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Pepperdine University
Graduate School of Education and Psychology

ACADEMIC ACCOMMODATIONS FOR COLLEGE STUDENTS WITH PSYCHIATRIC
DISABILITIES: RECOMMENDATIONS FOR DISABILITY SERVICE STAFF, FACULTY,
AND CLINICIANS

A clinical dissertation presented in partial satisfaction
of the requirements for the degree of
Doctor of Psychology

by

Joelle I. Broffman

December, 2016

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This clinical dissertation, written by

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under the guidance of a Faculty Committee and approved by its members, has been submitted to and accepted by the Graduate Faculty in partial fulfillment of the requirement of the degree of

DOCTOR OF PSYCHOLOGY

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ABSTRACT

The number of college students with mental illness is on the rise, and there is a clear relationship between mental health and academic performance. As many as 5-12% of college students with mental health symptoms may not obtain the supportive services for which they qualify. A significant portion of students with mental health diagnoses may be protected by the ADA if their conditions rise to the level of a psychiatric disability (PD). Despite the importance of working effectively with college students with PDs, there is limited literature to inform stakeholders (disability services office staff, faculty, and clinicians) in providing academic accommodations to this portion of the student body. This dissertation project builds on empirical, theoretical, and applied literature about students with PDs, literature from related disciplines about learning disabilities (LDs) and ADHD, and original content to offer stakeholders a list of concrete, interdisciplinary recommendations for providing academic accommodations to university students with PDs. Recommendations are grouped as follows: (a) coordinating interdisciplinary communication and outreach, (b) stakeholder training and education, (c) evaluating and documenting PDs, and (d) archiving and refining academic supports and services. These recommendations may improve stakeholders' abilities to collaborate with other professionals and maximize effective service delivery to students with PDs. Additional considerations for using recommendations, project limitations, and directions for future research are also addressed.

Keywords: psychiatric disabilities, academic accommodations, disability service offices, faculty, mental health clinicians

Introduction

Postsecondary education is generally acknowledged as being critical to occupational success. According to the Bureau of Labor Statistics (2009), nearly half of new jobs between 2008 and 2018 are expected to require postsecondary education and training (Koch, Mamiseishvili, & Higgins, 2014). College graduates are nearly twice as likely as high school graduates to become employed, and college graduates' projected earnings across the lifespan are almost one million dollars greater than high school graduates' earnings (Day & Newburger, 2002; U.S. Department of Labor, 2008). Given this data, it is not surprising that the number of people in the United States who pursue a college education has increased during the last several decades (Collins & Mowbray, 2005; Megivern, Pellerito, & Mowbray, 2003). Between 2001 and 2011, student enrollment in degree-granting postsecondary institutions increased by 32%, and the number of students under 25 years of age enrolled in degree-granting postsecondary institutions increased by 35% (U.S. Department of Education, 2013).

The number of college students with mental illness is also on the rise (Substance Abuse Mental Health Services Administration [SAMHSA], 2013). The increased frequency of mental illness on college campuses seems to lie at the intersection of general increases in the number of people entering college, and the age demographic of many college students. For instance, people under age 25 now comprise nearly 30% of university populations (U.S. Department of Education, 2013). Further, 75% of people with a mental illness experience symptom onset by their early to mid-twenties, and nearly 50% of people see their first symptoms even earlier, during mid-adolescence (Kessler et al., 2007; National Institute of Mental Health [NIMH], 2014; Unger, 1992). Perhaps not surprisingly, campus administrators are reporting significantly increased demands for mental health services on college campuses, noting, "People who would

never have come to college a decade or two ago, are here” (Watkins, Hunt, & Eisenberg, 2012, p. 324).

Although as many as two thirds of people with severe and persistent mental illness aspire to attend college (Corrigan, 2008), as many as 86% of students with PDs withdraw from college before completing their degrees (compared to approximately 37% of other students): Furthermore, students with PDs who withdraw from college are less likely to return and complete their degrees (Collins & Mowbray, 2005; Hysenbegasi, Hass, & Rowland, 2005; Kessler, Foster, Saunders, & Stang, 1995; Koch et al., 2014). Of those students who experience emotional distress during college but do not withdraw from school, approximately 5-12% of their symptoms are serious enough to warrant mental health services (Collins & Mowbray, 2005; National Alliance on Mental Illness [NAMI], 2012). As can be seen, there are higher numbers of students with psychiatric disabilities (PDs) on college campuses than are obtaining mental health or related supportive services.

College presents new challenges for the majority of students such as living away from home for the first time, navigating newfound independence, and managing novel, oftentimes competing, social and academic demands. For those who struggle with mental illness, navigating such challenges may be significantly more difficult. In addition to the psychosocial challenges common to many students transitioning to college, students with PDs may additionally face (a) managing side effects of psychotropic medication, (b) dealing with stereotypes and stigma associated with having a mental illness, (c) maintaining sufficient academic performance in light of competing psychiatric symptoms, and (d) obtaining resources and supports for a PD; they may also have more difficulty than other students interacting with faculty and peers in a new social environment, and adapting to unexpected changes in coursework (Sharpe, Bruininks, Blacklock,

Benson, & Johnson, 2004; Souma, Rickerson, & Burgstahler, 2001). Research continues to show that students with mental illness experience higher levels of psychosocial stress, including higher levels of anxiety and academic-related distress, than other students, which can adversely impact academic functioning (Coduti, Hayes, Locke, & Youn, 2016).

As previously mentioned, college students with PDs face more frequent interruptions in their education and are less likely to return to school to complete their degrees. More specifically, as many as 4.29 million people may have completed college had a PD not interfered with their ability to stay in school (Kessler et al., 1995; Murphy, Mullen, & Spagnolo, 2005). In a recent study of 35 college students with mental health diagnoses, psychiatric symptomatology (36.4%) and lack of academic integration (21%) continued to be two of the most common responses regarding reasons for leaving college early: A few specific responses students provided included, "I was afraid to leave my room," "I was all mixed up with the mania," and "I didn't want to fail" (Megivern et al., 2003, p. 225). This increased rate of interrupted and unfinished higher education among people with PDs does not bode well for long-term functioning, as such factors are frequently associated with poorer vocational outcomes (including unemployment, use of Supplemental Security Insurance (SSI) or Social Security Disability Insurance (SSDI), and poverty (Collins & Mowbray, 2005; Koch et al., 2014; Manthey, Goscha, & Rapp, 2015; Megivern et al., 2003). However, people with PDs have a median educational level of more than 12 years, and an estimated 20-50% of people with PDs have some college experience, typically before the onset of their psychiatric symptoms (Collins & Mowbray, 2005). This research overwhelmingly suggests that psychiatric symptoms can adversely impact college students' postsecondary education and career trajectories. The many challenges psychiatric conditions cause may independently prompt students with mental health conditions to leave

college early. There may be additional barriers to completing college for these students, including difficulty obtaining necessary supportive services (e.g., due to perceived and actual stigma, the financial costs and time required to have disabilities documented, and the range and quality of services offered at particular universities).

Barriers to Accommodation Services and Supports

Historically, students with PDs have faced blatant institutional discrimination. As recently as 30 years ago, many university policies mandated that students withdraw from school if they had a psychiatric condition (Hoffmann & Mastrianni, 1991). Nearly 20 years ago, educators routinely discouraged students with PDs from remaining in school on the premise that campus life would exacerbate their mental health symptoms (Cook, Yamaguchi, & Solomon, 1993; Gift & Southwick, 1998; Hoffmann & Mastrianni, 1992). In the past, verifying the need for accommodations has been deemed “more important” for students with learning disabilities (LDs) and PDs than for those with physical or sensory disabilities, in part due to the former’s “hidden” or “invisible” nature (Collins and Mowbray, 2005, p. 306). Academic accommodation requests for PDs may continue to hold unique implications relative to other disabilities due to stigma associated with the former (Schreuer & Sachs, 2014). Obtaining accommodations for PDs may also be more frequently disputed than other kinds of disabilities, as PDs are related to internal processes rather than physical or otherwise observable impairments (Mowbray et al., 2006). However, present-day university climates appear to reflect more positive, supportive perceptions of students with mental illness than has been true in the past. For example, Becker, Martin, Wajeeh, Ward, & Shern (2002) found that nearly 80% of faculty and 85% of students believe students with mental illnesses can succeed in their academic pursuits. Other researchers have since replicated similar results (Brockelman, 2011; Brockelman & Scheyett, 2015). Still, some

stigma towards students with PDs remains in higher education settings (Charlton, 2006; Easterbrook et al., 2015; Salzer, 2012; Schreuer & Sachs, 2014). Further, students often internalize societal stigma about mental illness which fosters self-stigma, and adversely impacts their decision to solicit mental health and related services in higher education (Lannin, Gyll, Vogel, & Madon, 2013; Lannin, Vogel, Brenner, Abraham, & Heath, 2016; Michaels, Corrigan, Kanodia, Buccholz, & Abelson, 2015; NAMI, 2012; Quinn, Wilson, MacIntyre, & Tinklin, 2009; Venville, Street, & Fossey, 2014).

Section 504 of the Rehabilitation Act of 1973, and the Americans with Disabilities Act (ADA) of 1990, marked significant progress in higher education for students with PDs. Since that time, institutional stigma toward students with mental illness appears to have declined, and available supportive programs and services for students with mental illness appear to have increased. However, the number of students with PDs accessing disability support services on their college campuses has remained low over time (Collins & Mowbray, 2005; NAMI, 2012). As previously noted, there are more students with PDs on college campuses than are actually seeking support services: Nearly 45% of students who withdraw from college due to a mental illness may not receive accommodations, and as many as 50% may never seek access mental health services or supports (NAMI, 2012). Some of the most common reasons students do not obtain services (e.g., financial aid [66%], transportation [55%], study skills [54%], stress management skills [35%] and personal support, such as from an educational coach [33%]) pertain to all students, both with and without PDs (Corrigan, Barr, Driscoll, & Boyle, 2008). Other literature suggests that among students with PDs, one's degree of self-identity as having a PD is positively correlated with the tendency to seek academic accommodations (Megivern, 2002). In a more recent study published by NAMI (2012), the top five reasons students with PDs

reported they did not access accommodations included (a) unawareness that they qualified for and had a right to receive accommodations, (b) fear of stigma, (c) unawareness that disability services offices served students with mental health conditions, (d) burdensome documentation processes involved in obtaining accommodations for a PD, and (e) financial costs of documenting a PD. As can be seen, some of the reasons students did not report seeking services in NAMI's survey were due to fears about stigma or general unawareness of available services. Still other reasons were reflective of objective barriers to obtaining services (e.g., the finances, time, and other burdens involved in documenting a PD to receive accommodations). It appears from this data that college students with PDs have continued to remain disenfranchised, at times, from fully participating in higher education.

If quality disability support services are not available at universities, or if students do not perceive such resources as being accessible, they may more often choose not to disclose their mental health status or seek relevant supports (Collins & Mowbray, 2005; Lannin et al., 2013; Lannin et al., 2016; Megivern et al., 2003; Michaels et al., 2015; NAMI, 2012; Quinn et al., 2009; Venville et al., 2014). For example, some students report their school's websites do not provide thorough explanations of policies, procedures, or services available to students with mental health issues (NAMI, 2012). Additionally, many students (and some campus administrators) believe DSOs serve students with physical disabilities or LDs but not students with PDs (Brockelman, Chadsey, & Loeb, 2006; Megivern et al., 2003; NAMI, 2012; Olney & Brockelman, 2003; Szymanski, Hewitt, Watson, & Swett, 1999). It is unfortunate that students may incorrectly perceive their universities to lack information or provide insufficient resources to students with mental health issues, as research suggests many students with PDs can excel in school with adequate support (Megivern et al., 2003). While the LD literature is also limited in

documenting the empirical effectiveness of accommodation efforts (Rath & Royer, 2002), research does suggest students with LDs can succeed in higher education with the proper support. For instance, there is a positive association between students with LDs graduating from college and the availability of disability support services for LDs (Cowles & Keim, 1995). Specifically, helping students with LDs strengthen particular academic weaknesses through developing compensatory skills has been shown to be linked with greater academic outcomes (Rath & Royer, 2002). There is also a small body of literature on positive outcomes related to providing academic support services to students with Attention-Deficit/Hyperactivity Disorder ([ADHD]; Byron & Parker, 2002; Parker & Boutelle, 2009; Parker, Hoffman, Sawilowsky, & Rolands, 2013). There are likely similar benefits of providing academic support services to students with PDs as is the case for students with LDs and ADHD. As such, the overarching goal of this dissertation is to provide practical recommendations that will improve academic support services for students with PDs.

Research indicates there is a wide range in the quality, breadth, and depth of services different DSOs provide, despite their presence on most two and four-year college campuses in the United States. This range in the types and quality of services on college campuses can differentially impact students' access to learning. Some literature highlights that service providers do not coordinate well, or often enough, which can create additional barriers to students with PDs obtaining appropriate services (Blacklock, Benson, & Johnson, 2003; Katsiyannis, Zhang, Landmark, & Reber, 2009; Sharpe et al., 2004). Thus, another purpose of this dissertation project is to provide specific recommendations and ideas for three key groups of people (DSO staff, faculty, and mental health clinicians) to collaborate in providing academic accommodations to the growing college students with PDs population. This may also reduce

barriers that prevent students from participating in higher education and learning.

Mental Illness, Psychiatric Disability, and the Law

Accommodating students with wide-ranging disabilities has been federally mandated since the passage of Section 504 of the Rehabilitation Act of 1973 and, later, the Americans with Disabilities Act (ADA). According to the ADA (1990):

The term "disability" means, with respect to an individual - (A) a physical or mental impairment that substantially limits one or more of the major life activities of such individual; (B) a record of such an impairment; or (C) being regarded as having such an impairment. (Sec. 12102)

Two important phrases in the above definition are *impairments that limit functioning* and, more specifically, having conditions that *limit one or more major life activities*. In guidelines published by the Equal Employment Opportunity Commission (EEOC), major life activities explicitly include learning. Including learning as a major life activity protects individuals with learning disabilities, attention deficit disorders, and other psychiatric disorders from being discriminated against in educational contexts (Gordon & Keiser, 1998).

