Abstract
The aim of this research is to understand the capability and comfortability of college counseling center staff when working with students with schizophrenia. 34 college counseling center staff completed online surveys, and semi-structured interviews were conducted with four college counseling center directors. Questions focused on staff’s perceived knowledge of treatments for schizophrenia, training experiences, attitudes, and comfortability working with such students. Independent samples t-tests were run between survey participants in high and/or low categories of knowledge. Participants reporting higher levels of knowledge reported higher levels of comfort treating students with schizophrenia (M=19.28, SD= 1.78) compared to those reporting lower levels of knowledge (M=14.94, SD= 3.22), t(32) = 4.8, p < .001. There was no significant difference between knowledge groups on generalized stigma; t(32)= .562 (p=.562) or in social stigma scores, t(32) = 0.428 p = 780. Reoccurring themes, seen throughout the semi-structured interviews, consisted of university and family collaboration, experience working with students with serious and persistent mental illness (SPMI), concern for students, and a tailored approach. These results suggest that counselors who feel confident in their knowledge about schizophrenia feel more comfortable and prepared to work with such students.

Introduction
While there is sufficient research regarding the prevalence and risk for psychosis in young adults (Jones et al., 2016), there is a lack of literature regarding schizophrenia targeted treatment in college counseling centers. Many university counseling centers are meant for short-term care, which does not align with the typical treatment plan for individuals with schizophrenia (Francis & Abbassi, 2010). University counseling centers report 21% of students seeking services have a severe mental health concern, and three out of 1,000 students are diagnosed with schizophrenia (Mistler et al., 2012; Psychosis and Your College Student, 2017). Furthermore, first onset symptoms of schizophrenia, such as psychosis, tend to emerge around the traditional college-age, and students with psychiatric disorders are entering colleges at higher rates (Pedrelli et al., 2015,
As such, universities are often a first-line contact for treating students who experience these symptoms (Jones et al., 2016). College students with schizophrenia often fare better when they have access to care and support on campus (Brady, 2008). It is important that college counseling centers are capable, and staff members are comfortable, working with students presenting such issues, as this additional support can help retain students, as well as guide them throughout their treatment process (Jones et al., 2016). Negative stigma associated with schizophrenia adds additional barriers for students with schizophrenia to adapt and thrive in a college setting, as a high percentage of individuals perceive those with schizophrenia to be dangerous or unpredictable (Silva et al., 2017, p. 2). Stigmas towards these individuals is common, and inadvertently affects relationships with potential employers or educators due to a lack of educational training (Smith et al., 2011, p.46). “Therapists’ belief in the potential of a recovery outcome for their patients is essential, even when the patients’ cognitions may be limited. Furthermore, training therapists how to treat and relate to symptoms of psychosis is paramount in improving the process of validating the patients’ experiences” (Miele, 2014, p. 60- 61).

In an attempt to fill the gap in current research, we investigated the following question through our research, “What factors about a university’s counseling center makes its staff feel better equipped and comfortable to serve the needs of students with SPMI?” Two hypotheses were developed at the start of this project: 1) the more knowledgeable counselors believe themselves to be about schizophrenia, the more comfortable they will be working with such students, and 2) the more knowledgeable participants report themselves to be about schizophrenia, the lower the stigma they will report towards students with schizophrenia.

**Methods**

**Participants** Participants included 34 individuals (82% women, M age= 39.0) who work at a university counseling center. Of these participants, 85% identified as white, 9% mixed race, 3% Hispanic, and 3% Asian. The average length of time working in a counseling center was 10.9 years (SD = 8.9). Four current counseling center directors completed semi-structured interviews (M= 3.75 years being a counseling director). Gender and race are not reported to preserve confidentiality of counseling director participants.

**Procedures** A mixed methods approach, including a survey of counseling center staff and semi-structured interviews of counseling center directors, was used. Upon receiving approval to conduct this research from the University of Wisconsin-Eau Claire’s International Review Board, recruitment emails were distributed to 154 universities and college counseling centers throughout four midwestern states. Survey: The names and contact information of counseling center directors at 154 universities and colleges throughout four midwestern states were obtained from campus websites. The directors were contacted via email and asked to a) participate in a brief
interview, and b) forward a link to the online survey to their staff. Staff completed the survey by clicking on a link included in the forwarded email. 154 reminders were requested, though it was unclear how many directors actually forwarded the survey participation request, so actual response rates are unknown.

