

Autonomy Supportive Classrooms and Wellbeing in College Students with Psychiatric Disabilities

Amber O'Shea¹
Mark Salzer²

Abstract

Research has shown that students' experiences of autonomy within the classroom impact important outcomes related to student engagement, academic success, and wellbeing. Very little is known, however, about this relationship among students with psychiatric disabilities in postsecondary settings. Given the increasing number of students entering higher educational institutions with a psychiatric disability, and the increased risk this subpopulation of students has for experiencing issues related to health, wellbeing, and participation, research that further investigates the relationship between classroom experiences of autonomy and wellbeing among college students with psychiatric disabilities is warranted. The purpose of the current study was to examine the relationship between perceived support for autonomy in the college classroom and indicators of health and wellbeing among college students with psychiatric disabilities. Findings indicate that increases in perceived autonomy support in the classroom predicted higher levels of quality of life and recovery, and lower levels of distress from psychiatric symptoms. Implications for research and practice are discussed.

Keywords: autonomy, college students with disabilities, health, well-being

Issues pertaining to mental illness among college students today are wide-spread and pervasive. The number of postsecondary students in the United States who have been diagnosed with one or more mental illnesses continues to rise (Anastopoulos et al., 2016; Auerbach et al., 2016; Belch, 2011; Kampsen, 2010; MacKean, 2011), and researchers estimate that students with psychiatric disabilities currently make up one of the largest and fastest growing groups of students with disabilities who are enrolled in colleges and universities across the United States (GlenMaye & Bolin, 2007; Kupferman & Schultz, 2015). Despite the presence of campus-based services aimed at providing support to students with mental illnesses and disabilities, such as campus counseling centers and university offices of disability support services, students with psychiatric disabilities often experience issues related to health, wellbeing, and academic achievement, as evidenced by low levels of integration and persistence in higher education among this population (Collins & Mowbray, 2005; Goodman,

2017). For instance, research has shown that, while enrolled in institutions of higher education, students with psychiatric disabilities are less likely to fully participate in the campus community (Salzer, 2012); this has important implications for overall wellbeing, as research has found that low levels of involvement, engagement, and participation with the campus community can undermine students' educational and health trajectories (Burke-Miller et al., 2006; LaCaille et al., 2011; Rosenbaum et al., 2014; Visser & Hirsch, 2014; Von Ah et al., 2004). In general, individuals with psychiatric disabilities often face a number of barriers related to educational and occupational pursuits, as well as health and functioning, despite expressed motivation and desire to succeed in these domains (Hartley, 2010; Mancini, 2007).

In addition to the presence of psychiatric symptoms, it is likely that a number of social determinants of health - those presented within the socio-cultural contexts in which individuals live and work - negatively impact the health and wellbeing trajectories

¹ Pennsylvania State University; ² Temple University

of individuals with psychiatric disabilities. Evidence indicates that individuals with psychiatric disabilities are at an elevated risk of comorbidity, mortality, and engagement in unhealthy or risky behaviors (Pratt et al., 2013). Two particularly relevant outcomes related to health and wellbeing among individuals with psychiatric disabilities are recovery and quality of life, which have been described as complex constructs that involve a dynamic interplay between personal, environmental, and contextualized factors (Mancini, 2007; Pinkney et al., 1991). Recovery, which is often studied as an important health-related outcome among individuals with psychiatric disabilities, describes feelings of hopefulness, meaning, and illness management (Mancini et al., 2005). Personal empowerment and a sense of agency in one's life are central to the notion of recovery (Mancini et al., 2005). Not only do recovery and quality of life have important implications for overall functioning, health, and wellbeing, but also have a negative impact on academic functioning and success among postsecondary students (MackKean, 2011). For individuals with psychiatric disabilities in postsecondary settings, the development of maladaptive health behaviors (i.e., physical inactivity, poor nutritional habits, problematic sleep patterns), poor behavioral and emotional regulation, and self-defeating habits may further impede overall health and function (Hicks & Heastie, 2008; Visser & Hirsch, 2014). For many students, adapting to new challenges and stressors presented in the college context can undermine health and wellbeing. For instance, students often face myriad stressors related to new academic demands, social roles, and pressures related to selecting and pursuing professional goals, which may influence student health, wellbeing, and quality of life (Beiter et al., 2015; Fier & Brzezinski, 2010).