Section 504 of the Rehabilitation Act of 1973 and the ADA were designed to protect the rights and enhance the lives of people with disabilities. However, not everyone with a diagnosable mental health condition also has a PD. According to Goldman (1999), psychiatric impairments have been defined for lay populations as "refer[ring] collectively to all diagnosable mental disorders...characterized by alterations in thinking, mood, or behavior... associated with distress and/or impaired functioning" (Job Accommodation Network, 2010, p. 3); however, this definition may be misleading if readers mistake it for a description of conditions protected by the ADA. Psychiatric diagnoses covered by the ADA include anxiety disorders, autism, bipolar

disorder, borderline personality disorder, depressive disorders, obsessive compulsive disorder, panic disorder, post-traumatic stress disorder, schizophrenia, and seasonal affective disorder (Collins & Mowbray, 2005; Job Accommodation Network, 2010; Souma et al., 2001). Blacklock (2001) has written about diagnoses which are not protected by the ADA including transvestitism, transsexualism, pedophilia, voyeurism, gender identity disorders, compulsive gambling, kleptomania, and pyromania (Souma et al., 2001). Additionally, personality traits and sequelae of mental health conditions are not protected, such as irresponsibility, poor judgment, irritability, and chronic lateness (Job Accommodation Network, 2010).

While having a mental health diagnosis and having a PD are not mutually exclusive, authors still caution those who accommodate or evaluate students for mental health conditions to understand the delicate nature of differentiating the two (Falender, Collins, & Shafranske, 2009). People with mental illness may be able to function well in several domains of their lives, particularly once supportive services are in place. In one self-report study, as many as 20% of college students' psychiatric symptoms did not significantly interfere with their academic functioning, particularly when they had environmental supports such as positive teachers, access to mental health treatment, and the ability to partake in study groups (Megivern et al., 2003). Thus, providing support services to students with PDs may significantly facilitate their access to learning. This dissertation aims to improve support services, namely academic accommodations, by developing concrete recommendations for providers who serve them in academic and related clinical settings.

Developing and Implementing Academic Accommodations

An academic accommodation has been defined as "the removal of a barrier to full participation and learning. The emphasis is on access, not outcome." (Souma et al., 2001, p. 2).

Accommodations are granted to students in order to facilitate their equal access to education rather than to assure their academic success, in the same way that the success of students without disabilities cannot be assured. When considering the mental health conditions and related impairments that warrant academic accommodations, Gordon and Keiser (1998) suggest that:

The focus of an accommodation request should therefore not be on what would help the individual pass the exam or have greater success meeting course requirements. The orientation should instead be toward accommodations that would correct or circumvent functional impairments that might otherwise preclude a fair opportunity to take a course or sit for an examination. (pp. 17-18)

Gordon and Keiser (1998) analogize academic accommodations to assistive devices. For instance, allowing hearing-impaired students to wear hearing aids does not directly maximize their academic performance, but it does remove a functional impairment that would otherwise pose a considerable barrier to learning. They add that "accommodations should only address the interactions between functional impairments and task demands" (Gordon & Keiser, 1998, p. 15). In sum, accommodations must only remediate disability-related impairments. Authors repeatedly note that even when students do qualify for academic accommodations, not all academic accommodations requested will be reasonable (ruled by the Supreme Court in *Alexander v. Choate* [1985]) and they should not all be permitted, particularly when they substantially alter course objectives (*Alexander v. Choate*, 1985; Katsiyannis et al., 2009; Rickerson, Souma, & Burgstahler, 2004; Souma et al., 2001). This project will provide recommendations for providers to implement reasonable academic accommodations that do not compromise the integrity of the learning process in higher education.

Authors have distributed written lists of instructional and other academic accommodations

for students with PDs that may be useful to reference (Job Accommodation Network, 2010; Sharpe et al., 2004). Of these recommendations, extending deadlines for students with PDs and discussing mental health issues with students are two of the most frequently endorsed strategies faculty report using when accommodating or supporting students with PDs (Becker et al., 2002; Brockelman, 2011; Brockelman & Scheyett, 2015). However, the effectiveness of academic accommodations for a range of disabilities remains largely unknown, as such accommodations have historically lacked experimental support (Rath & Royer, 2002; Sharpe et al., 2004). Some recent research suggests that college students' use of academic accommodations on the basis of several disabilities (including but not limited to PDs), is positively correlated with grade point averages and students' perceived institutional support (Schreuer & Sachs, 2014). Literature about outcomes related to workplace accommodations for people with PDs (Chow, Cichocki, & Croft, 2014; Granger & Gill, 2000; Stefan, 2002) is somewhat more accessible than outcome literature about accommodating students with PDs. However, to date this investigator has been unable to locate outcome studies about providing academic accommodations to students with PDs, and has found only a handful of studies (based on either faculty or student self-reports) which investigate the most commonly used academic accommodations for college students with PDs (Becker et al., 2002; Brockelman, 2011; Brockelman & Scheyett, 2015; Koch et al., 2014; Salzer, Wick, & Rogers, 2008). Still fewer studies have been performed to measure the effectiveness of such accommodations (for an example of one such study based on student self-reports, see Salzer et al., 2008). A thorough review of accommodations that have been proposed for students with PDs is beyond the scope of this dissertation; however, examples of common recommendations, many of which are frequently cited for use in university settings with students, have been compiled and listed in Appendix A for reference. These recommendations were adapted primarily from the Job

Accommodation Network (2010), and additional information was integrated from DO-IT (2001).

Stakeholders Accommodating Students

The increasing number of students with PDs coming to college in the last two decades has had a significant impact on university staff. As previously mentioned, campus administrators have noted students with mental illnesses are attending college today more frequently than was the case 10-20 years ago (Watkins et al., 2012). Blacklock, Benson, Johnson, and Bloomberg (2003) noted that having higher rates of students with untreated psychological issues on college campuses has required campus staff to work significantly more hours per week than in the past (Hartley, 2013). College counseling center staff in particular have struggled to meet the increased demand for psychological services on their campuses (Benton, Robertson, Tseng, Newton, and Benton 2003; Hartley, 2013), and a range of other academic and career counseling service centers continue to report they lack the resources required to meet increased student needs on the basis of PDs (Mowbray et al., 2006). In sum, ongoing attempts to meet the needs of students with PDs, who are coming to college in increasing numbers, has exposed significant challenges in campus staff's ability to respond to such demands (Salzer et al., 2008; Watkins et al., 2012). Campus staff such as DSO staff, faculty, and campus clinicians are on the "front lines" of helping these students, and these groups have repeatedly called for increased education and training about how to work with college students with PDs (Brockelman et al., 2006; Collins & Mowbray, 2005; Katsiyannis et al., 2009; Mowbray et al., 2006; Quinn et al., 2009). Thus, a primary goal of this dissertation is to help clarify the individual, unique roles of various people (hereafter referred to collectively as "stakeholders") involved in accommodating students with PDs, and providing concrete ways for these stakeholders to collaborate. The literature frequently refers to three major stakeholder groups in assessing students' needs for and subsequently

permitting academic accommodations: (a) disability services office administrators and staff (DSOs), (b) university faculty, and (c) mental health clinicians.

DSO staff. DSO staff play a central role in accommodating students with disabilities. With respect to PDs in particular, DSO staff are frequently the liaisons between clinicians, faculty, and students. DSOs often make final determinations regarding what accommodations to provide students (Mowbray et al., 2006; Sharpe et al., 2004; Stefan, 2001). They also coordinate how accommodations will be implemented in particular courses. As such, they represent a critical stakeholder group in the accommodations process.

DSO staff have reported several difficulties providing services to college students with PDs. Research suggests DSOs view PDs as a "confusing, fuzzy area" when it comes to determining these students' need for accommodations (Collins & Mowbray, 2005, p. 311). They report longstanding difficulty determining appropriate accommodations for students with PDs compared to students with other types of disabilities (Wilk, 1993). As many as 88% of DSO staff feel they have insufficient knowledge about PDs to provide these students with support services; at smaller universities, DSO staff report having insufficient budgets to obtain preliminary training about PDs (Collins & Mowbray, 2005). The psychoeducational training that DSO staff do receive may be weighted toward accommodating students with physical, sensory, or learning disabilities than students with PDs (Sharpe et al., 2004).

Some efforts have been made to inform DSOs working with college students with PDs in the past. For example, Collins (2000) writes:

The disability support office is the key in establishing a supportive environment within the university for students with PDs. If the campus community trusts and respects the disability services office, professors are more willing to provide

appropriate accommodations and spend less time questioning a student's motives.

(p. 38)

Other authors have broadly encouraged providers to collaborate across disciplines when working with students with PDs, for instance, that college counseling centers and DSOs maintain open lines of communication (Mowbray et al., 2006), and that students be included in DSOs' decisions about how to meet students' academic needs (Eudaly, 2002). However, these calls for collaboration have likely been difficult for DSOs to follow through on because such general recommendations lack specificity or concrete direction. Thus, a primary goal of this project is to clarify the DSO's role in accommodating college students with PDs, and to recommend specific ways for DSOs to work collaboratively with other stakeholders on tasks beyond their scope.

Faculty. Faculty may often be the first stakeholder group to notice students are experiencing learning difficulties. Faculty are frequently the first of the stakeholder groups who students approach for accommodations or other support (Quinn et al., 2009), and faculty may refer approximately 12% of students with PDs who are managed by the DSO for supportive services (Collins & Mowbray, 2005). Further, faculty must implement accommodations that students receive for PDs in their courses. As can be seen, faculty members are critical stakeholders in accommodating students with PDs. However, their roles in this process are not always clear in the literature. For instance, some literature suggests in the past students have sought academic accommodations directly from their instructors, while other sources state that disabilities must be documented with DSOs before faculty can permit accommodations (Sharpe et al., 2004). Still other writers argue that faculty have an ethical obligation to expand their role in accommodating students beyond simply permitting accommodations, for instance by preemptively “apply[ing] best practices in providing reasonable accommodations and effective

instructional strategies that better meet the learning characteristics and needs of students with disabilities” (Katsiyannis et al., p. 43). This recommendation may be difficult for faculty to implement, as professors express a lack of confidence in their abilities to help students with mental health concerns (Becker et al., 2002; Brockelman et al., 2006); in addition to limited training, they may lack the time or the resources to develop multimodal educational and learning curriculum that is recommended in the disability literature. Nearly 84% of faculty in one study indicated they wanted additional information and resources about working with students with PDs (Brockelman et al., 2006). Faculty may not feel confident working with students with PDs because they were not trained to do so; to further complicate this issue, there is limited literature or training for them to utilize in increasing their knowledge. Research shows faculty may lack training about and subsequent awareness of the signs and symptoms of mental health conditions (Quinn et al., 2009), which further highlights the need for increased training about PDs. Thus, a goal of this project is to develop concrete recommendations for faculty when working with students with PDs. This project will provide recommendations for increasing faculty knowledge about working with students with PDs, clarifying their role in accommodating students with PDs, and guiding faculty toward ways to work collaboratively with other stakeholders.

Clinicians. The processes by which students obtain academic accommodations are heterogeneous and unstandardized between universities. Many universities require that students’ PDs be formally evaluated by licensed professionals, and nearly 77% of schools have some formal documentation requirements (Collins & Mowbray, 2005). Despite a clear tendency toward students demonstrating their PD status prior to receiving accommodations, clinicians’ roles in accommodating students with PDs receives relatively little attention in the literature.

Authors generally agree that mental health clinicians are the most qualified providers to

evaluate students for PDs. However, the quality of documentation of a student's psychiatric condition, including justified accommodation requests, may be the lowest among all possible disabilities which require documentation for obtaining accommodations (Wylonis & Schweizer, 1998). Ambiguity and unclear or unstandardized documentation procedures may be explained by a lack of clinical training in this particular area of the literature. Mental health professionals may be more likely to receive training and education on disabilities with direct, observable links to academic performance (e.g. LDs, ADHD), and less training about how psychiatric disorders may similarly impair learning. However, research continues to elucidate concerning findings regarding mental health clinicians misunderstanding terms such as "functional impairment," being uninformed about laws around providing academic accommodations on the basis of LDs and ADHD, and frequently misclassifying students diagnostically for having LDs or ADHD (Harrison, Lovett, & Gordon, 2013; Weis, Speridakos, & Ludwig, 2014). While there is limited empirical or applied literature to support the claim that clinicians may obtain more training about LDs and ADHD relative to PDs, this hypothesis is reflected in the lack of available literature or training about PDs and academic performance compared to that which is available about LDs and ADHD. This lack of available scholarship and research may be one reason that PDs have at times been omitted from the mission statements of higher educational coalitions. For example, in 2014, the Association for Educational Therapists' (AET) mission statement referenced developing and utilizing tools to help students with learning disabilities and "other learning challenges" (AET, 2014, "Welcome," para. 1). Recently, however, their conferences have begun to include trainings about the explicit impact of mood disorders and other PDs on classroom performance, and recommendations for addressing these issues, which suggests the field is moving toward understanding and appreciating PDs' impact on academic functioning. Similarly,

in the past there have been somewhat limited references to PDs on websites such as the Association on Higher Education and Disability webpage, and specific mental health alliances were not previously listed as AHEAD collaborators (AHEAD, 2014). Thus, another goal of this project is to add to the limited literature about academic accommodations for students with PDs in postsecondary education. Specifically, one goal of this project is to clarify the role that clinicians play in helping their patients, namely students with PDs, obtain the academic accommodations they need.

Dissertation Rationale and Aims

In the last 10 to 15 years, stakeholders have expressed needs for training and education about the links between PDs and students' academic performance. Many authors have called for stakeholder groups to collaborate in accommodating students with PDs, and these authors have provided suggestions ranging from very vague, to concrete but brief (for examples of such recommendations, see Collins, 2000; Collins & Mowbray, 2005; Katsiyannis et al., 2009; Sharpe et al., 2004). Despite stakeholder requests for training and the range of previously mentioned recommendations proposed in the past, the literature on accommodating college students with PDs remains fraught with gaps. Further, the literature that is available suggests limited budgets pose considerable obstacles to stakeholders obtaining necessary training about PDs. Some authors have called for additional budgeting to fund such training (Katsiyannis et al., 2009). There seems a critical need to provide low- to no-cost training to circumvent financial barriers that will otherwise continue to impede stakeholder training and education.