Interviews: Of the 154 directors contacted, four agreed to complete semi-structured interviews. The interviews were conducted using the Zoom software platform and lasted between 30 minutes and 90 minutes. All participants were sent a recruitment email containing an informed consent document, where the purpose of the study and perceived benefits were detailed. Participants then responded to the email, indicating their interest in being interviewed. At the beginning of the interviews, verbal consent was obtained. Participants were asked if they were either 18 years of age or older, and if they consented being interviewed, and having their interviews recorded and stored for three years within the researcher’s university secured OneDrive account. Recorded interviews were later transcribed using the Otter program, and data was analyzed through open-coding, allowing for common themes to be recognized.

**Measures: Perceived Knowledge of Schizophrenia Treatment Strategies**
Questions were created for the purpose of the current study by reviewing best-practice guidelines for treating schizophrenia (Keepers et al., 2020). For example, participants were asked about cognitive behavioral therapy for schizophrenia, reality checking strategies, and crisis intervention for psychotic symptoms or the emergence of a psychotic break, and all items were responded to using a Likert-type scale ranging from “not at all” (0) to “very knowledgeable” (7). The internal consistency of these items was acceptable (alpha = 0.919), indicating reliability for use as a total perceived knowledge scale in analyses.

**Comfort Working with Students with Schizophrenia** Four questions were asked regarding participants’ comfortability and preparedness in working with a student with schizophrenia. Possible answers ranged from “very uncomfortable” (1) to “very comfortable” (6). Higher scores on the scale indicated greater comfortability (minimum: 10, maximum: 21).

**Generalized and Social Stigma** Two concepts of stigma were included in the survey: the adapted versions of the Social Distancing Scale (SDS) and Semantic Differential Measure (SDM) (Broussard et al., 2012). The SDS measures the social distance, or comfortability of a relationship or proximity, the participant would like to be with a person with schizophrenia. Higher scores on the SDS (Broussard et al., 2012) corresponded with a greater level of comfort regarding those with schizophrenia and a lower level of social distance (minimum: 14; maximum: 29). The SDM compared participants’ views of students with schizophrenia to an “average” student, by having them rate such students within the framework of polar adjectives of the extreme (worthless to valuable, dirty to clean, etc., minimum: 12, maximum: 84).
Semi-Structured Interviews Questions for the interview with directors were generated by reviewing research and best-practice guidelines for college counseling centers (Jones et al., 2016). These questions inquired about the typical protocol presenting symptoms of SPMI, specifically for schizophrenia, any training that is provided, and their perception of their staff’s knowledge for working with students with SPMI (See appendix).

Results
Survey Results To observe differences between participants who perceived themselves to be high or low in knowledge of treating schizophrenia, two groups were created using a median split based on the sample mean. Participants with perceived knowledge scores of 39 or greater were assigned to the high group (n = 16) and those with scores of 38 or less were placed in the low group (n = 18). Independent sample t-tests were conducted to examine group differences on comfort treating students with schizophrenia, generalized stigma, and social stigma scales.

Participants who reported higher levels of perceived knowledge also reported significantly higher levels of comfort treating students with schizophrenia (M=19.28, SD= 1.78) compared to those who reported lower levels of perceived knowledge (M=14.94, SD=3.22), t(32) = 4.8x, p < .001. Contrary to hypotheses, there was no significant difference between knowledge groups on the measures of generalized stigma; t(32)= 0.562 (p =.562). In addition, there was no significant difference in the social stigma scores between the knowledge groups, t (32) = 0.428 p = .780.