It may be particularly challenging for students with psychiatric disabilities, in comparison to their peers, to develop the necessary balance between self-care and work towards addressing newfound independence, professional, and social challenges, as they are charged with navigating through new systems of health-care, advocating for needs and accommodations on campus, and managing symptoms of the disability and side-effects of medication. Moreover, as the college years often provide young adults with their first experiences of autonomy and behavioral independence to make meaningful decisions that reflect endorsed identities, students with psychiatric disabilities often must grapple with decisions related to disclosure of their disability to individuals at their college or university, which can be a complex process. Research has shown that, among college stu-

dents with invisible disabilities, students' decisions to disclose their disability to the university and make effective and appropriate use of campus-based support services relates to students' sense of self-determination and identity, which are developed through experiences afforded to them within the college context, such as interactions with peers, professors, and university staff (O'Shea & Meyer, 2016). Thus, for students with psychiatric disabilities, autonomy is a particularly important component of self-determined action related to proactive decision-making and wellbeing. Still, individuals with psychiatric disabilities often experience impairments that undermine motivated action and initiated behaviors, and are more likely to experience interactions with others in which their autonomy is often deemphasized (Mancini, 2008), leading to maladaptive decision-making and undermining health and wellbeing (Drake et al., 2010).

Research suggests that, for individuals with psychiatric disabilities, college may negatively impact health and wellbeing. While research has concluded that educational attainment and health are positively associated among individuals in the general population, this relationship is not as clear for individuals with psychiatric disabilities. A recent study conducted by O'Shea and Salzer (2019) found a negative relationship between level of educational attainment and indicators of quality of life and recovery among individuals with psychiatric disabilities. Results of this research revealed that, among adults with psychiatric disabilities, those who had been to college reported significantly lower indicators of wellbeing than those individuals with a high school education. One plausible explanation of these counter-intuitive findings is that experiences afforded within the college context may work to undermine recovery-oriented outcomes in individuals with psychiatric disabilities. For instance, research has suggested that highly controlling environments undermine identity exploration and negotiation which can compromise health and recovery, while autonomy-supportive practices facilitate self-determined action, recovery, and wellbeing (Hutcheon & Wolbring, 2012; Mancini et al., 2005). Based on these studies, it is clear that further research is needed to better understand the experiences of students with psychiatric disabilities in contexts of higher education and how these experiences impact outcomes related to health and wellbeing.

Traditional-aged college students are often in an important developmental period between late adolescence and early adulthood, engagement in health-related behaviors has important implications for overall and long-lasting health and wellbeing (Nelson et al.,

2008). Experiences during the college years can impact long-term health outcomes, as the habits formed during late adolescence and emerging adulthood can lead to the development of health conditions later in life (LaCaille et al., 2011; Visser & Hirsch, 2014; Von Ah et al., 2004). Consequently, for college students with psychiatric disabilities, adopting negative health habits during this developmental period may further contribute to the disparities in health and employment frequently seen among adults with psychiatric disabilities (Burke-Miller et al., 2006; Rosenbaum et al., 2014). As such, it is imperative to develop a better understanding of the malleable factors in the college context that impact health and wellbeing among college students with serious mental illnesses. More students are entering college with psychiatric disabilities than ever before (Blanco et al., 2008), it is urgent that research identifies effective, affordable, and scalable lifestyle interventions that promote the development and maintenance of health and wellbeing among college students with psychiatric disabilities. An important step in this direction is to establish a necessary knowledge-base of the unique characteristics inherent in students' experiences in higher education that impact health and wellbeing.

Support for Student Autonomy

One critical factor that contributes to success and recovery among individuals with psychiatric disabilities involves support for autonomy. Among individuals with psychiatric disabilities, autonomy has long-been identified as an essential component of rehabilitation and treatment. Autonomy, which is considered a basic psychological need, involves developing a sense of agency, intrinsic motivation, and self-determination towards actions and goals (Deci & Ryan, 2008). Support for autonomy, which involves the development of a sense of personal agency, self-initiated action, and decision-making (Drake et al., 2010), has been found to be an important element of recovery-oriented programs, and evidence suggests that supporting individuals' sense of autonomy and autonomous decision-making and actions results in improved outcomes related to recovery, quality of life, and psychiatric symptoms (Mancini, 2007). Thus, support for individual autonomy is a predictor of recovery and wellbeing in individuals with psychiatric disabilities; however, structures vary significantly in the extent to which they support and foster individuals' sense of autonomy. Autonomous behavior is intrinsically motivated, while controlled behaviors are enacted under the pressure of external figures (Deci & Ryan, 2002). In the classroom, students' autonomy can be supported by instructors