One low- to no-cost method for disseminating training information includes developing and distributing written informational materials, yet research suggests dissemination of printed materials or resources for staff and faculty is one of the least likely provided services in support

of students with PDs (Collins & Mowbray, 2005). This project will respond to the need for stakeholder training and the call for increasing collaboration and be distributable in written format, allowing the potential for its content to reach a wide audience at no cost to them.

In this review of the literature, the author has encountered several questions about and omissions with respect to evaluating students for PDs and subsequently providing the appropriate academic accommodations. The primary goal of this dissertation is to summarize previous recommendations for practice posed in the college students with disabilities literature and to generate novel recommendations for serving college students with PDs, specifically, that will achieve the following:

- Clarify some of the individual roles of various stakeholders involved in accommodating students with PDs:
 - define the DSO's role in accommodating college students with PDs,
 - define faculty's contribution to working with students with PDs who are receiving accommodations, and
 - define the role that clinicians play in helping their patients (i.e., students with PDs) obtain the academic accommodations they need
- Provide concrete ways for each of the aforementioned stakeholders to collaborate, and for these stakeholders to collaborate with other professionals (e.g., upper university administration, university legal counsels) as-needed
- Suggest ways for stakeholders to seek out training and education about working with college students with PDs
- Consider ideas for providing academic accommodations that do not compromise course integrity

Innovation and Potential Contributions

To the investigator's knowledge, concrete recommendations do not exist that encourage explicit collaboration among each of the three stakeholder groups identified in this literature review. Some authors have proposed recommendations that provide two of these stakeholder groups with direction for collaborating (particularly among DSO staff and faculty; Katsiyannis et al., 2009); however, those recommendations are brief, that body of literature remains largely limited, and mental health providers seem to have been omitted at times from literature on interdisciplinary collaboration. Therefore, the proposed project intends to expand upon previous recommendations and, additionally, to make an original contribution to that literature. This project will fill a critical gap in applied clinical writing on the topic of providing academic accommodation services to students with PDs on college campuses. Developing concrete recommendations and disseminating them in a publishable, written format has potential to reach a broad audience at little cost, including those who may be limited by budgets or other resources to obtain training. The recommendations developed should also reduce discrepancies in the quality of academic accommodation services provided between universities. Last, but not least, the recommendations are being written in the spirit of advocacy, with intentions to improve the quality of services provided to college students with PDs. This author hopes that when stakeholders implement some, or all of these recommendations it may foster students with PDs' academic and occupational success.

Method

General Procedure

The chief goal of this dissertation is to provide interdisciplinary recommendations for stakeholders (DSO staff, faculty, and campus clinicians) involved in providing academic accommodations to college students with PDs. This chapter outlines the general procedures, as well as the more specific literature search and review strategies, undertaken to produce the final recommendations. Developing interdisciplinary recommendations for stakeholders involved a three-step process: (a) comprehensive literature review, (b) literature analysis and synthesis, and identification of gaps in literature, and (c) writing the interdisciplinary recommendations.

Literature Review

To inform the initial rationale for the project, this author searched for statistics about mental health in higher education settings, including matriculation and drop-out rates of college students with mental health conditions. The author also focused on student-perceived and more objective obstacles to obtaining academic supports for students with PDs, historical attitudes towards students with PDs on college campuses, and disability policy literature to highlight the critical need to serve this population of the student body. To support the rationale for the project and to aid in the development of the final list of recommendations, this author also searched for literature focusing on roles that faculty, DSO staff, and diagnosing clinicians have fulfilled or been recommended to fulfill in providing academic accommodations for students with PDs. This literature highlighted the range of recommendations that have been proposed, revealed ambiguity and inconsistencies across recommendations, as well as information missing from such recommendations. Although developing specific academic accommodations was not the focal point of this study, a list of some academic accommodations that have been proposed in the past

for students with PDs was compiled and included in Appendix A for reference.

Next, to inform the final list of recommendations the author searched for outcome studies about providing academic accommodations to college students with PDs. Because empirical research was limited, the author also searched for literature on disabilities such as LDs and ADHD, which have large conceptual overlap with PDs for their potential impact on learning. Electronically accessible training websites about PDs were also reviewed for reference in the final body of recommendations (e.g., to provide ideas to stakeholders about where to obtain training at low- to no-cost). Literature on the neurobiological and psychological correlates of specific mental health diagnoses were referenced to provide concrete examples for implementing specific recommendations. Literature highlighting the positive impact of providing mental health training to non-mental health populations was also reviewed and included to scaffold recommendations about educational training for university faculty and staff. Applied clinical writing (e.g., briefs for the lay population, summaries of extant literature, commentary on empirical articles, national survey study results) was also gathered about college students with PDs, and about students with other disabilities that can impair learning (e.g., LDs and ADHD). Furthermore, the author reviewed (a) disability policy literature, to provide context for specific recommendations, (b) local DSO and university websites, to identify common practices being utilized at present by stakeholders in the community, and (c) national testing organization websites that accommodate students on the basis of disabilities (e.g., the Educational Testing Service) to integrate into the recommendations proposed in this project.

Identifying source material and selecting studies. Literature which informed the final recommendations was identified through use of public search engines such as Google Scholar, and research databases such as PsycINFO and PubMed. The investigator compiled existing

experimental, correlational, and qualitative literature on the aforementioned topics. Emphasis was placed on articles from peer-reviewed journals where possible, on topics related to college mental health, psychiatric rehabilitation, disability studies, and academic/career development. Scholarly textbooks on similar topics were also reviewed and included in the subsequent synthesis of literature used to inform recommendations. However, as previously mentioned, empirical literature about providing college students with PDs with academic accommodations is limited. As such, the author also searched for and compiled applied clinical writing and theoretical literature on the aforementioned topics to inform practice considerations. Relatedly, online and printed information published by professional organizations and advocacy groups for persons with disabilities and, specifically, college students with disabilities (Association of Educational Therapists [AET], 2014; Association of Higher Education and Disability [AHEAD], 2014; Disabilities, Opportunities, Internetworking and Technology [DO-IT], 2014; Job Accommodation Network [JAN], 2010), was reviewed and referenced as relevant to provide the most recently proposed recommendations for working with students with a range of disabilities. Particular attention was paid to the recommendations about determining students' need for accommodations due to a PD. However, because that literature was scant, the investigator also reviewed the writings of related fields (e.g., providing services to students with learning disabilities and ADHD).

Search strategies. To guide the literature review in a systematic way, various combinations of the following words were entered into literature databases in various combinations: academic, academic accommodations, accommodations, achievement, ADHD, attitudes, barriers, clinicians, collaborate, collaborating, collaboration, college mental health, college students, counseling, considerations, disability policy, disability service offices, disability

services, disability support services, education, employment, ethical, ethics, evidence, evidence-based, evidence based, faculty, higher education, integrated, integrated care, interdisciplinary, interventions, law, learning disabilities, legal, mental health, mental illness, policy, practice considerations, psychiatric disabilities, outcomes, perceptions, professors, providers, psychotherapy, recommendations, success, training, university, university students, university staff, work, and workplace. The author searched for the aforementioned key words such that electronic databases would return literature in which (a) paper titles listed some or all of these words, (b) papers, chapters, or books were flagged for containing some of these terms as keywords, and (c) combinations of these words were each found within the body of the document. With the exception of (a) historical information that is helpful in describing the evolution of attitudes towards students with mental health issues on college campuses, and (b) highly cited articles or other sources that are considered classic or seminal to the areas of the literature reviewed, any research published more than 20 years ago was excluded from the final recommendation list.

Analysis and Synthesis of Literature

Following the aforementioned comprehensive literature review, this author organized compiled literature in order to identify common themes and organize recommendations conceptually, and to identify areas in the literature that could benefit from additional recommendations or practice considerations. This author paid particular attention to recommendations which have been proposed in the literature about ways for two of the three stakeholders of interest in this project to collaborate (e.g., literature about faculty and DSO collaboration) and summarized them as relevant to this project. The author also proposed novel ways for two, or all three, of these stakeholder groups to collaborate either with one another or

with other university professionals (e.g., university upper administration, university legal counsel).

Throughout the process of synthesizing, adapting, and refining the final recommendations list, this author consulted with her dissertation committee, whose members collectively represent each of the three stakeholder groups identified in this project, in order to obtain feedback about the kinds of recommendations that were likely to be most prudent and practical to implement. The author also solicited feedback select experts on disability services and psychiatric disabilities in higher education settings about project directions and ideas for obtaining additional literature. Recommendations complete with citations represent literature adapted, synthesized, and reorganized conceptually from preexisting literature. Recommendations without citations represent the author's original ideas (to her knowledge) for practice.

Developing final recommendations. After reviewing the aforementioned bodies of literature, organizing existing literature conceptually, generating novel recommendations for practice that do not exist in the literature to this author's knowledge, the final list of recommendations was developed. The author organized recommendations based on their conceptual similarity in the following four groups: (a) coordinating interdisciplinary communication and outreach, (b) stakeholder training and education, (c) evaluating and documenting PDs, and (d) archiving and refining academic supports and services. Wherever possible, recommendations were tiered to allow stakeholders with a range of available resources (e.g., time, finances, staff personnel) to implement them in some format at their university or in their clinical practice. Because the recommendations were specifically developed to promote interdisciplinary collaboration, each general recommendation heading includes ways at least two of the three stakeholder groups can increase their communication and interdependence. Some

recommendations also encourage stakeholders to collaborate with other entities such as university administration and legal counsel to further facilitate academic support services for college students with PDs.

Results

The primary goal of this dissertation is to recommend ways for faculty, disability service offices staff (DSOs), and mental health clinicians to collaborate when providing academic accommodations to students with psychiatric disabilities (PDs). The recommendations emphasize integration and collaboration of effort among the stakeholder groups. Currently, some challenges involved in accommodating college students with PDs in university settings include:

1. Limited information. Little empirical research or applied clinical literature exists to inform stakeholders' work with college students with PDs (Becker et al., 2002; Brockelman et al., 2006; Katsiyannis et al., 2009; Sharpe et al., 2004).
2. Student difficulty obtaining necessary assessment and documentation. Students must typically show proof of their need for academic accommodations, which often includes a formal diagnostic evaluation and an accommodation letter (Megivern et al., 2003; NAMI, 2012; Sharpe et al., 2004). However, being formally evaluated for a PD status can be costly and time-consuming; students with mental health conditions have noted these as a few reasons they often do not seek the academic and institutional supports they need (NAMI, 2012).
3. Lack of empirically validated, standardized procedures for identifying the need for accommodations. The literature is limited when it comes to providing guidelines for writing academic accommodation letters. Some authors argue they are the "lowest quality" letters clinicians provide for documenting a student's disability (Wylonis & Schweizer, 1998).
4. Role ambiguity of stakeholders. Literature about accommodating students with PDs tends to address three groups of people repeatedly; they are DSO staff, university

faculty, and mental health clinicians (hereafter, they are collectively referred to as stakeholders). Applied clinical writing provides inconsistent direction to these stakeholders about accommodating students for a PD (Blacklock et al., 2003; Collins & Mowbray, 2005; Rickerson et al., 2004; Sharpe et al., 2004; Souma et al., 2001).

5. Development of sufficient academic accommodations to remediate students' learning deficits while maintaining course integrity. Not all academic accommodations are reasonable, and stakeholders are only required to provide accommodations that remediate functional impairments caused by a PD (Mowbray et al., 2006; Rickerson et al., 2004; Souma et al., 2001; Wilk, 1993). In fact, literature generally discourages providing accommodations that surpass a student's particular learning needs. As previously mentioned, the purpose of accommodations is to provide access to learning rather than to maximize academic performance (Souma et al., 2001; Wylonis & Schweizer, 1998).

The following recommendations include a synthesis of (a) practice considerations previously posed in the literature about college students with PDs, (b) research from the learning disability (LD) and attention-deficit/hyperactivity disorder (ADHD) literatures that this author adapted for providers when working with students with PDs, and (c) innovative recommendations that, to this author's knowledge, are not yet in the psychology or educational literatures. These synthesized recommendations provide guidelines for stakeholders to collaborate when providing academic accommodations to college students with PDs. Wherever possible, the author has tiered recommendations according to the degree of available resources (e.g., financial, time, personnel-related), so that staff can best adapt them for their university setting. Some recommendations suggest that two of the three stakeholder groups collaborate;

other recommendations involve all three stakeholder groups working together. While college students with PDs are undoubtedly important stakeholders, they are not directly involved in determining other students' need for accommodations, or making decisions about what accommodations to permit. Consequently, these recommendations focus on the stakeholder groups who are most central to the accommodations process: DSO staff, faculty, and mental health providers. Although students are not addressed as a separate stakeholder group, some of the recommendations encourage including students in evaluating and refining the accommodations process. Finally, a list of specific recommendations for *each* stakeholder group discussed in this dissertation may be a fruitful endeavor to undertake in a future document; however, this particular project is intended to generate ideas for increasing *communication* and *collaboration* between stakeholder groups, rather than to focus on their individual efforts. Of course, there is potential to improve stakeholder groups' distinct roles in the accommodations process by implementing the interdisciplinary recommendations provided herein.

The author hopes readers can find ways to use these recommendations at their universities or in their clinical practices. Readers should understand that these recommendations may need to be adapted to meet unique needs at particular universities, and that they address and comprise only a finite number of possible solutions to myriad challenges about accommodating college students with PDs. However, these preliminary recommendations may stimulate research in a highly valuable and currently understudied area of the literature. Recommendations are grouped into the following four categories: (a) coordinating interdisciplinary communication and outreach, (b) stakeholder training and education, (c) evaluating and documenting PDs, and (d) archiving and refining academic supports and services.

Coordinating Interdisciplinary Communication and Outreach

DSO staff, faculty members, and clinicians develop interdisciplinary committees to facilitate academic support for students with PDs. DSOs, faculty members, and mental health clinicians all play important roles in identifying need for, generating, and implementing academic accommodations. While literature shows general consensus that clinicians should be gatekeepers for evaluating and documenting that students need accommodations, the roles faculty and DSO staff are expected to play in the process are less clear. Different authors place the onus on different stakeholders to varying degrees. Some literature indicates DSOs should determine whether and what type of accommodations students will receive, and that faculty should subsequently implement them in the classroom (Sharpe et al., 2004). Other writers encourage faculty to identify the need for and permit accommodations, particularly when students seeking assistance approach faculty before contacting the university DSO (Katsiyannis et al., 2009).

