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An Examination of the Big Five, Mental Illness Stigma, and Crisis Intervention Training

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Dedication

To my people, for the undying support and understanding when my studies took priority, for encouragement in the moments when I lacked motivation and doubted my goals, and for being there when I needed to be reminded of my "why."

I am also so grateful for my CRP committee, especially my chairperson, Dr. Bennett, who provided guidance and made this process as painless as a dissertation can be.

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Abstract

The number of individuals incarcerated with mental illness continues to grow, and correctional officers may play a critical role in rehabilitation. A correlation analysis was conducted between Big Five personality traits and mental illness stigma to determine whether there is a significant relationship in a sample of state correctional officers who participated in Crisis Intervention Training. A mixed model ANOVA was also conducted to assess whether personality traits impacted levels of mental illness stigma following completion of the training. A moderate negative correlation was found between agreeableness and mental illness stigma. All other findings were not clinically significant, potentially due to the study's limitations. Future research is necessary to continue to address the gap in the research regarding personality and mental illness stigma amongst correctional officers.

Chapter 1: Introduction

Background

There are several historical and systemic factors that have contributed to the rise of individuals with mental illness involved with the criminal justice system. As a result, correctional workers, particularly officers, have found themselves in a new role in terms of reducing recidivism among this population. This section seeks to shed light on the factors that led to a growing population of mentally ill and incarcerated individuals, the stigma this population faces, and the importance of understanding how correctional officer characteristics may impact recidivism.

Contributing Factors to the Prevalence of Mental Illness in U.S. Prisons

Deinstitutionalization. The term "deinstitutionalization" describes a transition that occurred in the United States throughout the mid-1950's and 1960's, whereby the passing of President John F. Kennedy's Community Mental Health Construction Act in 1963 facilitated the closure of state-run psychiatric hospitals (also historically referred to as asylums or psychiatric penitentiaries) with the intention of opening federally funded community mental health centers (CMHCs) (Caspar & Joukov, 2020). This shift in the locus of treatment of individuals with mental illness was supported by findings that indicated inhumane treatment within psychiatric hospitals (Yohanna, 2013). It was further supported by the growing belief that individuals with serious mental illness could care for themselves in the community thanks to the introduction of the first effective antipsychotic medication, chlorpromazine (Ban, 2007). Further, Medicaid was established around this time, which created an incentive for states to close their psychiatric hospitals in lieu of sharing financial responsibility for individuals with mental illness with the federal government (Yohanna, 2013; Caspar & Joukov, 2020). The passing of the Omnibus

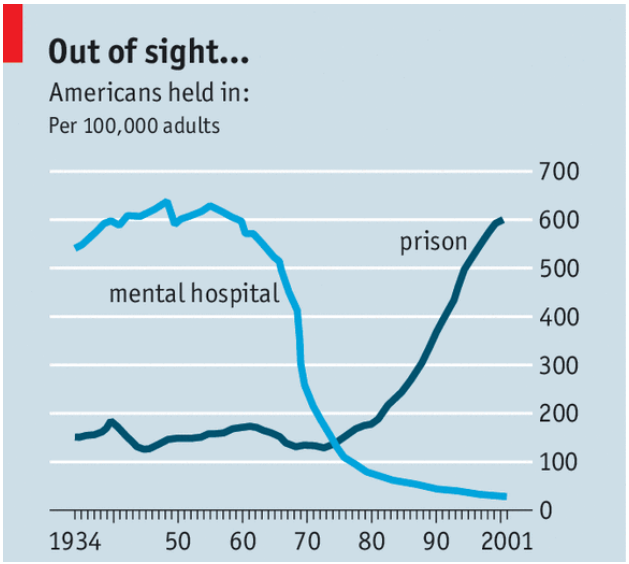
Budget Reconciliation Act of 1981 left individual states financially responsible for long-term mental health facilities. As a result, individuals with serious mental illness who were able to obtain care were left to reside in overcrowded and underfunded facilities (Yohanna, 2013).

