing.
- Strauser, D. (2013). Career Development, Employment, and Disability in Rehabilitation. New York: Springer Publishing Company. Retrieved from http://ebookcentral.proquest.com.ezproxy1.lib.asu.edu/lib/asulib-ebooks/detail.action?docID=1394868

- Substance Abuse and Mental Health Services Administration. Supported Education:
 Building Your Program. HHS Pub. No. SMA-11-4654, Rockville, MD: Center for Mental Health Services, Substance Abuse and Mental Health Services
 Administration, U.S. Department of Health and Human Services, 2011.
- Substance Abuse and Mental Health Services Administration. Supported Education: The Evidence. HHS Pub. No. SMA-11-4654, Rockville, MD: Center for Mental Health
- Services, Substance Abuse and Mental Health Services Administration, U.S. Department of Health and Human Services, 2011.
- The Americans with Disabilities Act of 1990 and Revised ADA Regulations Implementing Title II and Title III. Retrieved October 26, 2016, from Information and Technical Assistance on the Americans with Disabilities Act, https://www.ada.gov/2010_regs.htm
- Unger. K.V. (1993). Access to educational programs and its effect on employability. Psychosocial Rehabilitation Journal. J7(.3), 117-126.
- Wagner, M. (1995). Outcomes for Youths with Serious Emotional Disturbance in Secondary School and Early Adulthood. The Future of Children, 5(2).

$\begin{array}{c} \text{APPENDIX A} \\ \text{SURVEY INSTRUMENT} \end{array}$

SURVEY INSTRUMENT

You are invited to participate in a research project for a graduate student thesis, about Supported Education for Young Adults with Psychiatric Disabilities. This online survey should take about 15 minutes to complete. Participation is voluntary, and responses will be kept anonymous to the degree permitted by the technology being used.

You have the option to not respond to any questions that you choose.

Participation or nonparticipation will not impact your relationship with the Arizona State

University. Submission of the survey will be interpreted as your informed consent to

participate and that you affirm that you are at least 18 years of age.

The Principal Investigator for this study is Dr. Michael S. Shafer. Dr. Shafer is a Professor in the School of Social Work and can be contacted at michael.shafer@asu.edu or 602.496.1479. If you have any questions about your rights as a subject/participant in this research, or if you feel you have been placed at risk, you can contact the Chair of the Human Subjects Institutional Review Board, through the ASU Office of Research Integrity and Assurance, at (480) 965-6788.

I have read the above information and agree to participate in this research project.

____ Enter survey

The following questions are to get a better understanding of current mental health prevalence at ASU, as well as identify existing student services at ASU and additional services they students would like to receive while attending ASU.

Mental Health: Psychological or emotional well-being; regardless medical diagnosis or self-diagnoses.

Arizona State Univers	sity Undergraduate Student Survey Instrument
Demographic Characteristics	
Race/Ethnicity	Caucasian
·	African American
	Multiracial
	Asian American
	Hispanic / Latino
	Native American Pacific Islander
Age	TEXT
Sexual Orientation	Straight
Sexual Orientation	Bisexual
	Lesbian
	Gay
	Other
Gender	Female
Gender	Male
	Transgender
Student Characteristics	Transgender
Undergraduate Student	Encolonica (# of anodity completed)
Olidergraduate Student	Freshman (# of credits completed)
Status	Sophomore (# of credits completed)
Status	Junior (# of credits completed)
	Senior (# of credits completed)
G 11 GD 1	Other
Current Overall GPA	4.0 scale (0.0-4.0) (Drop Down Choices)
Type of Student	In-person courses
	Online courses
	Enrolled in both in-person and online courses
Course/Section	Course: PSY 101, SOC 101, COM 100, SWU 171
	(scroll down choice)
	Section # (scroll down choices)
Mental Health Questions	
Have you ever been	Depression
diagnosed by a medical	Bipolar
professional with any of the	Anxiety
following? (check all that	Schizophrenia
apply)	PTSD
10	ADHD
. Have you ever self-	Borderline Personality
diagnosed yourself with any	•

of the following (without	Dysthymia
obtaining medical	Eating Disorder
conformation)? (check all	Obsessive-Compulsive Disorder (OCD)
that apply)	Schizoaffective Disorder
	Autism Spectrum Disorder
	Substance Abuse
	Other
. Are you currently receiving	Yes
treatment for a mental health	No
condition?	
. Have you ever in the past	Yes
received treatment for a	No
mental health condition?	
. Are you currently seeking	Yes
and/or interested in receiving	No
treatment for an existing or	
possible mental health	
condition?	
. Have you ever disclosed	Yes
your mental health	No
conditions to ASU faculty or	N/A, I do not have a mental illness
staff (DRC, Counselor	
Training Center, or Health	
Services)?	

Listed below are various centers and services available students attending Arizona State University. Please indicate which of the following you have accessed. For those you have accessed, please indicate how helpful they have been for you in terms of managing and balancing your mental health and academics.

Service	Used		Help	Helpfulness			
	(1=Not at all; 5=Very H)		ery He	elpful			
ASU Disability Resource Center	Y	N	1	2	3	4	5
ASU Counselor Training Center	Y	N	1	2	3	4	5
ASU Health Services	Y	N	1	2	3	4	5
ASU Formal/ Informal Faculty Advising	Y	N	1	2	3	4	5

Listed below are a variety of academic support services that some college students find helpful during their college careers. Please indicate which of these supports you have USED while attending ASU and which you WOULD LIKE to see be available to you while attending Arizona State University?

Career Planning	U	sed	Would	d Like
Vocational Assessment	Y	N	Y	N
Career Exploration	Y	N	Y	N
Educational Goal Plan Development	Y	N	Y	N
Course Selection Instruction	Y	N	Y	N
Counseling Services	Y	N	Y	N
Academic Survival Skills	U	sed	Would	d Like
Information on disability rights and resources	Y	N	Y	N
Tutoring	Y	N	Y	N
Mentoring	Y	N	Y	N
Academic support groups	Y	N	Y	N
Time and Stress management	Y	N	Y	N
Social support groups	Y	N	Y	N
Social Skill building workshops	Y	N	Y	N
Campus & course orientation	Y	N	Y	N
Assignment & course management	Y	N	Y	N
Direct Assistance	U	sed	Would	d Like
Assist in choosing classes each semester	Y	N	Y	N
Financial aid	Y	N	Y	N
Managing education debt	Y	N	Y	N
Planning for future expenses	Y	N	Y	N
Outreach	U	sed	Would	d Like
Classroom Accommodations (DRC)	Y	N	Y	N
Mental Health Treatment Team	Y	N	Y	N
Advocacy	Y	N	Y	N

APPENDIX B

IRB APPROVAL LETTER



EXEMPTION GRANTED

Michael Shafer Applied Behavioral Health Policy, Center for 602/496-1479 Michael.Shafer@asu.edu

Dear Michael Shafer:

On 2/13/2017 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Support Services ASU Student Survey
Investigator:	Michael Shafer
IRB ID:	STUDY00005693
Funding:	None
Grant Title:	None
Grant ID:	None
Documents Reviewed:	 Student Survey Instrument, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions); Faculty Recruitment Letter, Category: Recruitment Materials; Supported Education Protcol, Category: IRB Protocol; Follow-up Recruitment Email, Category: Recruitment Materials; Faculty Recruitement Letter, Category: Recruitment Materials;

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 (2) Tests, surveys, interviews, or observation on 2/13/2017.

In conducting this protocol you are required to follow the requirements listed in the INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc:

Nicole Janich Sydney Etzler