Developing interdisciplinary committees could help stakeholders such as DSO staff and faculty clarify their roles at individual universities and better collaborate when working with college students with PDs. Previous authors have briefly recommended that DSO staff and faculty form committees to promote ongoing communication and collaborative efforts (Katsiyannis et al., 2009); this author believes mental health providers would be prudent additions to such committees because they play such a critical role in determining students' accommodation eligibility and needs. A committee is defined as a group of people appointed or selected to perform a function on behalf of a larger group (Grigsby, 2008). Committees are organized to serve specific functions within organizations; they are typically headed by one chair, and comprised of other members who represent different points of view (e.g., junior or

senior faculty), different organizational components (e.g., departments or divisions), or different constituencies, such as postdoctoral scholars (Grigsby, 2008). Committees are commonplace in large organizations, for instance every medical school has committees that are often required by larger bodies that govern such organizations (Grigsby, 2008). Undergraduate university settings may find similar use of committees to problem-solve and collaborate in providing academic accommodations for students with PDs. For example, select DSO staff, faculty, and campus clinicians or clinicians in the community may meet to discuss accommodation procedures and policies at their university on a routine basis. Topics for discussion at these meetings may include:

- monitoring and refining the kinds of academic accommodations granted to students
- evaluating specific accommodations from multiple stakeholders' perspectives, including students
- determining methods for and frequency of communicating with students who receive accommodations
- obtaining funding to enhance academic supports and related services (e.g., for psychodiagnostic testing and treatment, stakeholder training)
- coordinating educational training about PDs to university staff and faculty
- generating solutions to challenges which are unique to specific universities (e.g., universities without formal DSOs, schools with understaffed DSOs, or institutions with limited financial support for resources and programs)

Interdisciplinary committee meetings seem to be a proactive way to improve academic support services on college campuses. Engaging stakeholders in routine interdisciplinary communication creates the potential for iterative feedback loops in the accommodations process,

and allows stakeholders to refine their distinct roles in their university settings. As an example, DSO staff can prompt faculty and students to provide feedback about specific academic accommodations. Committee members can then discuss ways to refine accommodations based on faculty and student feedback. DSOs can subsequently permit students to obtain the refined accommodations in future academic terms. Interdisciplinary committees may also anticipate and problem-solve about accommodation-specific challenges before they arise. For instance, interdisciplinary committees who discuss preventive topics at their meetings (e.g., about developing and implementing academic accommodations that do not compromise course integrity) may reduce the likelihood that vague or poorly defined accommodations, or accommodations that significantly alter learning objectives, are repeatedly provided to students.

Committees may invite students to take part in their meetings. Collaboration between providers and consumers (e.g., DSO staff, faculty, and students with PDs) is consistent with the mental health recovery model (Corrigan et al., 1999; Pickett et al., 2012; SAMHSA, 2011; Zimmerman, 1990). Further, consumers' active participation in their own care is critical to successful recovery from a mental illness (Ralph, 2000). Consumer empowerment is associated with higher levels of self-esteem, self-efficacy, confidence, and hope for the future (Corrigan et al., 1999; Pickett et al., 2012; Zimmerman, 1990). Therefore, interdisciplinary committees that include students in their meetings may benefit both students and stakeholders alike. Committees may choose to include students in their meetings who (a) receive academic accommodations through the DSO for a PD, (b) have received accommodations in the past for a PD, or (c) are student advocates who do not receive accommodations, but who wish to be involved in social justice on their campus. University size, possible conflicts of interest, and student confidentiality issues should each be considered when committees decide whether to include students in their

meetings, and what students to include. Despite possible risks of including students in committee meetings, doing so provides the benefit of a consumer perspective about the academic accommodations process at the university.

DSOs seek feedback from university faculty members about implementing academic accommodations for students with PDs. Faculty members are responsible for implementing academic accommodations in their courses and evaluating students' learning. Thus, their input about the accommodations process is very important. Faculty are more likely to participate in a student's learning disability accommodation plan if they agree that a particular student needs the academic support (Bourke, Strehorn, & Silver, 2000; Zhang et al., 2010). There is no similar research on faculty participation in the accommodations process for students with PDs to this author's knowledge. However, given Bourke et al.'s (2001) findings it is possible that, independent of disability type, faculty may be more likely to participate in a student's accommodation plan when they agree that the student needs accommodations. To engage faculty in the accommodations process for students with PDs, DSOs can solicit faculty members' feedback about implementing academic accommodations for these students. DSOs can use this feedback to improve accommodations for students with PDs in future academic terms in ways that may benefit both faculty and students. Actively soliciting feedback from faculty may also bolster relationships between professors and DSO staff. For instance, when faculty members see the university as a source of support in implementing accommodations for college students with learning disabilities, they are more likely to participate in implementing course accommodations (Bourke et al., 2000).

One challenge identified in the literature involves providing reasonable accommodations to students that do not alter a course's learning objectives or compromise its integrity. As

previously mentioned, all academic accommodations must be ‘reasonable’ to reduce the likelihood that they may compromise course objectives. Various disability advocacy coalitions and disability legislation acknowledge that some accommodations may be unreasonable (Mowbray et al., 2006; Rickerson et al., 2004; Souma et al., 2001; Wylonis & Schweizer, 1998). Therefore, obtaining faculty feedback about the feasibility of specific accommodations can help preserve course integrity. For instance, DSOs can use faculty input about challenges implementing specific accommodations to develop alternative accommodations that do not significantly alter course expectations or learning objectives. DSOs may solicit this feedback by administering brief surveys about challenges faculty encounter when implementing specific accommodations for students with PDs.

In addition to communicating with faculty at the end of an academic term, DSO staff may also choose to establish contact with faculty at the beginning of an academic term (i.e., when decisions about a student’s need for accommodations likely occur). DSOs may administer brief surveys to faculty about challenges they anticipate facing before implementing accommodations to their students with PDs. DSOs can use this information to support their faculty in implementing certain accommodations during the academic term. DSOs can maintain ongoing dialogue with faculty throughout the term to check in about specific anticipated, or new unanticipated, challenges. Ongoing DSO-faculty communication may be especially useful when faculty identify particular accommodations as problematic once they have been permitted to students, for instance in the middle of an academic term. Ongoing DSO-faculty communication allows for problem-solving during the academic term, for instance if a student continues to struggle academically despite receiving accommodations for a PD. Maintaining ongoing communication with faculty throughout the academic year may be as critical to the

accommodations process as establishing contact at the beginning or end of an academic term.

DSOs seek feedback from students receiving academic accommodations for a PD.

Students may not understand the impact that psychiatric symptoms can have on academic performance (Beiser, Erickson, Fleming, & Iacono, 1993; De Cesarei, 2015; Megivern et al., 2003). One student's response to a survey study about mental health and academic functioning, "I just had trouble with academics, not with my depression" is a poignant example (Megivern et al., 2003, p. 225). Because students may not always fully grasp the implications of having a mental health diagnosis, they may not know how or when to seek help (De Cesarei, 2015). This may also be true for students who do receive support services through their DSO. As previously mentioned, inviting consumers to participate in their own care and mental health is a cornerstone of mental health models such as the recovery model of mental illness (Corrigan, Faber, Rashid, & Leary, 1999; Pickett et al., 2012; SAMHSA, 2011; Zimmerman, 1990). Therefore, students (the consumers of the services discussed herein) may benefit from providing input about the academic support services they receive. Seeking student feedback may promote positive student beliefs about university staff's concern for and desire to help them. For example, research shows students are more willing to approach their faculty for help obtaining accommodations for a learning disability if they expect to receive a positive response (Hartman-Hall & Haaga, 2002; Quinlan, Bates, & Angell, 2012). The same finding may prove true regarding student beliefs about their DSO.

DSOs can use student feedback to individualize or tailor students' academic supports as appropriate. Obtaining student feedback may also aid DSO efforts to evaluate their academic support services from the consumer's perspective. Using both student and faculty feedback may

aid DSOs in balancing student needs and faculty needs when providing students with academic accommodations.

DSOs may elicit student feedback in different formats. The most feasible method will depend on the resources (e.g., time, personnel) available at individual universities. Two initial suggestions for implementing this recommendation include holding routine interdisciplinary meetings with individual students and relevant stakeholders (minimally, DSO staff and some of the student's faculty members), and soliciting routine feedback from students through surveys or questionnaires.

Research indicates there is a significant association between students with PDs' first to second-year persistence in higher education and the frequency of their meetings with academic advisors (Koch et al., 2014). This research bolsters the recommendations that DSOs schedule interdisciplinary meetings for individual students with relevant stakeholders (e.g., DSO staff, the student's professor(s), and students' mental health provider(s), pending their availability). These meetings may be most useful during the first year of school when many students transition from high school to college; however, other students may benefit from such meetings at other points in their educational trajectories or throughout their college enrollment. Not all students may be registered with their DSO in the first year of school and, as such, stakeholders will need to schedule appropriate junctures for such meetings with students on an individually considered basis. Meeting objectives may include discussing aspects of accommodations which are conducive to a particular student's learning, and aspects of academic life the student continues to find challenging. Holding biannual interdisciplinary meetings may be ideal, particularly if a student's PD is episodic (for instance if a student has major depressive disorder, a diagnosis characteristic for symptoms that can remit and recur over time). Frequent meetings may

stimulate students' self-reflection on the links between mental health and academic functioning, and allow space for students to share their insights with relevant stakeholders. DSOs and other relevant stakeholders may choose to have fewer or additional meetings with specific students when a student's PD necessitates differing amounts of academic support. Ultimately, students participating in routine meetings with an interdisciplinary team, including DSO staff and relevant stakeholders, may increase the likelihood that students communicate their needs to stakeholders. Students' input affords everyone involved in their care (including the student) opportunities to collaborate and nurture academic functioning. Having relevant faculty attend these meetings may be particularly beneficial: In one study, students with PDs rated contact with their instructors as the "most helpful" and most frequently used form of academic support they received (Salzer et al., 2008).

Soliciting student feedback through interdisciplinary meetings with individual students may have several benefits. However, DSOs may find this recommendation difficult to implement at their universities due to time, staff, and financial constraints. Alternatively, or in conjunction with individual meetings, DSOs may also elicit student feedback by administering brief surveys at the end of each term about the accommodations they received. Obtaining student feedback through surveys may be a time- and cost-efficient way to refine and improve accommodation services.

DSOs may choose to utilize in-person or survey methods to gather student feedback depending upon their available time and resources. DSOs may also consider using a combination approach in which they rely primarily on students' survey feedback, and hold meetings with a smaller number of the students who might benefit from or require more in-depth communication through in-person meetings. Students who continue to struggle despite being provided

accommodations, or students with complex mental health needs and accommodation plans may benefit most from individual meetings with their interdisciplinary team. Ultimately, incorporating student feedback into support services may help improve and refine DSO procedures and facilitate students' self-awareness regarding links between mental health and academic functioning.

DSOs maintain relationships with and refer students to clinicians who will provide assessment services to students at reduced fees. College students with mental illnesses often do not receive support services they need because of (a) the intricate process involved in documenting a PD and (b) the financial burden of formally diagnosing and documenting a PD (NAMI, 2012). These student-perceived barriers are significant because as many as 77% of schools require that a student's mental health diagnosis be formally identified and documented before granting academic accommodations (Collins & Mowbray, 2005). This statistic highlights how important it is to facilitate students' access to evaluation services. DSOs may find the following recommendations helpful in maintaining the integrity of the accommodations process while reducing some barriers to services:

Ideally, universities might offer their students low- to no-cost formal assessments for academic accommodations on the basis of a PD. However, universities understandably have varying abilities to provide evaluation services on campus (e.g., due to financial resources, time, and available, qualified staff). When universities cannot offer evaluations on-site, they may develop referral programs with local clinical psychology graduate schools in which doctoral students can perform the assessments. Clinical psychology graduate programs frequently offer assessment services to people in their community. As such, this may be another low-cost way to facilitate students' access to the necessary evaluation services.

DSOs may also provide students with lists of clinicians in the community who perform psychological evaluations and write accommodation letters for PDs. Implementing this recommendation requires DSOs to develop and maintain relationships with mental health providers in their communities. To do this, DSOs may ask local psychologists or psychiatrists known to provide services to students if they are available to take other referrals from the DSO for accommodation testing. DSOs may front-load their referral lists with clinicians who can evaluate university students for a reduced fee or on a sliding scale. Psychology faculty and university mental health clinicians may be helpful experts to consult in building referral lists.

Additionally, DSOs may elect to screen their own students to determine whether they meet criteria for accommodations. A preliminary investigation of DSO websites suggests that some universities currently offer such screening services for other kinds of disabilities. As an example, the Office for Students with Disabilities at the University of California, Los Angeles (UCLA) offers screening interviews for students with learning disabilities to assess whether further testing, and providing academic accommodations, is warranted. UCLA's screening process involves a one-hour meeting with a learning disabilities specialist. The meeting includes an interview about the student's development and academic history. Similarly, the University of California, Irvine (UCI) DSO does not require students with PDs to be formally evaluated for academic accommodations (C. O'Keefe, personal communication, May 4, 2016). Rather, UCI students can have their own mental health providers or clinicians from the university counseling center complete a form indicating the student meets criteria for a DSM-5 diagnosis. The student is then eligible to meet with DSO staff who determine the appropriate accommodations to provide. While mental health providers can recommend specific accommodations, the UCI DSO typically makes the final decision whether to grant accommodations (C. O'Keefe, personal

communication, May 4, 2016). Informally screening students on campus, or through the DSO, may be a prudent option, particularly when there are limited community or university evaluation resources available to students. Screening students within the university, rather than off campus by a third party, may also facilitate student access to evaluations and remove frequently identified barriers to obtaining accommodations, for instance by reducing the financial burden of psychological evaluations. DSOs may also consider providing accommodations provisionally while students await more thorough evaluations. Ultimately, individual DSOs will have to determine the best options for making evaluation services accessible to students when formal evaluations are necessary to provide students with academic accommodations for a PD.