The drawbacks of deinstitutionalization have been well documented in the literature. While the notion of closing inhumane psychiatric hospitals was well-intentioned, the implementation of directing previous hospital residents to CMHCs and programs that may aid with other resources (e.g., housing, food, clothing, job training) that had yet to be established was unsuccessful (Yohanna, 2013). For example, in 1965, Connecticut's public mental health facilities had the ability to provide for 8,200 individuals with mental illness compared to only 2,300 individuals in 1985, twenty years later (Conklin, 1985). Sadly, this is not reflective of a reduction in the prevalence of mental illness or need for psychiatric beds, but rather a societal shift in the locus of treatment for those with a mental illness. Without sufficient community resources to provide mental health services and support community living, many individuals ended up either homeless or incarcerated. Collier (2014) reported, "One study found this trend accounts for about 7 percent of prison population growth from 1980 to 2000 — representing 40,000 to 72,000 people in prisons who would likely have been in mental hospitals in the past."

The repercussions of the deinstitutionalization movement continue to be visible today in the high incarceration rate of individuals with mental illness and the discrepancy between the amount of individuals in need of acute or long-term mental health care and the lack of available beds (Caspar & Joukov, 2020; Conklin, 1985). For instance, Figure 1 demonstrates a clear shift over time in the number of people being held in a psychiatric hospital versus a prison in the United States, with the number of Americans with mental illness in prison exceeding those in psychiatric hospitals beginning around 1980 (Caspar & Joukov, 2020).

Figure 1

Mental Hospital versus Prison Population in the United States



According to the National Alliance on Mental Illness (NAMI), approximately 2 in 5 incarcerated persons have a history of mental illness, with 37% of individuals incarcerated in state and federal prisons and 44% of individuals in local jails reporting a diagnosed mental illness (Bronson & Berzofsky, 2017). A meta-analysis of publications looking at mental illness among the homeless population estimated 76.2% of homeless individuals experience a mental disorder, with the most common being substance use disorders, schizophrenia spectrum disorders, and major depression (Gutwinski et al., 2021). The increase in individuals with mental health difficulties being incarcerated or homeless demonstrates an unmet societal need for more mental health care facilities.

The "War on Drugs." An increase in concern over drug use in the United States resulted in a declaration of a nationwide "war on drugs" by President Nixon in 1971 (Musto & Korsmeyer, 2002). This campaign involved significant escalation in drug penalties and the implementation of steep mandatory minimum sentences (Travis et al., 2014). This movement

intensified during the Reagan administration as public opinion grew to see drug abuse as a leading problem; thus, the enactment of tough drug laws became more widespread (Travis et al., 2014). The United States' criminal justice policies continued to emphasize incarceration throughout the 1980's and 1990's as the opioid crisis further contributed to public concern regarding drug use. Harsher sentencing guidelines (e.g., "three-strike laws") in conjunction with a dramatic increase in state and federal drug laws resulted in drug offenses accounting for one-fifth of state prison offenders and approximately two-thirds of federal offenders by 1997 (Mumola & Karberg, 2006).

The "war on drugs" began to lose support over time as public opinion shifted from viewing substance use as a criminal problem to a public health problem, which was further supported in a 2016 United Nations General Assembly Special Session on drugs (Volkow et al., 2017). The Obama administration brought new policy changes to begin the decriminalization of drugs with the goal of reducing jail time for prisoners serving time for non-violent, drug-related offenses (Collier, 2014). While this may have initiated a decrease in the number of drug-related arrests, many individuals sentenced during the "war on drugs" remain incarcerated. For example, it is estimated that 60% of U.S. offenders have a substance use disorder (Bronson et al., 2017), and drug offenses currently account for 45.3% of the federal bureau of prison population (Federal Bureau of Prisons).

The "war on drugs" is typically considered a political campaign, though it played a major role in the public's perception of drug addiction and resulted in many individuals with substance use disorders being incarcerated rather than receiving treatment. Similarly, public perception of individuals with mental illness who are experiencing homelessness (and often have a comorbid substance use disorder) was also impacted in a negative manner. The negative impacts of the

"war on drugs" are more readily acknowledged today given that the political and social climate has adopted a more rehabilitative approach to drug use overall (Travis et al., 2014).

Recidivism. Other contributing factors to the prevalence of mental illness in correctional facilities are the re-arrest and recidivism rates among incarcerated individuals with a mental illness. Over a 6-year span, Baillargeon et al. (2009) found individuals diagnosed with a major psychiatric disorder (major depressive disorder, bipolar disorders, schizophrenia, and non-schizophrenic psychotic disorders) to have an increased risk for multiple incarcerations. Compared to individuals without a major psychiatric disorder, incarcerated persons with bipolar disorders were approximately 3 times more likely to have been previously incarcerated 4 or more times (Baillargeon et al., 2009). Additionally, Zgoba et al. (2020) found the highest rearrest rate among individuals diagnosed with a substance use disorder, followed by individuals diagnosed with co-occurring mental health and substance use disorders. Individuals diagnosed with a mental health disorder alone had the lowest rearrest rate compared to those with substance use disorders, co-occurring disorders, and no mental health or substance use diagnoses (Zgoba et al., 2020).