who create student-centered learning environments, provide information and opportunities for informed decision-making, acknowledge students' attitudes and identities, and encourage identity exploration and problem solving while avoiding coercion (Black & Deci, 2000). Instructors who adopt student-centered approaches to teaching, such as prioritizing students' needs and avoiding coercive or demanding practices, were found to promote more positive outcomes related to learning and psychological development. According to self-determination theory, a theoretical framework of human motivation (Ryan & Deci, 2000), environments that support individuals' basic needs for autonomy are more likely to enhance intrinsic motivation, pro-active behaviors, and overall functioning. This theoretical framework is particularly well-suited for elucidating the malleable and socio-contextual factors present within the college context that impact student wellbeing, as the theory explicitly attends to the person-environment fit and the dynamic relationship between the level of support for autonomy in an environment and an individual's intrinsically-motivated action. Moreover, this theoretical framework has the potential to provide important insight about practices within higher education that support health and wellbeing in college students with psychiatric disabilities, as it brings to the forefront individuals' contextualized experiences within post-secondary settings.

Among individuals with psychiatric disabilities, contexts that support individual autonomy related to the development of personal agency and goals has been found to improve motivation towards personally meaningful work (Moran et al., 2014). Inclusion of individuals' identities is an important part of supporting autonomy. In particular, Moran et al. found that autonomy-supportive contexts value prior knowledge and lived experience with a mental illness, rather than stigmatizing these identities, which allowed individuals to "integrate illness experience and more normative parts of one's identity in a health way" (p. 39). This study, in combination with other prior research, show that autonomy as described by self-determination theory (Ryan & Deci, 2000), provides a suitable theoretical framework for elucidating and conceptualizing the experiences of individuals with psychiatric disabilities in various contexts, the extent to which socio-cultural environments are supportive or restrictive of individuals' autonomy, and the relationship these factors have on important outcomes related to health and wellbeing among individuals in this population.

Among educational researchers, perceived support for student autonomy in the classroom has long-been established as an important predictor of

successful outcomes in higher education (Ryan & Deci, 2000). Prior research has shown that instructors who are perceived by students as being more supportive of student autonomy in the classroom foster greater academic outcomes, engagement, and persistence (Black & Deci, 2000). In the classroom, teachers can support students' autonomy by avoiding coercive behaviors, emphasizing students' personal agency, and providing opportunities for students to make proactive decisions aligned with their personally endorsed identities (Niemi & Ryan, 2009). Autonomy support in the classroom reinforces student-centered learning, which is an approach to facilitate learning in which students assume primary ownership of their own learning processes, by providing students with opportunities to make decisions, develop a sense of agency, and engage in independent thinking and learning (Lee & Hannafin, 2016). Moreover, autonomy-supportive teachers construct student-centered learning environments by offering scaffolding to students' learning while supporting the development of student identity, interests, and goals. Among individuals with disabilities, research has found that authoritarian or paternalistic environments, which frustrate and undercut the need for autonomy, thwart recovery-related outcomes and goals (Mancini et al., 2005), and influence decision making regarding the use of available resources and services that are known to support successful postsecondary outcomes (O'Shea & Meyer, 2016).

While research has shown that autonomy-supportive environments foster health outcomes among individuals with psychiatric disabilities, and autonomy is an important component of recovery-oriented programs and those aimed at improving student outcomes, there remains a dearth of research on the extent to which perceived support for autonomy in the classroom promotes positive outcomes related to health and wellbeing among individuals with psychiatric disabilities in postsecondary settings. As the number of students with psychiatric disabilities on college campuses continues to increase, it is important that we develop a better understanding of the ways in which students' health, wellbeing, and educational trajectories are either supported or thwarted by factors within the educational environment. While it is clear that autonomy support plays a critical role in improving outcomes related to engagement, motivation, and wellbeing among students in the general population (Reeve, 2006), very little is known about these relationships among students with psychiatric disabilities in settings of higher education.

Given the increasing number of students entering higher educational institutions with a psychiatric dis-

ability, and the increased risk this subpopulation of students has for experiencing issues related to wellbeing and success, research is warranted that further investigates the relationship between classroom experiences of autonomy and wellbeing among college students with psychiatric disabilities. The purpose of the current study is to examine the relationship between perceived support for autonomy within the college classroom and indicators of wellbeing, namely recovery, quality of life, and distress from psychiatric symptoms, among college students with psychiatric disabilities.