Stakeholder Training and Education

DSOs obtain routine training from mental health professionals about the impact of PDs on academic success. Mental health symptoms can adversely impact the cognitive abilities required to engage in autonomous, self-directed learning (Collins & Mowbray, 2005; Hartley, 2013; Knis-Matthews, Bokara, DeMeo, Lepore, & Mavus, 2007; Weiner & Wiener, 1996). For these and a host of previously mentioned reasons, psychiatric illness in college students is positively correlated with poor academic performance (Collins & Mowbray, 2005; Kessler et al., 1995). This relationship is particularly concerning given the rising rates of psychiatric illness among college students (SAMHSA, 2013). Nearly 5-12% of students' psychological symptoms are severe enough to warrant mental health services and supports (Collins & Mowbray, 2005; National Alliance on Mental Illness [NAMI], 2012). However, studies suggest that as many as 88% of DSO staff feel they lack sufficient knowledge to work with this portion of the student body (Collins & Mowbray, 2005).

Empirical research on the impact of training university staff about PDs, particularly with

respect to PDs' impact on academic performance, does not exist to this author's knowledge.

However, some training initiatives developed to teach non-mental health providers about mental health have promising implications for training faculty about PDs. For instance, the organization 'Mental Health First Aid' [MHFA] teaches laypersons to recognize signs, symptoms, and risk factors of mental illness, make appropriate referrals, and increase confidence in helping distressed individuals (Mental Health First Aid, 2016). The MHFA program has a substantial research and evidence base: It has been shown to be effective with a range of non-mental health providers including pharmacists, financial counselors, nursing students, and medical students. It has also been widely used on college campuses for training non-mental health staff to recognize signs and symptoms of mental distress, and to connect such students with resources. For a review of empirical literature demonstrating training outcomes, visit the "Resource" tab of the Australia Mental Health First Aid website.

Similar empirical research offers promising results of training non-mental health professionals about mental health. For instance, training non-mental health staff to perform suicide assessments in United Kingdom medical settings has been shown to improve evaluation and suicide risk management skills (Appleby et al., 2000). Furthermore, community psychological medicine training for primary care physicians in China has been linked to increased physicians' confidence in diagnosing and managing mental health conditions in general medical settings, and increased rates of psychiatric referrals as clinically indicated (Lam et al., 2011). Training non-mental health staff about the etiology, neurobiological foundations, and course of various DSM-5 disorders, such as borderline personality disorder (Clark, Fox, & Long, 2015), psychosis (Dowey, Toogood, Hastings, & Nash, 2006; McGill, Bradshaw, & Hughes, 2007), and neurocognitive conditions such as Down Syndrome and dementia (Kalsey, Health,

Adams, & Oliver, 2007) has been shown to increase non-mental health staff's knowledge, facilitate staff's attitudinal change, and increase staff empathy. The studies document improved outcomes for staff who received mental health training; however, there are also likely positive "trickle-down" clinical implications for consumers of medical and mental health services. Further, it seems feasible that similarly providing non-mental health professionals (such as DSO staff working in college settings) with training about the impact of PDs on cognition and, subsequently, academic performance would also positively impact both support service outcomes and student recipients. Ample survey and qualitative investigations support the call for increasing staff knowledge about PDs. Programs like MHFA demonstrate that training stakeholder groups about PDs and academic functioning may similarly have positive outcomes; However, training programs of this nature have yet to be created to this author's knowledge. Thus, DSO staff and other non-mental health staff may not know where, or how, to access training information about college students with PDs and academic performance. The following are a few possible ideas for stimulating training efforts:

First, DSOs may ask select faculty from their education or psychology departments to speak at scheduled in-service training seminars about the impact of mental health diagnoses on academic functioning. Department faculty may also be helpful in identifying other mental health professionals in the surrounding community who can provide training to DSO staff. In addition to facilitating in-person training, DSOs may seek permission to audio and video record training sessions. Recording trainings provides staff the option to access information after the in-person seminar. It also allows for staff who could not attend an in-person meeting to access useful educational information at a later point in time. DSOs may ask presenters to provide written training information during their talks; keeping written material on file is another way for staff to

keep information for future use, or for staff who cannot attend in-person meetings to obtain important training material at a later time. DSOs may consider working with their information technology departments to archive such training information (both audio-recorded and written format).

In addition to the above recommendations, universities with limited monetary resources or staff personnel to offer in-service trainings may rely on internet-based trainings to increase their knowledge of students with PDs. One training curricula, published by the Center for Disabilities, Opportunities, Internetworking, and Technology [DO-IT], about working with college students with PDs has recently become available to the public free of charge. DO-IT is a University of Washington organization whose mission is to help students with a range of disabilities succeed in academics. DO-IT recently posted a series of informational brochures and associated Internet-based training templates to their website: All information on their website is free and accessible to the general public. DO-IT has created their training lessons such that a DSO staff person or someone else who has experience with students with PDs can read, and then deliver, the lesson to other staff at his or her university. DO-IT's lesson on PDs provides an overview of commonly encountered PDs in college settings, the learning impairments different diagnoses may cause, and how to accommodate specific impairments in classroom and examination contexts. The seminar outline also begins with a caveat that students with PDs may also be appropriate speakers for presenting some part of the lesson. If DSO or other university staff are unable to present the training seminar to staff at an in-service training, DSOs and relevant staff may choose to read up on the information on DO-IT's website individually. Obtaining training free of charge through internet-based resources is a low-cost and potentially high-yield way to help stakeholders learn important information about working with college students with PDs. To view

the specific training described here, visit the “psychiatric impairments” tab on the Washington DO-IT website.

DSOs coordinate faculty training about the impact of PDs on students’ academic functioning. Faculty members may provide as many as 12% of psychiatric-based student referrals to the DSO (Collins & Mowbray, 2005). Many professors question their abilities to work with students with mental health conditions: Literature suggests that while faculty may feel *comfortable* interacting with students with PDs, they do not have as much *confidence* in their abilities to help students with PDs (Becker et al., 2002; Brockelman et al., 2006). As many as 84% of university faculty feel they would benefit from additional training about working with students with PDs (Brockelman et al., 2006). Faculty training has been recommended as a critical form of developing professionalism in working with college students with PDs (Katsiyannis et al., 2009).

Research findings suggest a range of positive outcomes can be achieved by training faculty to work with students with a range of disabilities. For instance, faculty are more willing to provide accommodations on exams, are more fair and sensitive to student needs, and are more receptive to students' disclosure of learning disability status in particular (Murray, Lombardi, Wren, & Keys, 2009). Faculty also tend to agree more frequently with a student’s need for academic accommodations on the basis of an LD, particularly when they have been trained about LDs; they also endorse greater confidence in working students with mental health needs (Murray et al., 2009; Murray, Wren, & Keys, 2008). Similar findings appear to be true of educating faculty about PDs. For example, teaching faculty to identify mental health symptoms and refer students for psychiatric intervention has been shown to improve teacher attitudes towards working with students with mental health concerns (Kutcher, Wei, & Coniglio, 2016). Even

faculty who held positive perceptions of students with PDs before training showed improvements in their attitudes towards students with PDs after training. The above findings suggest that university faculty members could greatly benefit from frequent, ongoing training about PDs. Faculty training may be best geared toward increasing knowledge about the relationships between PDs and academic functioning to enhance empathy and promote understanding.

DSOs may coordinate with their university's upper administration to organize inter-department faculty trainings about college students with PDs. DSOs may also perform routine needs assessments to determine the training topics that would benefit their faculty members most. DSOs may request that faculty provide specific information in these needs assessments, such as challenges they have faced in working with students with PDs. Faculty could also suggest the kinds of information they would deem most useful from training.

DSOs may help their universities facilitate faculty training using similar recommendations posed above about DSO training, namely, by recruiting mental health professionals from within their university or the local community to provide education, or accessing available electronic training resources. It may also be helpful for DSOs to solicit their faculty members' feedback after trainings have been held (e.g., through electronic or handwritten survey questionnaires). Inquiry of these surveys may focus on how helpful faculty found the information presented to be; any aspects of the training content that were confusing, redundant, or otherwise unhelpful; and what topics faculty believe they would benefit from learning more about in the future.

DSO staff and faculty play different roles in the accommodations process for students with PDs. Generally, it is a DSO's job to coordinate academic supports for students, and faculty's job to implement said supports during their courses. While some training topics may be appropriate to present in an interdisciplinary format (e.g., where both DSO staff and faculty attend the same

seminars), other trainings may need to be tailored to meet distinct roles of DSO staff and faculty in the accommodations process. For example, when training DSO staff and faculty about different kinds of academic accommodations, each of these groups may benefit from learning somewhat different information. DSO staff may benefit from discussions about reasonable academic accommodations that remediate functional impairments without compromising learning integrity. On the other hand, faculty may find information regarding the reasons PDs warrant academic accommodations, and how to effectively teach students with PDs in their classrooms to be more helpful, given their role in students' academic endeavors. For example, faculty may benefit from tailored training about universal design (UD), a teaching paradigm developed to benefit a wide range of students, including students with disabilities that impact learning (Ouellett, 2004; Scott, McGuire, & Shaw, 2003). Katsiyannis et al. (2009) provide some specific examples of the principles covered in UD teaching modalities, including (a) varying one's methods of providing students with information (e.g., group work, electronic discussions in classroom forums, lectures), (b) using wide-ranging methods for evaluating student learning (e.g., written exams, projects, take-home assignments), and (c) modifying classroom structures based on class sizes and discussion formats adaptations (e.g., in small classes, having chairs placed in circles to facilitate face-to-face discussion). This is one example of how tailoring a broad training topic to the needs of the distinct audience (e.g., DSOs or faculty members) may be helpful. There may also be benefits of DSO staff and faculty participating in the same trainings. For instance, at interdisciplinary trainings faculty may be helpful in educating DSO staff about the kinds of accommodations that they frequently find to compromise their course integrity. DSOs can subsequently use this feedback to refine their accommodations. Some additional topics to consider in coordinating DSO or faculty training include, but are not limited to,

common mental health conditions found on college campuses and how to provide referrals to appropriate support services, methods for differentiating psychological symptoms from PDs, rationale for providing accommodations to students with PDs, the potential effects of psychotropic medications on learning, and how to tailor teaching and academic evaluation strategies to college students with PDs (e.g., by expanding on discussions of UD).

Clinicians who work with college-age students remain informed or seek consultation about learning impairments caused by PDs. Students with mental health conditions can have significantly more difficulties navigating college life than other students. Without appropriate support services, these students' trajectories toward academic and occupational success may be exceedingly challenging. Some of the unique difficulties students with mental illness face include (a) difficulty managing side effects of psychotropic medication, (b) coping with stereotypes and stigma associated with having a mental illness, (c) simultaneously managing psychiatric symptoms and academic performance, (d) accessing necessary resources on the basis of having a psychiatric disability, (e) interacting with others, including faculty and peers, in a new social environment, and (f) coping with unexpected changes in coursework at the college level (Sharpe et al., 2004; Souma et al., 2001). Thus, it is critical for mental health clinicians to provide tailored clinical services to their student patients. Providing effective clinical intervention to college students with PDs requires clinicians have a thorough understanding of the aforementioned challenges their patients face. Mental health providers likely understand their duty to stay informed about the needs, learning and otherwise, of their college-age students with psychiatric illnesses. However, clinicians may find this to be a challenging endeavor due to the very limited training available to educate mental health clinicians about the overlap between PDs

and academic functioning. The following are some recommendations for staying informed about or otherwise managing clinical work with college students with PDs.

Various professional ethics codes mandate that helping providers “do no harm.” This point is listed first and foremost in the American Psychological Association’s (APA) Ethics Code, which all licensed psychologists in the United States are held to (American Psychological Association, 2002). The APA Ethics Code in particular encourages psychologists to consider the “boundaries of [their] competence” (p. 1063), to provide services only within the scope of their practice (see, for instance, codes 2.01a, 2.01b, 2.01c), and to remain updated about research and empirically-supported treatments with the clinical populations they treat (APA Ethics Code 2.03). *Competence* is one of the foundational requirements of clinical practice in psychology; it is a baseline level of professional ability which clinicians are trained to “develop, achieve, maintain, and enhance...throughout their careers” (Barnett, Doll, Younggren, & Rubi, 2007, p. 510). Competence has been defined several ways. Generally, each definition agrees that competence includes “knowledge; skills; and the attitudes, values, and judgment needed to effectively implement and use them.” Barnett et al. (2007) further elaborate that:

Knowledge is typically gained through one’s formal education, readings, and other didactic experiences. Skills are developed through supervised clinical experiences during practicum and internship training as well as through ongoing clinical supervision and professional development throughout one’s career.

Professional judgment should be developed through both, with ongoing efforts made to prevent any degradation of judgment. (pp. 510-511)

According to this definition of competence, mental health clinicians who work with college-age patients should be sufficiently trained to work with, and remain informed about,

unique psychological, developmental, and academic aspects of clients' college lives. Such clinicians should understand and appreciate the impact of various psychiatric disorders on learning.