However, other studies have found no significant difference in the rate of re-offending after release between individuals with mental illness and the general population (Gagliardi et al., 2004). One may question, then, why those with mental illness have higher rearrest rates than the general population if they do not commit more crimes. One may explain this discrepancy with the fact that many community mental health centers are not equipped to treat or do not offer services to individuals with co-occurring substance use disorders or a violent criminal history. The value of access to treatment is also reflected in the discovery that individuals with healthcare upon release have a greater likelihood of engaging in services that reduce recidivism (Bronson &

Berzofsky, 2017). However, in 2020, 11% of adults with mental illness in the United States reported no insurance coverage. A lack of adequate post-release treatment among the other disadvantages individuals with a criminal history face upon release (e.g., affordable housing, attaining stable employment) may all inadvertently contribute to the "revolving door" of individuals with mental illness in the criminal justice system. For example, adults with a mental illness have a higher unemployment rate (6.4%) compared to adults who do not have a mental illness (5.1%) (Bronson & Berzofsky, 2017). While there is conflicting data regarding a difference in recidivism rates among individuals with mental illness, it is reasonable to assume that those with mental illness face unique challenges upon release compared to the general population in terms of reintegrating into society. Another factor that may influence the rearrest rates of individuals with mental illness is mental illness stigma among law enforcement officers who may struggle to identify symptoms of mental illness.

The Intersectionality of Stigma within the Criminal Justice System

"Stigma…is the situation of the individual who is disqualified from full social acceptance" whereby the individual is "reduced in our minds from a whole and usual person to a tainted, discounted one" (Goffman, 1963, p.15). Individuals may experience stigmatization as a result of personal characteristics, group membership, or societal norms. Racial stigma within the prison system is evident when one considers the history of the incarceration of racial and ethnic minorities in the United States. Travis et al. (2014) noted that "the war on drugs has disproportionately affected African Americans and Latinos" (p.118). For instance, while there is little evidence that black Americans sell drugs at a higher rate than white Americans, black Americans are arrested for drug-related charges at a rate three to four times higher than white Americans (Travis et al., 2010).

The incarceration rather than treatment of the mentally ill population has influenced public opinion by perpetuating the "mental illness as dangerous" mentality to support the development of more punitive laws (Batastini et al., 2018). Symptoms that typically indicate more severe mental illnesses, such as inappropriate affect and abnormal behaviors (i.e., psychosis), can evoke stigmatized reactions in others (Link et al., 1987). Other consequences of experiencing a mental illness such as poor social skills and lack of personal hygiene have also been found to produce stigmatizing responses from others (Mueser et al., 1991; Penn et al., 1997; Eagly et al., 1991).

Individuals with mental illness involved with the criminal justice system, particularly those who identify with other marginalized groups (e.g., race, gender, age, socioeconomic status), face the risk of heightened stigmatization given the intersectionality of their identities. "Membership in some disadvantaged groups can compound the negative effects of simultaneous membership in another disadvantaged group or groups" (Chisholm & Greene, 2008, p.77). Examples of this include persons of color with a disability, lesbian and gay persons of color, and older individuals of a lower socioeconomic status. Nettles and Balter (2011) noted the stress of having to navigate different identities to maintain support from one's community, such as those who choose to conceal a stigmatized identity (mental illness) to avoid losing support in coping with a second stigmatized identity (race). The challenge of being labeled as a member of several stigmatized groups impacts how one navigates their internal and external world as these individuals may be the target of stigmatizing attitudes and behaviors (Thornicroft et al., 2007). An illustration of this challenge may be reflected in the fact that among incarcerated people with a mental health condition, non-white individuals are more likely to go to solitary confinement, be injured, or stay longer in jail (Bronson & Berzofsky, 2017).