Method

Human subjects approval for this study was obtained from the institution's IRB prior to participant recruitment. As part of a larger study on Supported Education, participants were recruited over a period of 18-months via the Internet from student-oriented websites, such as student-run mental health organizations, campus mental health organizations and services, e-news listservs, and websites operated by mental health organizations such as NAMI. Eligible participants were enrolled in either a two- or four-year college or university at the time of the study, for either full- or part-time study. Interested and eligible participants were mailed a release of information form for confirmation of mental health diagnosis and the IRB-approved consent form. Participants were offered a \$20 incentive for completing the baseline survey. Cross-sectional baseline data for all participants were used in the current analysis.

Measures

Demographic information was collected from each participant, including information about age, gender, ethnicity, relationship/marital status, employment status, and level of education. Additionally, participants were asked whether or not they lived independently, in their own domicile, in a shared domicile, or if they had ever experienced homelessness.

Participants' perceived recovery from mental illnesses was assessed with the 20-item version of the Recovery Assessment Scale (RAS). The items on the scale assess life goals and purpose, general outlook and attitudes, hope, not being dominated by symptoms, and asking for help. Each of the 20 items is rated on a five-point Likert scale (1 = strongly disagree; 5 = strongly agree). A composite RAS score ranges from 20 to 100 and is calculated by summing the 20 constituent items. Higher scores correspond to greater recovery. A comprehensive review of psychometric findings has found the RAS to have strong

evidence of reliability and validity for the targeted population (Salzer & Brusilovskiy, 2014).

To assess participants' quality of life, the 10-item version of Lehman's Quality of Life (QOL) measure was used. This measure, which was adapted from a longer version of Lehman's QOL interview, was developed to assess how individuals feel about important aspects of their lives in various areas (e.g., "How do you feel about the amount of fun you have?" "How do you feel about the way things are between you and your family?" and "How do you feel about the amount of friendship you have in your life?"), with responses ranging from 1 = terrible to 7 = delighted. The composite score was calculated by averaging the scores on all the items, with higher scores indicative of greater overall quality of life. The Lehman QOL questionnaire has demonstrated good validity and reliability and has previously been validated for use with individuals with serious mental illnesses (Lehman, Postrado, & Rachuba, 1993).

The Hopkins Symptoms Checklist (HSCL) is a 25-item measure, assessing the presence and intensity of depression and anxiety symptoms, as well as two somatic symptoms over the past month. Items were scored on a four-point Likert scale (1 ¼ not at all bothered to 4 ¼ extremely bothered), and a composite score is calculated as the average of the item responses, with lower scores indicating fewer symptoms. This 25-item measure has demonstrated reliability and validity for assessing symptoms among individuals with serious mental illnesses (Derogatis et al., 1974).

Perceived autonomy support was measured using the six-item version of the Learning Climate Questionnaire (LCQ), which measures students' perception of the level of support for their autonomy in classroom-based settings. Both the six-item and 15-item version of the LCQ have been found to have similar psychometric properties; thus, the shorter version was selected for use in the current study as efforts were taken to reduce the time for completion of the survey instrument. The LCQ can be adapted to assess support for autonomy in a particular class or to ascertain students' perceptions of the general learning climate and faculty members' support for their autonomy in general at their postsecondary institution. For the purposes of the current study, students were asked to reflect on their experiences overall with the instructors of their courses at the current postsecondary institution. This measure uses a 7-point Likert scale (1 = strongly disagree to 7 = strongly agree) on items such as "I feel that my instructor provides me choices and options" and "My instructor encouraged me to ask questions". Higher scores represent higher levels

of perceived support for student autonomy from faculty member at their institution. This scale has been previously validated and found to have good reliability and validity (Williams & Deci, 1996).

Results

Sample Description

Of the 70 participants surveyed, 17% were male, 77% were female, and 6% were transgender. The sample was 61% white, 7% black, 7% Latino/Hispanic, 1% Native American, 10% Asian, and 2% Other. Ninety percent of participants reported that they were single or never married at the time of completing the survey, and 10% were married or in a domestic partnership. Sixty percent of the sample reported that their sexual orientation was heterosexual, 4% Gay/Lesbian, 21% bisexual, and 14% other. Of the participants surveyed, 9% reported that they have children (biological, adopted, or step-children), and 91% did not have any children. Seventy percent of the sample was employed at the time of the survey and 29% were not employed. The mean age of the sample was 24 ($SD = 6$). For educational attainment, 11% of the sample successfully completed high school, 50% had completed some college, 16% completed an associate's degree, 10% completed a bachelor's degree, 7% completed some graduate school, and 6% completed a graduate or professional degree. Demographic characteristics of the sample are also presented in Table 1.