However, as previously noted, establishing a clinician's competence in treating college students with PDs can be challenging at times. Clinicians who work with college students can attempt to surmount these training and research barriers by staying informed about new literature or available trainings. Fortunately, as the field advances scholarly literature and training about the relationship between academic functioning and psychiatric diagnoses is slowly being published. Thus, clinicians may routinely search for literature most relevant to the population with whom they work. Article searches using specific diagnoses (e.g., "depression," "anxiety," "PTSD," "bipolar disorder," "schizophrenia") in combination with educational and disability words (e.g., "academic," "impact," "functioning," and "mechanism") in some combination may return good results for literature reviews. Providing an exhaustive explanation for the cognitive, psychological, and neurobiological correlates of all PDs that students may present with when seeking accommodations, and giving examples of specific accommodations to permit based on diagnosis, is beyond the scope of this dissertation. A specific example is given below to illustrate possible uses of empirical literature in determining how to better aid college students with specific mental health diagnoses in obtaining the appropriate academic supports:

New research literature about links between depression and procrastination may be helpful for clinicians who work with college-age students with mood disorders. Flett, Haghbin, and Pychyl (2016) found procrastination to be associated with ruminative brooding (a cognitive component of depression), and they found both procrastination and ruminative brooding to be positively correlated with depressive symptomatology. Similarly, neurobiological research

indicates that brain abnormalities in depressed patients can range from specific regional changes to global, network-level brain dysfunction; and, this research suggests depression impacts cognitive processes such as executive functions (Brzezicka, 2013; for a review of related neurobiological literature on depression see the introductory section of the article by Wei et al., 2015). Executive functions refer to a cluster of higher order cognitive abilities including the ability to problem-solve, think flexibly, plan ahead, and carry out complex tasks. When considering this literature, it is easy to see how the plethora of academic and other demands placed on college students may be exceedingly difficult for a student with a depression diagnosis. Fortunately, the research studies referenced here have important implications for facilitating the academic functioning of students with depression. For instance, clinicians can use research on the links between procrastination and brooding, and the neurobiological literature on executive functioning in depressed patients, to select the appropriate accommodations to facilitate a depressed student's learning. This may include providing the student with tutoring services to encourage planning ahead, preparing for deadlines (e.g., setting deadlines for specific tasks leading up to a final project), and managing time; and providing the student increased time to complete relevant coursework.

Clinicians who frequently work with college-age populations may also consider joining relevant professional organizations (useful starting points may include the Association on Higher Education and Disability [AHEAD] and the Association of Educational Therapists [AET]). Clinicians may solicit local DSOs or other mental health providers to obtain names of relevant local, regional, or national educational organizations. They may also consult mental health colleagues who have expertise in the relationships between psychiatric functioning and academic performance.

Recommending that clinicians stay informed about literature relevant to the clinical populations they serve is intended not only for mental health providers working in psychological settings but also for other clinical professionals who work with college-age populations, such as pediatricians and primary care practitioners. These providers may have had preliminary but likely less comprehensive training in mental health concerns than mental health clinicians. Non-mental health providers must use their clinical judgment to determine whether they have the expertise to treat their patients for psychiatric conditions or make recommendations about patients' academic needs on the basis of mental health symptoms. Non-mental health providers should consult their own professional ethics codes and consider their own training experiences to determine their competence in treating patients for mental health conditions. Minimally, they should continuously seek training, consult mental health experts, and read literature that may better inform their clinical practice. When providers treating college students with mental illnesses do not have competence in mental health, they may consider referring their patients to clinicians who *are* competent in assessing, diagnosing, and treating people with psychological disorders.

DSOs remain informed about ADA's definition of a psychiatric disability and related policies. Determining who qualifies for accommodations due to a PD is one of the most common challenges regarded in the literature on PDs. As previously mentioned, not everybody with a mental health condition may have a PD that causes learning impairments. Relatedly, not all psychiatric diagnoses are protected by the ADA. Substance use disorders are one such example: The ADA protects people with alcohol dependence but other forms of substance dependence issues are not protected, unless the person diagnosed with another kind of substance use disorder is obtaining formal treatment for their condition (Westreich, 2002). For more

information about ADA legal and ethical issues about substance use and addiction, see Westreich (2002).

Blacklock (2001) writes there are other diagnoses not subsumed under ADA protection including transvestitism, transsexualism, pedophilia, voyeurism, gender identity disorders, compulsive gambling, kleptomania, and pyromania (Souma et al., 2001; Weistreich, 2002). DSOs may have difficulty parsing mental health conditions from true PDs that impair learning, and although this is not their explicit role in the accommodations process, some literature suggests faculty look to DSO staff for upholding legal responsibilities that their institutions are required to abide by (Bourke et al., 2000; Burgstahler, Duclos, & Turcotte, 2000; Katsiyannis et al., 2009). To manage ambiguity around what qualifies as a PD and to limit DSO liability, authors have suggested DSOs frequent and remain well-versed in disability policy literature and legislation (Katsiyannis et al., 2009). Additionally, DSOs can consult with national organizations such as the American Psychological Association (APA), and communicate regularly with their university legal teams for support. Disability rights and discrimination attorneys recommend universities (a) employ people familiar with the laws in DSO offices or elsewhere within the university, and (b) frequently consult people who understand the laws (for a summary of these and other ideas see Thomas, 2000). DSOs may expressly include this information on their websites and in consent forms provided to students before offering accommodation services.

Evaluating and Documenting PDs

DSO staff provide clinicians with preliminary guidelines for writing accommodation letters. As many as 77% of DSOs require students to provide some form of documentation before students can receive academic accommodations (Collins & Mowbray, 2005). However, the appropriate procedures for identifying a PD and documenting a student's accommodation

needs are not always clear, and the quality of accommodation letters for PDs may be the lowest of all disabilities (Wylonis & Schweizer, 1998). Students may be unable to obtain the academic supports they need if DSOs deem their accommodation letters insufficient or incomplete. However, the process of evaluating and documenting PDs is compromised in large part by the field's limited training and scholarship on this topic. Mental health professionals may be more likely to understand how conditions such as LDs and ADHD adversely impact academic performance, although some research indicates that even with LDs and ADHD there is room for improvement in correctly diagnosing and documenting such conditions (Harrison et al., 2013; Weis et al., 2014). A lack of available research about documenting PDs does suggest that relative to LDs and ADHD, mental health clinicians may be less informed about how PDs impact academic functioning. However, PDs produce substantial impairments in learning just as LDs and ADHD do, as illustrated in the previous example regarding executive functioning deficits in depressed individuals (Brzezicka, 2013; Wei et al., 2015); by research which illustrates that mental health issues can impact self-directed learning (Hartley, 2013; Knis-Mathews et al., 2007); and in literature demonstrating that students with PDs experience additional psychosocial stress beyond what typical college students face that can adversely impact academic performance (Coduti et al., 2016).

Mental health clinicians may benefit from having concrete guidelines to follow when evaluating students for PDs and writing accommodation letters. The more specific DSOs can be about accommodation letter guidelines, the more useful clinicians' letters may be. DSOs may therefore inform clinicians about the specific information that helps DSO staff determine what accommodations to provide. They may attempt to communicate their requirements to clinicians before clinicians write their accommodation letters. For instance, DSOs may find it helpful to

publish their letter guidelines to their university web pages.

Various authors and DSOs have proposed a range of ideas for clinicians to standardize their evaluation procedures and accommodation letters. For instance, Wylonis and Schweizer (1998) proposed very specific guidelines for clinicians when assessing the presence of a PD and writing academic accommodation letters, including (a) providing conclusive rationale for a DSM-5 psychiatric diagnosis; (b) using structured or standardized psychiatric interviews to support the diagnosis; (c) including diagnosis-specific screening and scales, where possible; (d) gathering and documenting collateral information supporting the presence of a particular diagnosis (e.g., family history, age of onset, history of treatment) to provide external validation of the diagnosis; (e) explicitly stating and describing the functional impairment(s) caused by the diagnosis; and (f) specifically stating what accommodations (or broadly, the kinds of accommodations) are being requested, and why they remediate functional impairments caused by the diagnosis. DSOs may find Wylonis and Schweizer's guidelines useful in standardizing their own evaluation and documentation requirements. Some more recent writing by Banerjee and Shaw (2007) about documenting LDs for high-stakes testing (e.g., for admission to graduate-level training programs and professional licensing exams) may provide a framework for DSO staff to consider when asking clinicians to sufficiently document (d) and (e) outlined by Wylonis and Schweizer (1998) above for students with PDs. Their framework includes asking clinicians to provide *objective evidence* of a disability (e.g., grades, objective test performance if applicable), *authentic evidence* of the disability (student, parent, teacher, and/or clinician reports of the student's abilities and impairments in academic settings), and *task-related evidence* (providing information that describes the student's ability to function in situations similar to the academic setting for which accommodations are being requested).

Some individual DSOs have published their accommodation letter requirements for students with PDs on their university web pages. For instance, The UCLA Center for Accessible Education website (formerly the UCLA Office for Students with Disabilities website) provides both students and clinicians with information about obtaining academic accommodations for a PD. Specifically, the UCLA CAE requires accommodation letter writers to document (a) the presence of a diagnosable mental disorder, (b) each assessment/evaluation procedure used to arrive at the mental health diagnosis, (c) the manifested symptoms of the disorder, (d) the side effects of any medication prescribed for the disorder, (e) the functional limitations caused by the disorder, and (f) the student's prognosis (UCLA CAE, 2016, "Psychological Disabilities" under "Documentation Needed"). Their published requirements are similar to what Wylonis and Schweizer (1998) recommend. Additional ideas for DSOs to consider in guiding clinicians' letter writing may be providing clinicians with a checklist of information to include in their letters, and offering clinicians sample letters that are sufficient to warrant accommodations. DSOs may consult with staff at other universities, or join regional or national organizations to facilitate further discussions about documenting accommodation needs and collaborating with clinicians.

Several other organizations that oversee high-stakes testing have developed detailed, specific requirements for documenting PDs. The Educational Testing Service (ETS; responsible for test development and administration of the GRE, TOEFL, The Praxis Series and School Leadership Series tests), the Law School Admission Council (LSAC; responsible for the LSAT), the Association of American Medical Colleges (AAMC; responsible for the MCAT), the Graduate Management Admission Council (GMAC; responsible for the GMAT), and the State Bar of California (responsible for the California Bar Examination) are examples of some national

boards with different standardized procedures for documenting disabilities to obtain test accommodations. These boards require students take various steps to demonstrate their eligibility for test accommodations due to a PD. For instance, ETS and GMAC have divided their document requirements based on the medical or psychological conditions for which a student is seeking test accommodations. On the other hand, the LSAC's requirements in evaluating and documenting students are organized by the kinds of accommodations students are requesting for the LSAT (e.g., additional testing time). Each of these organizations has published their requirements for evaluating and documenting a disability for public access online.

The ETS in particular has written a thoughtful policy statement about documenting a student's PD status. They cover several criteria which universities may find useful in standardizing their own accommodation procedures. In its policy statement about PDs, the ETS revisits (a) ADA's definition of a psychiatric disability, (b) the need to use formal assessment procedures in identifying a PD, (c) evaluator qualifications sufficient to perform such assessments, (d) the documentation required to support mental health diagnoses, (e) the specific content of accommodation letters (include what accommodations are being proposed to remediate functional impairments caused by a PD), and (f) how the specific accommodations could remediate a student's test-taking impairments. ETS's policy statement on PDs covers a range of other information that DSOs, clinicians, and students may find helpful including (a) a primer about the adverse impact of psychotropic medication on learning, (b) recommendations for consumers (e.g., prospective test-takers who may qualify for accommodations), (c) a comprehensive list of various psychological, neuropsychological, and cognitive assessments that are appropriate for determining accommodation eligibility, and (d) a list of national resources/organizations students can contact for further information or resources (ETS, 2016).

ETS also has specific disability policy statements for students with learning disabilities, ADHD, and autism spectrum disorders, which they have separated from other psychiatric diagnoses.

There is an evident difference between the breadth and depth of the requirements of national organizations such as ETS (which are clearly delineated clearly and highly standardized), and the requirements at individual universities, which often seem to be in need of additional resources or guidelines to inform their procedures. There may be several reasons for the lack of standardized procedures at the university level relative to the national organizational and national testing exam board level. First, national testing agencies such as the ETS may feel the pressure to act as gatekeepers, namely to ensure that they maintain equal testing opportunities for the range of students who take their tests in order to gain admission to college and other educational programs nationwide. Given the high-stakes nature of the testing they provide, ETS may also want to control for students who may not qualify for disabilities but who seek accommodations to boost their test performance (for reference to this point in disability policy literature see Saks, 2008). Individual universities, on the other hand, may be more focused on helping students be successful in the event of having a disability that causes functional impairments in learning, than controlling for the possible opportunistic use of academic accommodations (S.S. Himmelstein, personal communication, July 7, 2016). Large organizations such as the ETS, AAMC, and LSAC may also be able to enforce more stringent standards for evaluating and documenting a disability because they have more resources (e.g., time, money, and staff personnel) than what may be available within individual universities. Still, universities looking for ways to standardize or improve their requirements for evaluating and documenting a PD may reference these organizations and use their procedures as springboards for their own accommodations procedures.

Finally, in addition to providing clinicians specific guidelines for their accommodation letters as various DSOs and several larger national organizations have done, DSOs may also generally encourage clinicians to standardize or refine their own procedures for evaluating students. For instance, encouraging clinicians to rely on structured clinical interviews and comprehensive, well-validated assessment instruments may be beneficial to both mental health clinicians and DSOs in serving students with PDs. In the absence of available literature, clinicians may revisit their professional ethics codes in determining whether evaluating their patients for PDs and writing accommodation letters is within the scope of their practice. As previously mentioned in other recommendations, clinicians working with college age students may consult with or refer out to other clinicians when they do not feel adequately trained to treat or coordinate services for these patients.

DSOs provide clinicians with feedback about their accommodation letters. The previous recommendation encouraged DSOs to give clinicians preemptive guidelines for writing students' accommodation letters. However, DSOs may more frequently see accommodation letters *before* clinicians have learned of a particular DSO's requirements. Therefore, it is important for DSOs to communicate to clinicians whether they have provided the DSO with insufficient or incomplete letters, and to guide them toward improving their letters. Waiting to receive sufficient documentation from clinicians prior to granting academic accommodations gives DSOs an opportunity to act as potential gatekeepers for providing supports to appropriately qualified students at their universities. In some such cases DSOs may find it helpful to consult with their university legal counsel before providing clinicians with feedback and recommendations for improving accommodation letters. However, it is worth reiterating here that not all academic accommodations requested by students and/or their mental health clinicians

will be reasonable (Mowbray et al., 2006; Rickerson et al., 2004; Souma et al., 2001; Wilk; 1993; Wylonis & Schweizer, 1998). Furthermore, Stefan (2001) notes historically courts have given considerable academic decision-making to universities regarding whether particular accommodations on the basis of particular disabilities would compromise course integrity, especially in medical schools (Mowbray et al., 2006).