Interview Themes The themes of university and family collaboration, experience working with students with SPMI, concern for students and tailored approach were identified as a contributing factor for a counseling center’s ability to meet unique needs of students with SPMI, and thus recognized as the four major themes from the semi-structured interviews. To describe and maintain the confidentiality of the participants’ identities, they will be identified by the following; Case 1 (personal communication, June 15, 2020) has a PhD in Counseling Psychology and works at a midsized university; Case 2 (personal communication, June 22, 2020) has a PhD in Clinical Psychology and works at a small private college; Case 3 (personal communication, August 13, 2020) is a licensed master social worker at a tertiary educational institution; Case 4 (personal communication, September 11, 2020) has a PhD in Clinical Psychology, and works at a small private college.

University and Family Collaboration University collaboration refers to the counseling centers’ involvement with other student services on campus, in regard to a student’s mental health or concern over their wellbeing (Jones et al., 2016). When asked about collaboration with student services, all participants indicated interest or relationships with their university’s disability, health, housing, and multicultural services. Case 2 went on to say that “we’re (the counseling center) going to involve as many individuals on campus as we need to” (personal communication, June 22, 2020). Additionally, the
two directors at private colleges, Case 2 (personal communication, June 22, 2020) and Case 4 (September 11, 2020), offered unique connectedness by working alongside the Campus ministry. However, Case 3 (personal communication, August 13, 2020) discussed experiencing difficulty forming healthy communication between counseling services and disability services, explaining that confidentiality and a lack of understanding created obstacles for the two departments to work together in managing student issues and concerns.

Family interventions are considered best practice in the treatment plan of an individual with schizophrenia (Caquera et al., 2015) and greatly encouraged amongst this clinical population (Pedrelli et al., 2015). These interventions often include therapy sessions with the client and their immediate family members, which can help promote open communication between all. These sessions are largely based on family collaboration with the client’s treatment team, with the goal of involving the students’ main caregivers or support system (Caquera et al., 2015). Notably, family intervention cannot be forced upon student clients in university counseling centers. Case 1 (personal communication, June 15, 2020) stated that “we (the counseling center) would never surprise someone with a family session or something like that without their (the student’s) permission. It would always be led by that student.” All counseling center directors indicated interest or current/past work with families and students, but prior to contacting families, student consent must be obtained. For some, including family members can be an obstacle in treatment, whether through administration’s concern or a student’s refusal for consent. Ultimately, family interventions were described as positive when the student was fully consenting and eager to bring in family members to their sessions.

**Experience Working with Students with SPMI** This theme relates not only to a participant’s graduate education and training focus, but the amount of interaction they have had with students with SPMI in their counseling centers. Participants education and training varied and those with Clinical Psychology degrees received more experience studying and working with individuals with SPMI, while counseling and other helping degrees work with “healthier, less pathological populations” (Norcross, 2000). Every participant had different experiences with students with a SPMI, and the average amount of students they work with who have a SPMI ranged from 10-25% of their students. When asked how many students with diagnosable schizophrenia they have worked with, the number decreased to one to three students in their career. These results suggest counseling staff most certainly interact with students with SPMI and led to inquiring about continuing education requirements. All participants reported that themselves and their staff were able to choose which courses to register for based on personal preferences. Case 3 explained difficulty finding continuing education that focused on SPMI, “that (continuing education) would arm me with the appropriate response to treat somebody on site a plan to get them treatment. And it’s maddening, I cannot find anything” (personal communication, August 13, 2020).
Recent research has suggested that graduate and medical students experience additional academic pressure, and are often unable to take time off from their responsibility of classes, research, clinical practicum, etc. (Dyrbye et al., 2005 & Woolston, 2019). Case 3 displays the reality of students with SPMI attending their university’s rigorous tertiary school, stating the number of students with SPMI was, “probably pretty low only because they wouldn’t make it here... You have people who are quite frankly, higher functioning” (personal communication, August 13, 2020). However, Case 3 explained that while students may not fit a diagnosis for schizophrenia, for example, they seem to exhibit extreme signs of perfectionism and neuroses. Perfectionism has been found to hinder academic performance and raise stress levels in medical students, indicating a need for accessible and comprehensive mental health services (Bußenius & Harendza, 2019).

While students in post-graduate programs indicate a need for mental health services, many, especially medical and dental, may be hesitant to disclose and seek help regarding their mental illness (Bianchi et al., 2016).