The Role of a Correctional Officer

Traditionally, the main purpose of the correctional officer position was security. Correctional officers continue to be primarily responsible for maintaining the security and safety of incarcerated individuals, other correctional staff, and the public at large (Liebling et al., 2011). However, Liebling et al. (2011) argued that the role of a correctional officer is complex and challenging given the unique demands of the prison environment. The responsibility of managing a vast array of individuals with differing offenses and needs involves correctional officers being "on the front lines" so to speak, in that they have routine contact with incarcerated individuals more than any other correctional staff. The potential rehabilitative nature of the officer-inmate relationship may often be overshadowed by security related duties. Although managing the mental health needs of incarcerated persons may seem like a daunting task to put on correctional officers, they are crucial members of a treatment team aimed to reduce recidivism and increase functioning in this population. Involving all correctional staff appears sensible and justified when one considers how the actions of federal, state, and local governments have markedly increased the prevalence of mental illness in correctional settings (Caspar & Joukov, 2020). Additionally, correctional officers are members of two environments that hold stigmatizing attitudes towards individuals with mental illness (i.e., the community and correctional settings). Understanding and addressing mental illness stigma in correctional officers may create a bridge to reducing stigma in both settings.

Initial research has shown that correctional officers hold varying degrees of stigma towards offenders with mental illness (Callahan, 2004; Lavoie et al., 2006; Serafini, 2018). Studies have also demonstrated how correctional officer attitudes and perceptions may influence offenders' adjustment to prison, help-seeking behavior, and recidivism upon release into the

community (Callahan, 2004; Greineder, 2013; Taxman & Ainsworth, 2009; Vuolo & Kruttschnitt, 2008). For example, Taxman and Ainsworth (2009) suggested that training correctional staff to use speech that reinforces the change process may improve treatment outcomes in similar ways to treatment staff. Incarcerated females who did not receive help from officers, believed that officers treated their work as a "just a job", and felt that the officer did not follow the rules had a significantly harder time adjusting the prison environment independent of their individual characteristics (Vuolo & Kruttschnitt, 2008). This is evidence to support the importance of a strong working alliance between officer and inmate. Individuals with a serious mental illness account for nearly 2 million jail bookings a year, which further demonstrates a need for correctional officers to have adequate training and knowledge to work with individuals with a mental illness (Bronson & Berzoksky, 2017).

While there is limited research on correctional officer personality traits specifically, preliminary data suggests that correctional officers higher in openness to experience will have more positive perceptions of mentally ill inmates. More general personality literature has demonstrated individuals who score higher in openness to experience and agreeableness to report the least amount of mental illness stigma, which translated into a lesser desire for social distance (Brown et al., 2012; Qi et al., 2018). Overall, correctional officers can be considered to have an important role in how individuals spend their incarceration (e.g., seeking education or mental health treatment), reducing the likelihood that an individual reoffends after incarceration, and promoting overall community wellness. Subsequently, it would be beneficial to have correctional officers who are higher in agreeableness and openness to experience if these traits are related to a willingness to work (or come into contact with) individuals with mental illness. Taking these findings into consideration along with the fact that many individuals with mental illness have

few resources upon release and often return to prison, the significance of understanding correctional officer characteristics that directly relate to how an officer interacts with an incarcerated person (e.g., personality, stigma) becomes evident.

Purpose of the Study

The purpose of this quantitative research project is two-fold. The first aim is to explore how a correctional officer's Big Five personality traits may relate to mental illness stigma. The second aim of the research project is to examine the relationship between Big Five personality traits and the influence Crisis Intervention Training has on mental illness stigma among correctional officers.

Significance of the Study

The significance of this research project spans across several disciplines. Correctional officers are underrepresented in the current psychology literature (Butler et al., 2019), and this study will contribute to lessening this gap in the literature by revealing personality characteristics and the degree of mental illness stigma among correctional officers. Findings from this study may also be significant to the criminal justice system. Given the important role that correctional officers occupy within the judicial system, a deeper knowledge of the interaction between correctional officer personality and mental illness stigma may lead to improved understanding of officer-inmate relationships and reform in correctional officer hiring and training. More broadly, this study will add to psychologists' understanding of how personality traits may relate to varying degrees of mental illness stigma as well as how personality interacts with interventions aimed to reduce mental illness stigma. A stronger comprehension of these relationships may influence our understanding of the working alliance, the development of anti-stigma interventions, and future research.