Autonomy Support and Quality of Life

A linear regression was run to understand the effect of perceived autonomy support (Haslam et al., 2009) within the classroom on quality of life among college students with psychiatric disabilities. Linearity was assessed via a scatterplot with a superimposed regression line of quality of life against perceived autonomy support (PAS). Visual inspection of these plots revealed a linear relationship. The assumptions of homoscedasticity and normality were met, as assessed by visual inspection of standardized residuals versus standardized predicted values. No outliers were detected via case-wise diagnostics. Correlations for all variables are presented in Table 2. PAS accounted for 9% of the variation in quality of life with an adjusted R square .08, which equates to a medium effect size. PAS in the classroom statistically significantly predicted quality of life $F(1,69) = 6.57, p = .013$. Results of the regression analyses are presented in Table 3.

Autonomy Support and Recovery

A linear regression was run to understand the effect of perceived autonomy support (Haslam et al., 2009) within the classroom on recovery among college students with psychiatric disabilities. Linearity was assessed via a scatterplot with a superimposed regression line of recovery against PAS. Visual inspection of these plots revealed a linear relationship. The assumptions of homoscedasticity and normality were met, as assessed by visual inspection of standardized residuals versus standardized predicted values. No outliers were detected via case wise diagnostics. Perceived autonomy support accounted for 12% of the variation in recovery with an adjusted R square .13, which also equates to a medium effect size . Perceived autonomy support in the classroom statistically significantly predicted recovery $F(1,69)$, $= 10.28$, $p = .002$.

Autonomy Support and Psychiatric Symptoms

A linear regression was run to understand the effect of perceived autonomy support (Haslam et al., 2009) within the classroom on psychiatric symptoms among college students with psychiatric disabilities. Linearity was assessed via a scatterplot with a superimposed regression line of recovery against PAS. Visual inspection of these plots revealed a linear relationship. The assumptions of homoscedasticity and normality were met, as assessed by visual inspection of standardized residuals versus standardized predicted values. No outliers were detected via case wise diagnostics. Perceived autonomy support accounted for 10% of the variation in symptoms with an adjusted R square .08. Perceived autonomy support in the classroom statistically significantly negatively predicted symptoms $F(1,69)$, $= 7.35$, $p = .008$.

Discussion

The purpose of the current study was to investigate the relationship between students' perceived autonomy support in college classrooms and measures of students' subjective sense of wellbeing, including their quality of life, recovery, and psychiatric symptoms. A large body of literature shows that support for autonomy yields positive outcomes for students in educational contexts (Ciani et al., 2010; Reeve, 2009; Stefanou et al., 2004), and for students with learning disabilities (Field et al., 2003); however, research had not yet explored this relationship among postsecondary students with psychiatric disabilities. Results of the current study show that students' perceived support for autonomy in the classroom is positively associated with quality of life and recovery, and neg-

atively associated with symptoms among college students with psychiatric disabilities. The results of this study provide important insight into the nature of the relationship between students' perceptions of support for their autonomy and pertinent outcomes related to their health and wellbeing.

Prior research has explored the effects of autonomy on a number of factors related to success in general student populations. In particular, research has found that when teachers support student autonomy, students are more likely to report feeling a sense of personal wellbeing and belonging in the classroom, are more likely to actively engage in prescribed learning activities, and are more engaged in tasks that require higher-order thinking (Stefanou et al., 2004). Moreover, students who perceive the classroom environment to be supportive of their autonomy have been found to have a better sense of community within the classroom (Solomon et al., 1996), improved relationships with peers (Ruzek et al., 2016), and increased academic achievement (Marshik et al., 2017). On the other hand, classroom structures which are perceived by students as controlling or rigid, in which students feel pressured to think, behave, and respond in specific ways in order to succeed in the classroom context, have been found to undermine students' motivation, well-being, and academic outcomes (Garcia & Pintrich, 1996; Reeve, 2009). The findings of the current study lend further support to previous research that highlights the important role of support for students' motivated decision-making, self-determination, and autonomy. In this case, outcomes related to the health and wellness of students with psychiatric disabilities were found to be associated with perceived autonomy in the educational environment.

Prior research has focused on the importance of autonomous motivation among college students with disabilities, and found that students with disabilities who feel that their autonomy is supported in the college context are more likely to make proactive decisions aligned with their personal and professional goals (Field et al., 2003). In particular, among college students with disabilities, perceiving the college environment as supportive of student autonomy was essential in priming students' identity, self-determination, and motivation to use campus-based disability support services in an effective and proactive way (Field et al., 2003; Hadley, 2007; O'Shea & Meyer, 2016). Students with psychiatric disabilities may face unique stressors related to stigma, health and well-being, and belonging in higher education (Condra et al., 2015). Identifying factors related to successful outcomes among students with psychiatric disabilities is an imperative step towards supporting successful and

health trajectories among this growing subpopulation of students.