DSOs may develop concrete guidelines for evaluating clinicians' recommendations and providing feedback about their accommodation letters. For example, DSOs can inform clinicians about the clarity of a student's diagnosis (e.g., whether the clinician used formal assessment methods to make a diagnosis; whether they included or relied on collateral historical information in making a diagnosis). DSOs can provide similar feedback about how clearly clinicians have explained the learning impairment(s) caused by the PD in an academic setting. DSOs can tell letter writers how clear their rationale is for recommendations remediating learning impairments.

Ultimately, determining what goes in an accommodation letter will likely require compromise between mental health clinicians and the DSO staff. Reaching a consensus on the specifics of the assessment process and the subsequent content of accommodation letters will likely be complex process arrived at over time. The overarching goal of improving clinicians' letter writing is to facilitate the accommodations process for students with PDs. Clinicians may be differentially inclined to adhere to DSO guidelines in their accommodation letters, especially if they have already written a letter that the DSO subsequently finds insufficient or incomplete. Clinicians may have different amounts of time, financial resources, or expertise with psychodiagnostic assessment that may also influence how closely they follow DSO letter writing recommendations. As such, DSOs may spend time building rapport and making meaningful contact with clinicians who are likely to write accommodation letters for students, particularly

when those clinicians work locally. Individually communicating with clinicians, when possible, may bolster clinicians' active participation in DSOs' accommodations procedures in the future. DSOs may remind clinicians that their ability to collaborate on important aspects of the accommodations process, such as accommodation letters, is in service of a student in need. University clinicians may be more likely to adhere to their own university DSO guidelines than outside clinicians. However, DSOs may develop working relationships clinicians locally to improve the odds that such clinicians may work more closely with DSOs, thereby increasing the pool of clinicians available to assess students for PD-related accommodations. Collaborating with respect to improving accommodation letters benefits both students in need and the DSO assisting those students. Adhering to DSO guidelines is also the ethically responsible choice for mental health clinicians.

Archiving and Refining Academic Supports and Services

DSOs maintain archives or inventories of their academic accommodations. There are a range of instructional and related academic supports listed in the literature on accommodating students with PDs (Job Accommodation Network, 2010; Sharpe et al., 2004). However, because these accommodations lack empirical support their true effectiveness remains unknown (Sharpe et al., 2004). To date, this investigator has been able to locate only two studies documenting empirical evidence for the efficacy of some of these accommodations; the studies relied solely on self-report data to measure the effectiveness of various accommodations and supports (Koch et al., 2014; Salzer et al., 2008). Nevertheless, the studies are informative for detailing how helpful students found several assignment-related, classroom support-related, and examination/grading-related accommodations. 76% of students reported being given extended time to complete assignments was helpful; 65% of students reported having private, one-on-one meetings with

teachers and individual feedback about class performance was helpful; and 82% of students reported receiving Incomplete (I) grades rather than a Fail (F) if relapse or worsening of mental health occurred during the academic term was helpful (Salzer et al., 2008).

Sharpe et al. (2004, p. 4) argue that academic accommodations are "...universal in the sense that they are equally applicable to most types of disabilities." This important point bodes well for DSOs, as they do not need to completely reinvent accommodations for every condition that may cause a learning impairment (Sharpe et al., 2004). The Disability Services Office at University of California, Berkeley similarly states that students with psychological diagnoses in particular may experience many common challenges during the learning process (Job Accommodation Network, 2010). The DSO at Berkeley's note adds further support to maintaining a thorough archive of PD-related academic accommodations that can be reused.

Maintaining detailed records of the accommodations DSOs have provided, particularly by PD, may be a useful source of information to revisit over time and may also help DSOs refine future accommodations. For instance, DSOs can reevaluate which accommodations in their archive were the most practical for DSOs and faculty to implement, and which accommodations were simultaneously helpful to students. This practice may inform DSOs' decision to continue providing particular accommodations to students on the basis of having particular PDs. DSO staff and faculty may routinely evaluate whether specific accommodations are practical, and they may collaborate to determinate what accommodations to keep, modify, or discard in the future.

As previously mentioned, DSOs should ask faculty to propose recommendations that alleviate a student's learning impairments. However, it is ultimately up to DSOs to decide what accommodations to provide. Therefore, DSOs may also rely on the *principle of minimal effectiveness* should they develop new accommodations or modify specific accommodation

requests. The principle of minimal effectiveness involves identifying accommodations that alleviate functional deficits caused by a PD instead of merely enhancing a student's academic success (Wylonis & Schweizer, 1998). If DSOs can keep this principle in mind as they develop or modify accommodations, they may reduce the likelihood that such accommodations go beyond their intended purposes of remediating learning impairments and instead provide an unfair performance advantage to students, or otherwise compromise course integrity.

A thorough review of the types of accommodations that have been proposed for students with PDs is beyond the scope of this dissertation. However, some examples of common recommendations are summarized in Table 1 for readers' reference. These recommendations may give DSOs the opportunity to compare their current accommodation practices to what the literature currently includes.

Finally, in addition to archiving recommendations provided to college students with PDs for future use, DSOs may borrow ideas about academic accommodation and support services from outcome studies for college students with LDs and ADHD. These related bodies of literature shed some additional light on providing students who have specific mental health needs with individually tailored accommodation services in the form of classes or extracurricular programs. For instance, academic coaching specifically for students with ADHD, called executive functioning coaching, has been linked with students' improved perceptions of autonomy, increases in self-efficacy, and overall improved abilities to manage the competing tasks of undergraduate college life (Byron & Parker, 2002; Parker & Boutelle, 2009; Parker et al., 2013). Similarly, college students with LDs show improvements in academic self-efficacy, academic resourcefulness, greater internal loci of control related to academic performance, and higher year-end GPAs after participating in group or individualized intervention programs which

emphasize cultivating academic and compensatory skills (Reed et al., 2009; Reiff, 1997). DSOs may elect to stimulate similar program development at their universities for students with PDs. Creating such programs from the ground up would be well-beyond the DSOs scope of work, however DSOs may be important stakeholders involved in garnering upper administration's interest in funding and helping to develop this kind of programming for college students with PDs on their campuses. These kinds of programs could be similarly evaluated and refined over time, as this author is recommending individual accommodations can and should be.

Discussion

Project Summary

Goals. The overarching goal of this project was to develop a set of recommendations for stakeholders (DSO staff, university faculty, and mental health clinicians) to collaborate in providing academic accommodations to college students with PDs. Some challenges identified in the literature about providing academic accommodations to students with PDs include (a) limited stakeholder training, (b) student barriers to necessary evaluations, (c) vague, unstandardized evaluation and documentation procedures, (d) stakeholder role ambiguity, and (e) development of accommodations which remediate learning deficits without compromising learning integrity. The author of this project developed recommendations to address these challenges, and organized them as follows: (a) coordinating interdisciplinary communication and outreach, (b) stakeholder training and education, (c) evaluating and documenting PDs, and (d) archiving and refining academic supports and services.

Method. The limited body of literature on academic functioning among students with PDs, and current practices implemented by DSOs and relevant entities (e.g., ETS) were used to develop a few of the recommendations. Literature on accommodating students with other types of disabilities known to impair learning (e.g., learning disabilities [LDs], ADHD) informed several additional recommendations. The author relied heavily on LDs and ADHD literatures because (a) this literature is larger than that for PDs, and (b) because these conditions have more conceptual overlap with PDs than other kinds of disabilities with respect to the learning impairments they may cause (e.g., sensory disabilities, physical disabilities). The literature on educating non-mental health professionals about psychological functioning scaffolded many of the recommendations for stakeholder training. The author consulted with her dissertation

committee, whose members collectively represent each of the three stakeholder groups identified in this project, in order to obtain feedback about the kinds of recommendations that were likely to be most prudent and practical to implement. The author also contacted select experts on disability services and psychiatric disabilities in higher education settings for feedback about project directions and ideas for finding relevant literature to support and inform the final list of recommendations. In addition to adapting and synthesizing pre-existing recommendations from available literature, this author also wrote several original recommendations for collaborating and working with students with PDs that are not in the literature. The body of recommendations encourage stakeholders to collaborate, clarify roles unique to stakeholder groups, and resolves unclear procedures in accommodating students with PDs.

Challenges. Developing these recommendations was challenging for a number of reasons. First, the author had limited literature from which to base resulting recommendations for working with students with PDs. Further, there was frequently unclear or inconsistent policy about students who may qualify for academic accommodations, and under what circumstances they may qualify. Relatedly, in the past authors have raised issue with determining what accommodations are reasonable; there has been minimal success in answering this complex question. It was difficult to pinpoint literature regarding how the need for accommodations may vary over time for specific disorders given the fluctuating nature of symptoms for many psychiatric disorders (e.g., in the case of Major Depressive Disorder). Further, recommendations to stakeholders which have been offered in the past are generic. For instance, authors have recommended broadly that DSOs develop trusting working alliances with their university faculty (Collins, 2000) and that stakeholders from different disciplines collaborate when accommodating students with PDs (Mowbray et al., 2006). However, these recommendations do not provide

concrete steps for achieving trusting alliances with one another, or for increasing interdisciplinary collaboration. Furthermore, the limited literature about working with students with PDs has yet to clarify stakeholder roles, to provide consistent information about their roles. Articulating that there seem to be three primary stakeholders who are involved in accommodating students has also not yet been achieved in the literature to this author's knowledge. However, identifying these stakeholder groups was critical to subsequently developing and organizing concrete recommendations to guide their work, as each group occupies a unique role in the accommodations process.

Strengths. Particularly in light of the challenges this author encountered developing recommendations, this project has several strengths. First, there are inherent service benefits of implementing some or all of the proposed recommendations in a university setting. For example, research links faculty training about both LDs (Murray et al., 2009) and the physiology of psychiatric conditions (Kutcher et al., 2016) to improved faculty understanding, attitudes toward, and support of the complex learning challenges students with these diagnoses may face. Relatedly, students with LDs appear more likely to approach their professors for help or accommodations if they anticipate they may receive a positive response (Hartman-Hall & Haaga, 2002; Quinlan et al., 2012). Thus, recommendations for increasing stakeholder training about students with PDs have similar potential to positively impact both stakeholders and their students. This trend may also be true of implementing other recommendations proposed herein.

Second, these recommendations help clarify stakeholder roles in accommodating students with PDs, which was a limitation of preexisting literature. To provide one example, in the past some authors have identified DSOs' roles as being limited to facilitating instructional supports for students, but not diagnosing PDs or engaging in roles of other relevant stakeholders (Sharpe

et al., 2004). However, other authors have identified DSOs as having much greater responsibility than this, including upholding several legal responsibilities of their institution when working with college students with PDs (Burgstahler et al., 2000; Bourke et al., 2000; for a recent review of legal and practice considerations, see Katsiyannis et al., 2009). To resolve this inconsistency, this author proposed that DSOs rely on mental health clinicians to identify and document PDs accurately; that DSOs provide clinicians with guidelines for their evaluations and their letters; and that DSOs consult with and rely on their university legal counsels or other disability policy experts for support. As can be seen, such recommendations encourage that stakeholders adopt an interdisciplinary, collaborative approach when accommodating students.

Third, in addition to clarifying stakeholder roles and encouraging stakeholders to collaborate, these recommendations are also intended to concretize (a) aspects of the accommodations process for which limited literature exists, and (b) processes which stakeholders have identified as being vague or unstandardized. As an example, accommodation letters documenting PD status have been deemed some of the “lowest quality” documentation of all disabilities (Wylonis & Schweizer, 1998). This is problematic, given that in 2005 more than 75% of all U.S. universities require PDs to be formally documented prior to students receiving academic accommodations (Collins & Mowbray, 2005). It stands to reason that even more universities may require such documentation today than was true a decade ago. Consequently, these recommendations may help standardize previously vague or insufficient procedures for documenting a PD, and determining whether a student is eligible for academic accommodations.

In some instances, these recommendations offer preliminary solutions to questions about accommodating college students with PDs that literature has not yet addressed. For example, some authors have outlined the importance of DSOs building trusting relationships with their

faculty in order to engage faculty in accommodating students with PDs (Collins, 2000); however, they have provided few concrete steps for carrying out that recommendation. The recommendations developed during this project include potential ways to enhance DSO-faculty rapport, for instance through (a) interdisciplinary committees, (b) coordinated training about working with students with PDs, and (c) seeking faculty feedback about accommodating students with PDs. It is worth noting that such recommendations were written primarily to concretize stakeholder roles and standardize procedures involved in accommodating students, yet they also have secondary benefits of improving DSO-faculty relations.

Recommendations that clearly outline stakeholder roles and procedures for accommodating students may also limit the resources and time stakeholders need to perform their roles satisfactorily. For instance, stakeholders may find they spend considerable hours trying to solve complex problems regarding accommodating students that they cannot find answers to in the literature. If stakeholders find these recommendations provide answers to some of their questions, then utilizing them may decrease the time stakeholders need to spend problem-solving, and increase the time they have to work with students.

As previously mentioned, there is limited empirical literature to support the utility of the proposed recommendations as they pertain to students with PDs. However, several of the recommendations in this process were adapted and synthesized from empirical outcome literature about students with LDs and ADHDS. This author hypothesizes that implementing similar recommendations for students with PDs may have the same positive impact on students' academic outcomes and on stakeholder outcomes as has been documented for LDs and ADHD. For instance, students with LDs report feeling more supported by their institutions when their faculty have participated in LD-specific training (Hartman-Hall & Haaga, 2002). Relatedly,

stakeholders show higher levels of empathy, comfort with, and knowledge about working with students with LDs when they have received LD training (Murray et al., 2009). This empirical research is encouraging; it suggests the proposed recommendations may also be associated with positive outcomes for students with PDs and relevant stakeholders.

There are also important legal and ethical benefits of implementing these recommendations for both students and stakeholders. For instance, when DSOs remain abreast of ADA legislation and related legal policies they ensure that their conduct is in line with the most up-to-date disability laws and ethical considerations. Similarly, when clinicians engage in their own reflective practice (e.g., considering ethical issues of clinical competence and scope of practice), they minimize the likelihood that they may do harm to their patients and increase the likelihood that consumers will obtain treatment from the most qualified providers.