Summary and Outline of Remaining Chapters

Political movements, such as deinstitutionalization and the "war on drugs," resulted in a dramatic increase in the incarceration rate of individuals with mental illness in the United States. A lack of community resources structured to adequately care for previous psychiatric hospital residents and a prison system not readily equipped to provide mental health treatment resulted in a revolving door effect for those whose mental health needs make it difficult to care for themselves in the community. Prison is sometimes perceived as the best or only option for individuals without housing or the means to provide for basic (or mental health) needs (Caspar & Joukov, 2020). The intersectionality of an individual with mental illness in the prison system creates the unique challenge of holding multiple highly stigmatized identities in U.S. society, demonstrating the importance of understanding methods in which stigma is reduced. Developing constructive working relationships with incarcerated persons is a crucial role of a correctional officer given the influence officer attitudes and perceptions may have on offender behavior.

Chapter 2 provides an overview of the existing research and clinical information relevant to Big Five personality traits, mental illness stigma, and the correctional officer population. A review and discussion of the literature demonstrate a gap in knowledge that this research project's aims and hypotheses (as outlined above) intend to address.

Chapter 3 includes a description of the participants, procedures, measures, and data analysis implemented for the purpose of this research project. In accordance with the *Ethical Principles of Psychologists and Code of Conduct* of the American Psychological Association (Section 8) and Minnesota Statutes, a description of ethical issues is given.

Chapter 4 summarizes and presents the results of the current research project. An interpretation of the results, discussion of the study's clinical significance, identification of limitations, and directions for future research are also provided.

Chapter 5 provides an interpretation of the findings and explanation of the relevance of the results. Limitations of the current study and directions for future research are discussed.

Chapter 2: Literature Review

Historically, the diversity in personality and stigma theories, constructs, and measures, has made it difficult to synthesize research pertaining to these variables. Given the vast amount of literature on the individual topics of stigma and personality, researchers are now equipped to begin examining the relationship between particular types of stigma and personality traits in specific populations such as correctional officers. However, conducting empirical research within the prison system comes with several challenges. For instance, certain procedures and policies are not readily accessible to the public as a means of reducing the misuse of this information. This "curtain" aids in upholding the security and safety of employees and incarcerated persons (a vulnerable population) but creates a large barrier for researchers. Nonetheless, COs may play an important role in the outcomes of incarcerated individuals, including individuals with mental illness, and understanding how CO personality traits influence relationship factors (e.g., stigma) is significant.

There are several interventions that aim to reduce stigma, including training COs in how to adequately work with individuals with mental illness. However, there is little research examining distinct factors (i.e. CO personality traits) that may influence a training's effectiveness in reducing mental illness stigma. This literature review seeks to consider previous research in the areas of stigma, personality, and the role of the CO as well as identify a gap in the literature regarding mental illness stigma and Big Five personality traits in the CO population.

Stigma

A Brief History

The concept of stigma in relation to social science research was first defined by Goffman in 1963. "Stigma…is the situation of the individual who is disqualified from full social

acceptance" whereby the individual is "reduced in our minds from a whole and usual person to a tainted, discounted one" (Goffman, 1963, p.11). While this definition is a mere 60 years old, the term *stigma* dates back centuries to the Greeks, who used physical markings to identify groups who were considered impure or forsaken (Goffman, 1963). In today's culture, stigma typically involves two aspects, the identification of difference and devaluation of this difference (Dovidio et al., 2000).

Stigma is a social construct in that it occurs within social interactions, therefore its impact on an individual or a given population can be connected to power, social status, access to resources, etc. (Bos et al., 2013). It will also look different across cultures and time periods as attitudes regarding desirability shift. Individuals may experience stigmatization on the levels of personal characteristics, group membership, or societal norms (Bos et al., 2013). Stigmatization can be overt through avoidance, dehumanization, and social rejection or covert as evidenced in nonverbal expressions of discomfort (Bos et al., 2013). The one universal element in all stigma theory is the notion that differences that are associated with undesirable traits must be present and identified for stigmatization to occur (Smith, 2002).

Smith (2002) summarized that there is no 'unitary theory' of stigma due to its complexity of an interaction between "social science, politics, history, psychology, medicine and anthropology" (p. 317). While our understanding of stigma has evolved since 1963, there are many areas that remain to be understood, especially when one considers the vast number of differences that could be stigmatized in any given culture in any given period. In a summary of articles that reflect that current condition of stigma research, Bos et al. (2013) suggested future research should focus on stigma measurements, stigma reduction interventions, the

intersectionality of different stigmatized identities, the influence of social interactions on stigma, and the structural factors that contribute and maintain stigma.