For individuals with psychiatric disabilities, the role that autonomy plays in promoting recovery and quality of life has been demonstrated, as research has shown that individual autonomy supports positive outcomes related to recovery. Specifically, research suggests that recovery-oriented programs that are perceived as supportive of individuals' autonomous decision-making are more likely to foster personal recovery, a sense of personal agency, and meaningful participation in community structures (Drake & Whitley, 2014; Mancini et al., 2005). Moreover, individuals' engagement and performance in various environments such as work, community participation, and treatment programs, are improved when people perceive the environment as being supportive of their need for autonomy (Mancini, 2008). Mancini (2008) argues that autonomy support is perhaps the most important component of a recovery-oriented environment, as it is a vital component of personal well-being, and because many individuals with psychiatric disabilities have previously experienced encroachments on their personal sense of agency, autonomous decision-making, and initiation of goal-directed behaviors. Thus, the findings of the current study, which suggest that perceived autonomy support in the classroom are positively predictive of recovery and quality of life, and negatively predictive of distress caused by psychiatric symptoms, are congruent with research on the role of autonomy support in recovery contexts for individuals with psychiatric disabilities.

The study has a few limitations that are worth noting. First, the use of a cross-sectional design precludes the ability to attribute causation. Future studies should attempt to further investigate the impact of autonomy support in classroom settings in promoting positive outcomes related to health and well-being in college students with psychiatric disabilities using experimental or quasi-experimental designs. Additionally, while a strength of the current study was the utilization of standardized survey instruments that have been previously validated for use with individuals with psychiatric disabilities, survey methodologies are limited in their ability to yield rich in-depth responses regarding participants' meaning making. As the current study yields important insight into individual's experiences related to the objective experience of autonomy-supportive contexts and personal recovery, future research would benefit from taking a qualitative approach to gaining in-depth, rich information pertaining to how students with psychiatric disabilities construct meaning surrounding contextual support for their

autonomy, and their personally meaningful goals for recovery and sense of well-being.

Implications for Research and Practice

The findings of the current study provide new insight into the role of perceived autonomy support in the college classroom for supporting important outcomes related to health and wellbeing among college students with psychiatric disabilities. These results suggest that supporting students' needs for autonomy in the academic environment may have an impact on positive health-related outcomes. Central practical implications of the current findings involve improving the physical and mental health outcomes among college students with psychiatric disabilities by adopting practices and policies that foster autonomy-supportive classroom environments that will also benefit all students. Efforts should be made to identify specific strategies for supporting autonomy, agency, and engagement among students. Specifically, efforts should be increased to improve collaborative networks with those who interact with and provide services to college students with psychiatric disabilities. Initiatives should focus on working collaboratively with practitioners and staff within educational environments to support students' efforts to establish personal agency, personally meaningful goals related to educational attainment and occupational success, and motivated decision making among students with psychiatric disabilities. Additional attention should be paid to the systemic structures within academia in order to better understand how the culture of higher education and experiences of students outside of the classroom contribute to or thwart students' sense of autonomy. Additional research of this nature is needed to lay a necessary foundation of knowledge for the development of targeted interventions aimed at improving outcomes related to well-being in college students with psychiatric disabilities.

Prior research has found that paternalistic, or highly controlling environments, can lead individuals with psychiatric disabilities to feel silenced and discredited, while autonomy-supportive environments enhance self-efficacy and well-being (Schauer et al., 2007). Some researchers have contended that the deleterious effects of medical paternalism on individuals with psychiatric disabilities can create a form of iatrogenic injury, where controlling treatments impede recovery and result in poorer health outcomes (Mancini, 2007). The results of the current study lend additional support to the extant research on autonomy-supportive practices for individuals with psychiatric disabilities, and underscore the importance of avoiding coercive, controlling, or paternalistic behav-

iors when working with college students with psychiatric disabilities. Wherever possible, faculty and staff should prioritize and elevate students' choices and work closely with students to embolden them to make decisions about their disability in the context of postsecondary education. Efforts should be made to create spaces in which students' emergent identities are valued, and information should be provided in a way that promotes proactive discovery and informed decision-making. For instance, faculty and staff can work with students with psychiatric disabilities to help them better understand and communicate the barriers to success they might face in higher education, as well as their own unique strengths and needs in the context of college classrooms and environments. Moreover, faculty and staff should assist students in discovering, locating, and accessing resources on campus that are well-aligned with their personal goals and interests.