**Concern for Students** The theme, “concern for students”, references how counseling center directors follow up or check-in on students who have indicated that they are a threat to themselves or others, or if someone reports concern for a student. Every participant explained that if a faculty member, student or parent reached out to them with concerns for a student, they would be comfortable contacting such students. Three universities had a specific procedure for such instances, where a team of staff members, from various student services, come together to review cases and indications of concern for a student. Case 2 explained, “it’s either consulting with us (the counseling center) directly, they can just give us a call, or they can fill out a form which could be anonymous, or they could give their personal information” (personal communication, June 22, 2020). Early intervention and detection of SPMI symptoms is crucial in ensuring an individual’s chances of successful treatment, and measures used at universities can help identify students at risk and connect them with the appropriate support (Christianson, 2019).

**Tailored Approach** Tailored approach refers to a university counseling centers’ ability and willingness to create a unique treatment plan that fits the needs of a student, and often incorporates collaboration with other university or outside services. All participants indicated their counseling centers have or would utilize an individualized approach for students experiencing SPMI (Jones, et al., p. 26). “There’s no one treatment to all, it’s collaborating to meet their needs,” (Case 1, personal communication, June 15, 2020) This can be actualized by advocating for unique academic accommodations, creating a safety plan, referring students to an outside counselor, using unique techniques, etc.

For instance, universities that had nurse practitioners or medical doctors employed in campus medical centers were able to offer medication management for students, with the expectation of a signed waiver (Case 1, personal communication, June 15, 2020 & Case 4, personal communication, September 11, 2020). Additionally, the ability to offer regular and frequent sessions for students was found within the counseling centers of Case 2
and Case 3. The National Association on Mental Illness – Southwest Washington chapter reports that many students are subjected to their counseling centers’ waitlists, which can harm their own mental health (Thielking, 2017). For mid-sized public universities, like Case 1’s, pairing monthly or bi-weekly sessions with an outside clinician’s assistance provides robust support and services for students with SPMI.

Discussion
The survey findings indicate that those who reported higher scores of perceived knowledge also reported higher levels of comfort working with students who have schizophrenia; however, there were no meaningful differences regarding generalized or social stigma. The results highlight the importance of ensuring college counseling center staff are trained and receive continuing education on how best to work with students who have schizophrenia. Contrary to hypotheses, there were not meaningful differences regarding generalized or social stigma between the perceived knowledge groups. These results suggest counselors who feel confident in their knowledge about students with schizophrenia also feel more comfortable and prepared to work with such students. This comfort and preparedness may relate to better therapeutic relationships and student outcomes (Brady, 2008). Additionally, the current results suggest knowledge does not relate to generalized or social stigma about individuals with schizophrenia.

The themes discovered from the semi-structured interviews display which factors in a university counseling center influence its ability to work with students with SPMI. Participants indicated various strategies and resources in place to meet the needs of such students, in addition to extents to which they can be truly capable. Findings from interviews were consistent with expected practices at university counseling centers (Jones et al., 2016).

This project is not exempt from limitations, as a notable obstacle was the survey’s sample size, as participation recruitment occurred in the midst of the COVID-19 pandemic. The majority of university counseling center staff are not contracted during the summer months, which possibly interfered with the response size. The majority of participants identified as white, which displays the lack of racially/ethnically diverse participants. Reliability of survey responses is another limitation, as truthfulness relied entirely on the participants themselves.

Further research is needed to examine how and if stigma interferes with the therapeutic relationships and client outcomes. While counselors in college settings are not consistently exposed to students with schizophrenia, results from this study indicate that many perceive themselves to be knowledgeable and comfortable working with such students. These findings are promising as they suggest universities may be equipped and adequately capable to work with students who are diagnosed with schizophrenia. This study encourages further research to examine how and if stigma interferes with the therapeutic relationships and client outcomes.
References

Brady M. (2008). Beating the odds—nothing is impossible, it’s just a road less traveled. Schizophrenia bulletin, 34(2), 204–211. DOI: 10.1093/schbul/sbm023