Distinguishing Between Stigma and Prejudice

The terms "stigma" and "prejudice" were defined independently by two different researchers nearly a decade apart. Allport (1958) defined prejudice as "an aversive or hostile attitude toward a person who belongs to a group, simply because he belongs to that group, and is therefore presumed to have the objectionable qualities ascribed to the group" (p. 7). In other words, prejudice is an aversion to or deep dislike of a specific group or characteristic based on an inaccurate and inflexible generalization. The concepts of stigma and prejudice overlap in terms of the experience of the member of the disadvantaged group who may encounter negative attitudes, violence, and discrimination or unfair treatment within interpersonal interactions and societal structure based on their membership of the group (Stubar et al., 2008). However, one distinction may be the notion that stigma occurs within social interactions whereas prejudice resides within the person (Crocker et al., 1998). In terms of differences in research focus, Stubar et al. (2008) proposed that stigma research focuses more on "unusual conditions" (e.g., mental illness), and prejudice research focuses more on common factors (e.g., race, gender, age). While the conceptual models may describe similar processes, the primary focus of research in each respective area differs, which has created two distinct research domains.

Phelan et al. (2008) conducted an analytic review of 18 conceptual models based in the areas of stigma and prejudice to examine commonalities and differences as a means of exploring whether the concepts are describing the same fundamental processes. Aligning with the difference in the original conceptual models mentioned above, the study found that stigma models tended to center on target processes whereas prejudice models focused on perpetrator

processes. Overall, Phelan et al. (2008) found considerable overlap and concluded the conceptual models of stigma and prejudice appear to describe the same processes which can be further delineated into three subtypes: exploitation and domination (keeping people down); norm enforcement (keeping people in); and disease avoidance (keeping people away).

According to Phelan et al.'s (2008) findings, stigma literature tended to be most concerned with the subtypes of norm enforcement and disease avoidance whereas prejudice is concerned with social processes driven by exploitation and domination (e.g., racism). Based on this conceptualization, prejudice may be considered narrower in scope, specifically pertaining to individual attitudes, as compared to stigma, which refers to broader processes that encompasses prejudice. Similarly, in an editorial discussing limitations in stigma research, Thornicroft et al. (2007) proposed that stigma be considered a broad term that includes problems of knowledge (ignorance), attitudes (prejudice), and behavior (discrimination). By this definition, stigma is a broader term that comprises of prejudice along with the aspects of ignorance and discrimination.

While the earlier literature regarding these two constructs emerged separately from one another, the overlap between prejudice and stigma processes lends to the importance of considering and examining research in both realms. Bridging the gap between these research areas will deepen researchers' understanding of the models used to address areas such as psychosocial stress in disadvantaged groups, intersectionality, and aversive racism (Stubar et al., 2008). By failing to consider stigma-related processes in prejudice research or vice versa, the researcher creates the opportunity to miss out on important dimensions that may contribute to the variables being examined.

Phelan et al. (2008) suggested considering studies on stigma and prejudice given the overlap between the two constructs. Unfortunately, however, "the majority of research on

prejudice has tended to assess attitudes of racism, sexism, or general prejudice" (Sibley & Duckitt, 2008, p. 253). Therefore, if a search for literature was to include prejudice in relation to mental illness stigma, the majority of results regarding prejudice may not be specific to mental illness. Lastly, Sibley & Duckitt (2008) pointed out that a lot of research in this area remains unpublished, and 45% of the studies in their meta-analysis were unpublished. However, they "observed extremely limited evidence of publication bias in the literature on personality and prejudice" (Sibley & Duckitt, 2008, p.266). This is a promising finding, because if there is limited publication bias, researchers hoping to expand the literature in this area may be able to reference unpublished works that have previously been neglected. With the goal of succinctness in this literature review, research involving generalized prejudice or prejudice related specifically to mental illness stigma were considered. Literature discussing prejudice towards other populations or characteristics were not included.

Mental Illness Stigma

Processes. Mental illness stigma refers to negative attitudes (i.e., prejudice), discriminatory behavior, and a lack of accurate knowledge about individuals with a mental illness (Thornicroft et al., 2007; Szeto et al., 2015). Based on the discussion above regarding what is required for stigmatization to occur, mental illness first needs to be identified before a devaluation can take place. Mental illness appears to be inferred based on four different cues: physical appearance, labels, deficits in social skills, and psychiatric symptoms (Corrigan, 2000; Penn & Martin, 1998). Inappropriate affect, bizarre behavior, poor personal hygiene, and poor social skills have all been shown to lead to stigmatizing reactions based on the public's association of these characteristics to mental illness (Corrigan, 2004a).