College and university faculty can create autonomy-supportive classrooms by adopting practices that are flexible and promote students' motivated engagement. These practices are well-aligned with principles of universal design, which involve being flexible with the classroom structure and the presentation of material, allowing for flexibility in students' expression and demonstration of knowledge, and encouraging engagement and the development of intrinsic motivation towards tasks in the classroom (Hall et al., 2012). For students with disabilities, studies have shown that students' perceptions of faculty flexibility impact the likelihood that the student requests and makes use of academic accommodations (Goodman, 2017), thus, upholding these principles may be particularly important for supporting positive outcomes among students with psychiatric disabilities. Notably, Black and Deci (2000) found that students who are relatively low in initial autonomy are more likely to benefit from autonomy-supportive instructors, signifying that those students who are most likely to struggle with feeling autonomous are likely to gain the most from autonomy-supportive instructors. These findings are of chief relevance to students with psychiatric disabilities, as research suggests individuals with psychiatric disabilities are at an increased risk of developing maladaptive patterns related to autonomous self-regulation and motivation, and are more likely to have had prior experiences with controlling figures in the past (Mancini, 2007). Thus, while all students generally benefit from autonomy-supportive instruction, students who are at risk for experiencing lower levels of autonomy, such as those with psychiatric disabilities, are likely to further benefit from learning in autonomous-oriented contexts.

A critical component of providing support for autonomy involves supporting individuals in making informed choices that are congruent with their personal interests, identities, and goals (Field et al., 2003; Ryan & Deci, 2002; Stone et al., 2008). As such, faculty and staff should allow students to behave in ways that reinforce their identities and personal choices, by encouraging identity exploration and negotiation in the academic environment. Drake et al. (2010) assert that "real choice is predicated on having access to information" (p. 8). Thus, in order to create and maintain autonomy-supportive environments in postsecondary settings, it is critical that disability service providers, staff, and educators provide students with pertinent information about available accommodations on campus and the types of options and avenues students have for seeking assistance and support. Disability support staff who adopt autonomy-supportive practices can help students develop the tools and resources needed for success, while providing ample opportunities to discuss their ideas, interests, goals, and the challenges they face in pursuit of their educational and professional goals. Prior research has found that students' lack of knowledge about their disability in the context of higher education is a barrier to success (Goodman, 2017; Kranke et al., 2013). Hence, arming students with knowledge and information germane to college and career planning will help students construct a personally meaningful understanding of their disability and campus-based support services, and ultimately promote autonomy.

Providers of disability support services have the opportunity to educate and support students in the development of skills related to self-advocacy and self-regulation. Students with psychiatric disabilities are likely to benefit from having individual discussions with faculty and staff about their unique needs and experiences, the types of services and accommodations available and accessible to them, how services align with and support their individual goals, and the ways in which services and accommodations have or have not been perceived by their peers as being helpful in the past. These types of conversations help to enhance a sense of autonomy among students by enhancing and developing cognitive and motivational processes related to self-regulation, self-assessment, and decision-making (Niemiec & Ryan, 2009). As students learn to navigate the academic environment of postsecondary education, their understanding of their own academic strengths and limitations change and evolve. Working with students to encourage this type of discovery and exploration, while scaffolding support, empowers students' sense of agency and autonomy and promotes well-being and development.

Finally, faculty and staff at postsecondary institutions across the United States would benefit from additional education and training concerning the importance of adopting autonomy-supportive practices and avoiding controlling practices when working with students with psychiatric disabilities. Research has shown that a general lack of understanding of mental health issues presents a pervasive barrier for the success of college students with psychiatric disabilities (Condra et al., 2015). Enhancing faculty and staff awareness of issues pertaining to students with psychiatric disabilities is paramount. As the number of college students with psychiatric disabilities continues to increase it is vital that faculty and staff continue to develop a better understanding of the unique needs and experiences of this group of students and learn more about ways to support their success and wellbeing.