Finally, this project has potential to reach a wide audience that has repeatedly asked for training about and suggestions for working with college students with PDs. Written training information is a potentially a low-cost, high-yield way to educate stakeholders, and yet it is one of the least commonly provided services in support of students with PDs (Collins & Mowbray, 2005). Thus, these recommendations can be distributed to to a wide range of stakeholders as an informational resource at no cost.

Areas for Future Research and Development

There is limited outcome research about providing academic supports to college students with PDs. Past LDs researchers have pointed out it is unlikely that true experiments could be used to examine the effectiveness of different service programs, due to ethical issues involved in randomly assigning students to treatment/service versus no-treatment conditions, and subsequently withholding potentially helpful services and supports from some students (Rath &

Royer, 2002). However, there may be other ways to document the effectiveness of supportive services and academic accommodations for students with PDs, for instance, through use of case study data, and quasi-experimental research comparing students who do obtain accommodations for PDs from students with PDs who choose not to solicit academic accommodations (Rath & Royer, 2002). Despite methodological challenges involved in evaluating academic accommodations for students with PDs, the effectiveness of such supportive services remains a significant area for research development.

Some new research about accommodating students with PDs appears to be underway: The National Council on Disability (NCD) recently distributed a survey regarding staff, clinician, and faculty experiences serving students with mental health conditions (Association on Higher Education and Disability, email communication, July 1, 2016). The NCD is currently collecting data through this survey, and results have yet to be published. However, NCD hopes to use its findings to afford students with PDs more equitable learning experiences. This research seems to be a promising future direction for the field.

Studies evaluating some, or all of the recommendations developed during the course of this project may also help clarify their impact on diverse outcomes, such as access to accommodation services, student grades, disruptions to educational continuity and matriculation times, and self-reported student satisfaction and confidence. Collecting data about DSO staff, university, and clinicians' experiences implementing these recommendations can also inform ways to improve the recommendations in the future.

While an empirical literature base continues to develop, stakeholders who are invested in working with students with PDs should develop more clinical and educational resources about accommodating students with PDs, and make those trainings accessible to university personnel.

Since the author began work on this dissertation, training resources have become more commonplace, but are still limited. One helpful example of easily accessible training information about college students with PDs can be found on the “DO-IT” website (referenced in the Results section). Such trainings may be especially useful when university staff lack the time, resources, or personnel for routine, larger scale, in-person trainings. Resources such as DO-IT’s training information can be adapted as part of in-person DSO staff or university faculty trainings. It is critical for clinical psychologists, educational psychologists, and other mental health providers to answer the call to develop additional training resources and programs that can assist stakeholders working with students with PDs.

Project Limitations

In addition to having several strengths and offering unique contributions to the field, this project has some limitations. Many of the recommendations proposed require considerable resources in terms of staff, faculty, and clinician time. They presuppose the availability of community clinicians who are well-versed in the impact that PDs have on the learning process. Additionally, developing interdisciplinary committees would require upper administrative support, funding (e.g., to pay consulting clinicians), staff personnel time, and possibly faculty release time. Understanding that not all recommendations proposed are feasible universally, the recommendations were tiered wherever possible in order to provide a range of viable options to different universities depending on available resources.

In addition to potential limitations with implementing certain recommendations, the proposed recommendations are constrained by a currently very finite body of empirical research on which suggestions for stakeholder collaboration were based. The author relied on empirical literature from related fields (e.g., ADHD and LD literatures) when such research was deemed

relevant to the PD population. Additionally, several of the recommendations were informed by literature on the efficacy of developing interdisciplinary committees in solving complex problems; improving outcomes after training faculty and staff about LDs/ADHD; and facilitating favorable outcomes for students who received academic accommodations on the basis of such disabilities. However, because empirical research about working with college students with PDs is limited, the efficacy of the proposed recommendations remains an empirical question.

This project was able to address only a finite number of challenges unique to accommodating college students with PDs. Several likely concerns were not individually considered in this project. For example, one potential obstacle in accommodating students with PDs is differentiating students who are malingering to obtain accommodations from students with true PDs that impair their learning. A broader question beyond the issue of malingering includes how clinicians can determine the types and degree of academic disability that warrant academic accommodations. Elyn Saks, a professor at the USC Law School who has schizophrenia, asks stakeholders to consider why the presence of mental illness is the deciding factor in granting academic accommodations to students (Saks, 2008). She questions why stakeholders accommodate someone with a learning disability but not someone with low intelligence, or similarly why universities might accommodate attentional problems secondary to a psychiatric diagnosis but not attentional problems as a standalone impairment to learning (Saks, 2008, p. 356). Saks' points highlight the need to provide students with true disability status the necessary support services to reduce barriers to their learning. Her writing may also encourage relevant parties to expand their scope in considering the types and degree of disability that warrant academic accommodations. The questions she poses suggest the answer may not always be as clear as a DSM-5 diagnosis.

This author can provide preliminary suggestions for tackling such large-scale issues. For instance, DSOs should rely on diagnosing clinicians to address differentiating malingering from true disability status. This is consistent with the role of diagnosing clinicians outlined in this project's recommendations. Relatedly, clinicians may wish to routinely include measures of patient effort in their psychodiagnostic or neuropsychological evaluations, and to assess psychosocial functioning in other domains of the student's life that may be compromised by a PD. For instance, PD-related impairments may be global and pervasive, rather than limited to a student's academic life. Thus, considering a student's social functioning and self-care abilities in light of having a PD can be a useful source of collateral information. Although universities cannot mandate students requesting accommodations to concurrently receive psychotherapy, a student's participation in psychotherapy may also be a useful source of collateral information regarding the possible severity of a PD, and support the student's need for accommodations. DSOs may also consult with their university's legal counsel in determining what mental health diagnoses are, or are not, covered by the ADA, as this may be subject to change. Having DSO or other legal staff who frequently revisit ADA and related policies may be similarly helpful. Complex issues, such as differentiating malingerers from students with true disability status, require thorough investigation and recommendations in future research projects.

Other important topics beyond the scope of, but related to, recommendations proposed in this dissertation include generating reasonable accommodations that do not compromise course integrity, and accommodating students with PDs whose symptoms are episodic rather than chronic. As indicated in the example above about differentiating malingering from truth telling, such important remaining questions may be preliminarily addressed by implementing some of the recommendations proposed in this project. For instance, relying on faculty feedback, clinical

input from mental health providers, and the principle of minimal effectiveness may be helpful starting points in providing sufficient, practical accommodations that do not violate course integrity or compromise learning objectives. Similarly, obtaining ongoing training and education about the unique impact of PDs on academic functioning may shed light on the differential impact of chronic versus episodic mental health conditions on learning. However, these are examples of topics which in and of themselves warrant individual consideration in future research and should be managed beyond relying on the recommendations proposed herein.

Concluding Statements

As previously stated, the number of college students with mental illness is on the rise (SAMHSA, 2013). Nearly 1 in 5 college students has a mental health condition (NAMI, 2016) and as many as 5-12% of students with PDs do not seek the mental health or other support services for which they may qualify (Collins & Mowbray, 2005; NAMI, 2012). While not all individuals with a psychiatric disorder qualify for academic accommodations (Job Accommodation Network, 2010, p. 5), these statistics demonstrate that identifying PDs and providing academic accommodations is a growing need that universities will continue to address. DSOs have labeled accommodating students with PDs a “fuzzy” area of the field (Collins & Mowbray, 2005, p. 311); furthermore, the limited literature about academic accommodations for students with PDs provides inconsistent guidance to stakeholders regarding their roles in the accommodations process. Subsequently, the goal of this dissertation project was to improve the academic accommodations process for students with PDs, and for the stakeholders who facilitate the process. The recommendations encourage interdisciplinary stakeholder collaboration, clarification of stakeholder roles, and concretization of previously unstandardized or vague procedures central to the accommodations process at many universities. Researchers may

investigate the effectiveness of these recommendations in future projects, thereby setting the stage to further explicate, edit, and improve them. The author hopes this project will promote services for a population that is underserved yet highly deserving, and will assist relevant stakeholders by providing them with concrete steps to take in their efforts to facilitate students' academic and occupational success.

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APPENDIX A

Academic Accommodations for College Students with Psychiatric Disabilities

Questions to Consider in Determining Specificity of Accommodations:

1. What limitations does the student experience?
2. How do they affect a student's ability to perform in the classroom or participate in college activities?
3. What accommodations are already available to help reduce or eliminate problems caused by the student's limitations?
4. Are all possible resources being used to determine accommodations?
5. Can the student provide information on possible accommodation solutions?

Accommodation Category	Accommodation Ideas
<p>Time management:</p> <p>Students with psychiatric disabilities may experience difficulty managing time, which can impact their ability to mark time as it passes. It can also impact ability to gauge the proper amount of time needed to complete certain tasks.</p>	<ul style="list-style-type: none"> • Divide large tasks into several smaller tasks • Give ample time to complete in-class and out-of-class assignments • Provide a checklist of assignments
<p>Memory:</p> <p>Students with psychiatric impairments may experience memory deficits, which can impact ability to complete tasks, remember personal responsibilities, or recall daily actions or activities.</p>	<ul style="list-style-type: none"> • Provide written instructions • Allow additional time for new tasks • Offer use of a note-taker • Audio or video-record classes and lectures • Provide copies of the instructor's notes or slides • Provide outlines or lists of key words for

Accommodation Category	Accommodation Ideas
	each class section
<p>Concentration:</p> <p>Students with psychiatric impairments may experience decreased concentration due to auditory and/or visual distractions.</p>	<p>Reducing auditory distractions:</p> <ul style="list-style-type: none"> • Allow use of noise-canceling headsets • Hang sound absorption panels • Provide white noise machines • Relocate student's workspaces away from audible distractions <p>Reducing visual distractions:</p> <ul style="list-style-type: none"> • Install space enclosures (cubicle walls) • Reduce clutter in classroom environment • Redesign workspace to minimize visual distractions • Relocate workspace away from visual distractions • Preferential seating
<p>Organization:</p> <p>Students with psychiatric impairments may have difficulty getting or staying organized, or have difficulty prioritizing tasks and activities for school.</p>	<ul style="list-style-type: none"> • Develop color-coded system for files, projects, or activities • Use a chart to identify class activities and assignments • Utilize college advisors to help with class scheduling each semester • Utilize tutors, upperclassmen, or

Accommodation Category	Accommodation Ideas
	<p>volunteers to reinforce organizational skills</p> <ul style="list-style-type: none"> • Assign prioritization of assignments for students • When possible, assign new projects only when previous projects have been completed • Allow work to be completed in groups, making each person in the group accountable for a portion of the project
<p>Social Skills:</p> <p>Students with psychiatric disabilities may have limited adaptive skills, including communication with others. This may manifest itself as interrupting others, demonstrating poor listening skills, avoiding eye contact when communicating, and inability to read body language or understand subtle nonverbal cues.</p>	<ul style="list-style-type: none"> • Demonstrate appropriate behavior in the classroom • Develop a simple, but appropriate code of conduct in the classroom (e.g., rules about tardiness, early departure, engaging in debate or discussion, and good classroom citizenship) • If possible, make class attendance optional • Encourage students to minimize personal conversation, or move personal

Accommodation Category	Accommodation Ideas
	<p style="text-align: center;">conversation away from classroom</p> <ul style="list-style-type: none"> • Promote sensitivity training/disability awareness in the classroom • Encourage all students to model appropriate social skills • Adjust teaching techniques to better fit students' needs • Allow students to complete work online • Adjust method of communication to best fit students' needs
<p>Completing Course Requirements:</p> <p>Students with psychiatric disabilities may need adjustments to, or modifications for, course or degree requirements.</p>	<ul style="list-style-type: none"> • Course substitution • Taking a reduced course load • Spreading out course load to include summers or additional academic years • Independent study • Online courses • Substitute assignments in specific circumstances • Permission to submit assignments hand-written rather than typed or vice versa • Assignment assistance during hospitalization

Accommodation Category	Accommodation Ideas
<p>Taking Tests:</p> <p>Students with psychiatric impairments may need accommodations when taking tests.</p>	<ul style="list-style-type: none"> • Provide alternate formats (e.g., from multiple choice to essay; oral, presentation, role-play, or portfolio) • Use of assistive computer software (e.g., Optical Character Recognition, allowing scanned text to be read aloud by the computer's sound card; or speech recognition for converting spoken word to printed word on computer screen) • Extended time for test-taking • Individually proctored exams, including in the hospital • Exams in a separate, quiet, and non-distracting room • Increased frequency of exams

APPENDIX B

IRB Exemption Notice

PEPPERDINE UNIVERSITY

Graduate & Professional Schools Institutional Review Board

July 17, 2014

Joelle Broffman

Protocol #: N0615D01

Project Title: The Provision of Academic Accommodations for College Students with Psychiatric Disabilities: An Integrated Model for Disability Service Offices, Faculty and Clinicians

Dear Ms. Broffman:

Thank you for submitting the Non-Human Subjects Verification Form and supporting documents for your above referenced project. As required by the Code of Federal Regulations for the Protection of Human Subjects (Title 45 Part 46) any activity that is research and involves human subjects requires review by the Graduate and Professional Schools IRB (GPS-IRB).

After review of the Non-Human Subjects Verification Form and supporting documents, GPS IRB has determined that your proposed research activity does not involve human subjects.

Human subject is defined as a living individual about whom an investigator (whether professional or student) conducting research obtains (1) data through intervention or interaction with the individual, or (2) identifiable private information. (45 CFR 46102(f))

As you are not obtaining either data through intervention or interaction with living individuals,

or identifiable private information, then the research activity does not involve human subjects, therefore GPS IRB review and approval is not required of your above reference research.

We wish you success on your non-human subject research.

Sincerely,

Dr. Thema Bryant-Davis Chair, Graduate and Professional Schools IRB Pepperdine University

1 *Research* means a systematic investigation, including research development, testing and evaluation, designed to develop or contribute to generalizable knowledge. Activities which meet this definition constitute research for purposes of this policy, whether or not they are conducted or supported un-der a program which is considered research for other purposes. (45 CFR 46.102(d)).

A handwritten signature in cursive script that reads "Thema Bryant-Davis".

cc: Dr. Lee Kats, Vice Provost for Research and Strategic Initiatives Mr. Brett Leech,
Compliance Attorney Dr. Stephanie Woo, Faculty Advisor