Given that stigma is a social construction, one would hypothesize that changes in societal values would result in changes in the mechanisms of mental illness stigma. However, Thornicroft et al. (2009) found that both experienced and anticipated rates of stigma remained relatively consistent over time for those with mental illness. Literature on the impact of media suggests a reciprocal relationship between societal attitudes regarding mental illness and media (Ma, 2017). Notably, a literature review conducted by Ma (2017) found that, over the last twelve years, media portrayals of mental illness continue to be generally negative and contribute to mental illness stigmatization. While there are some studies to demonstrate an improvement in this realm, results are mixed, and more research is needed. For example, direct-to-consumer advertisements (DCTA) tend to more objective and informative than other forms of media and were found to have a positive influence on public perception (Ma, 2017). These findings are contrary to Corrigan et al.'s (2014b) study of DCTA, which suggested that DCTA may increase the general public's stigma but lessen self-stigma of those with mental illness. Overall, societal-level factors and structural stigma is an understudied area that may increase our understanding of stigma processes, though stigma has traditionally been found to be unresponsive to strategies aimed at changing societal perception (Naslund & Deng, 2021; Pullen et al., 2022).

Consequences. Individuals who display characteristics associated with mental illness can suffer a variety of consequences such as self-stigmatization, social rejection and isolation, low self-esteem and hesitancy in seeking treatment (Corrigan 2004a, 2006; Hinshaw, 2010; Naslund & Deng, 2021; Stuart et al., 2012). Individuals who can be publicly identified as mentally ill face more obstacles when it comes to social opportunities such as finding employment or housing (Corrigan, 2004a). Therefore, as a result of being labeled as a member of a stigmatized group,

individuals with mental illness face unique challenges in how they navigate their internal and external worlds.

A major consequence of mental illness stigma that is of particular importance to the current study is hesitance in seeking mental health treatment (Corrigan et al., 2014a). Corrigan (2004a) conducted a literature review focusing on research recommendations and implications for anti-stigma programming to answer why individuals with mental illness do not seek or fully engage with treatment if they are able to keep their mental illness symptoms hidden. The literature review supported the notion that label avoidance may play an important role in help seeking behavior.

There is much empirical evidence of the negative consequences of internalization of stigmatizing beliefs amongst individuals with mental illness. Link et al. (1987) found that society's stigmatizing ideas are frequently internalized by individuals with mental illness, resulting in a negative view of the self in relation to others. The negative impact on self-esteem and self-efficacy may lead to feelings of shame and contribute to individuals feeling as though they should not bother trying (Corrigan et al., 2014a). In conclusion, the inverse relationship between stigma and care seeking may be due to individuals' desire to not face the consequences of public and self-stigma discussed above (Corrigan, 2004a).

Another negative consequence of mental illness stigma is how individuals labeled as mentally ill are treated by societal systems (i.e., structural stigma) such as public health care and the criminal justice system. For example, Teplin (1984) found police were more likely to arrest individuals displaying symptoms of serious mental illness compared to others. More broadly, state legislation limiting the civil rights of individuals with mental illness is another example of

structural stigma that may influence an individuals' likelihood of seeking treatment and ability to navigate effectively within society (Corrigan et al., 2014a).

Of note, Corrigan (2004a) proposed that inferring mental illness based on appearance, social skills, and perceived psychiatric symptoms may lead to both false positives and false negatives. Many individuals with mental illness can keep their diagnoses and symptoms hidden from others and, given the research demonstrating the consequences of mental illness stigma, have good motivation to do so. Unfortunately, the desire to avoid the consequences associated with being identified as having a mental illness may lead individuals to not seek the treatment they need.

Research. Mental illness stigma research focuses predominately on the processes of stigma, those who are stigmatized, and how to reduce prejudice towards individuals with mental illness (Szeto et a., 2015). However, it would be extremely beneficial to also understand how individual characteristics relate to stigma and prejudicial behavior, in order to deepen our understanding of stigmatization processes and better develop effective stigma reduction interventions. Unfortunately, there has not been a lot of research in the area of individual characteristics of persons with stigmatizing attitudes and behavior (Crandall & Eshleman, 2003; Monteith et al., 1994).