Future research should focus on understanding the lived experiences of students with psychiatric disabilities in the context of higher education, and the characteristics of learning environments that shape, influence, and predict pertinent outcomes related to health, functioning, and wellbeing. Specific directions of future research should include investigations into other components of theoretically-oriented motivation, such as perceived support for the needs of competence and relatedness, and these factors' additional contributions to health and well-being among students with psychiatric disabilities. Research is also warranted that focuses on the relationship between recovery and other psychosocial factors, such as self-efficacy. Prior research has found that self-efficacy is an important contributory factor to recovery among individuals with psychiatric disabilities (Mancini, 2007), and may also be particularly important to the experiences of students in postsecondary education (Chemers et al., 2001). Thus, it is likely that the development of self-efficacy in college is related to positive postsecondary outcomes and health and wellbeing for students with psychiatric disabilities. Future research should investigate this possibility. Finally, more research is needed to identify the correlates of various contextual and sociocultural factors with outcomes related to academic achievement. As noted, the relationships between educational attainment, experiences within the educational context of college, and health and well-being among college students with psychiatric disabilities is somewhat complex. One line of future research might focus on the potential impact of psychiatric symptoms on students' perceptions of the classroom environment and their perception of opportunities to develop agency and autonomous regulation in the classroom, as it is plausible that students' perceptions

of their instructors' support for autonomy is shaped by symptoms and prior experiences in the classroom. Further research is warranted to better elucidate these relationships and the particular mechanisms at play. Additional research of this nature is needed to lay the foundation for the development of practices, policies, and classroom-based interventions aimed at supporting health, wellbeing, and academic success among college students with psychiatric disabilities.

Conclusion

The purpose of the current study was to investigate the relationship between students' perceived autonomy support in college classrooms and measures of health and wellbeing, including quality of life, recovery, and psychiatric symptoms. The results of the current study find that students' perceived support for autonomy in the classroom is significantly positively predictive of quality of life and recovery, and significantly negatively predictive of symptoms in college students with psychiatric disabilities. Not surprisingly, quality of life and recovery were negatively associated with psychiatric symptoms. The results of this study provide important insight into the nature of the relationship between students' perceptions of support for their autonomy and pertinent outcomes related to health and wellbeing among college students with psychiatric disabilities. Specifically, the results highlight the important role that perceived support for autonomy in the college classroom plays in promoting positive outcomes related to recovery, quality of life, and psychiatric symptoms among college students with psychiatric disabilities.

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About the Authors

Amber O'Shea received her B.A. degree in Psychology from Indiana University of Pennsylvania, her M.S. degree in Mental Health Counseling from Florida State University, and Ph.D. in Educational Psychology from Temple University. She is currently an assistant professor in the Department of Educational Psychology, Counseling, and Special Education at Penn State University. Her research interests focus on improving postsecondary outcomes in college students with disabilities. She can be reached by email at: amo5208@psu.edu.

Mark Salzer received his B.A. degree in psychology and sociology from the University of Wisconsin – Madison and M.A. and Ph.D. degrees in clinical psychology from the University of Illinois at Urbana/Champaign. His experience includes working as a psychologist in two Veterans Administration hospitals and serving as the founding department chair of Rehabilitation Sciences at Temple University. He is currently a professor in the Department of Social and Behavioral Sciences in the College of Public Health at Temple University and is the Director of the Temple University Collaborative on Community Inclusion. His research interests focus on community inclusion of adults with serious mental illnesses with a particular focus on promoting educational success of college students with mental health issues. He can be reached by email at msalzer@temple.edu.

Table 1*Participant Demographics*

Gender		N	Percent
	Male	12	17
	Female	54	77
	Other	4	6
Ethnicity			
	White	43	61
	Black	5	7
	Latino/Hispanic	5	7
	Native American	1	1
	Native Hawaiian	-	0
	Asian	7	10
	Other	1	2
Marital Status			
	Single/Never Married	63	90
	Married/Partnership	7	10
Education Level			
	High School/GED	8	11
	Some College	35	50
	Associates Degree	11	16
	Bachelor's Degree	7	10
	Graduate School	5	6
Employment Status			
	Employed	50	70
	Not Employed	20	29

Table 2*Correlations Between All Variables*

Measure	1	2	3	4
1. Autonomy	1			
2. Quality of Life	.297*	1		
3. Recovery	.362**	.665**	1	
4. Psychiatric Symptoms	-.312**	-.474**	-.591**	1

Note. * Correlation is significant at the $p < .05$ level (2-tailed);

** Correlation is significant at the $p < .01$ level (2-tailed).

Table 3

Simple Linear Regression Analyses for Perceived Autonomy Support in The Classroom Regressed on Quality of Life, Recovery, and Symptoms (N=70)

Dependent Variables	B	Beta	<i>t</i> -value	Significance	Confidence Interval	
Quality of Life	.322	.297	2.56	.013	.071	.573
Recovery	.029	.362	3.21	.002	.011	.048
Symptoms	-.536	-.312	-2.71	.008	-.931	-.142