More recent research has begun to fill in this gap in the literature. For example, Szeto et al. (2015) extended previous research by studying the relationship between mental illness stigma and individual difference variables such as intergroup anxiety, empathic concern, perspective taking, modern prejudice, Big Five personality traits and Honesty-Humility personality traits. The researchers found that these social-psychological difference variables were significantly correlated with mental illness stigma, and several variables (intergroup anxiety, empathic

concern, modern prejudice) accounted for more variance in the prediction of stigma than Big Five personality traits. This study is just one example of how research on individual characteristics may lead to a deeper understanding of how to conceptualize and reduce stigmatization of marginalized groups.

Approaches to Reducing Stigma

The literature clearly demonstrates the potential negative consequences of being stigmatized, which has resulted in the study and implementation of stigma reduction interventions. While this area of research is growing, the broader literature regarding prejudice and discrimination reduction demonstrates many of these interventions are not specifically addressed in mental illness stigma literature (Collins et al., 2012). Many of the actual interventions being implemented still require further development in terms of methodology, theoretical underpinnings, and overall effectiveness (Bos et al., 2013; Collins et al., 2012). The literature further suggests that interventions should focus on specific presentations of stigma; more information is needed to understand what types of interventions work at different levels of stigma (e.g., interpersonal, community, and institutional levels). There are a wide variety of anti-stigma or stigma reduction interventions, but four broad approaches to reducing stigma include legislative and policy change, increasing contact, education, and training interventions.

Legislative and Policy Change. Stigma is rooted within the interpersonal and societal interactions and arguably born out of society's beliefs around value and power. Therefore, legislative and policy change may play a crucial role in reducing the stigma experienced by marginalized groups. Generally, Smith (2002) suggested a rights-based approach to policy change as a means of achieving equal access to resources for individuals with mental illness such as housing, employment, and health care. They argued that this approach is beneficial, given that

it relies on morality, practicality, and does not require persuasion or a change in attitude but rather an enforcement of equality.

Reducing mental illness stigma through legislative and policy change is both important and difficult given the complexity of government and health care systems. Public sources provide financing for the majority of mental health services in the United States (National Academies of Sciences, Engineering, and Medicine, 2016). A major challenge in the implementation of evidence-based programs that policymakers face is the complexity of funding and how services are delivered within communities (Garfield, 2011). Another challenge that contributes to mental illness stigma in the United States is the historical divide between behavioral health and mental health. The United States has historically prescribed to a medical model of healthcare, which focuses more on one's physical wellbeing rather than mental wellbeing. As a result, more funding is provided to treatments that align with this traditional model of behavioral health, leaving less resources for services with a mental health focus. Mechanic et al. (2014) proposed that an integration of the two systems may help in the treatment of individuals with mental illness as well as prepare health care professionals with proper training in all areas of health. However, an integration of these two systems would require an overhaul of the United States' health care system and many changes in policy, which is a daunting task for legislators.

Contact Experiences. Accordant with broader social psychological theories and the more specific "contact hypothesis" pertaining to prejudice and discrimination reduction, contact is an important aspect in reducing mental illness stigma (Collins et al., 2012). Pettigrew and Tropp (2006) completed a meta-analysis on intergroup contact literature and found that contact had a significant effect in reducing racial prejudice, which generalized to other stigmatized

groups (e.g., individuals with mental illness). They argued that the instance of contact is not enough to reduce prejudice, but rather certain conditions must be present such as the absence of competition, shared goals, equal status, and support for the contact from those in positions of authority (Pettigrew & Tropp, 2006). This finding demonstrates the complexities of human interaction as well as the complexities of stigmatization, which create an uncontrollable number of variables in intergroup contact and stigma reduction research. Corrigan and Kosyluk (2013) argued the importance of approaches that were targeted, local, credible, and involved continuous contact with stigmatized persons as a means of reducing public stigma. Again, human interaction is a complex variable to study, so it is reasonable that researchers make several suggestions on factors that may contribute to a higher intervention efficacy.

Another meta-analysis was conducted by Corrigan et al. (2012) regarding anti-stigma interventions including contact, education, and social activism. While both education and contact were found to have a positive impact on mental illness stigma reduction in all age groups, contact was most effective at stigma reduction in the adult population whereas education was more effective among adolescents. This finding implies that different interventions may have a higher efficacy based on the age of the population the intervention targets, which is an important consideration when developing mental illness stigma reduction interventions. Corrigan et al.'s (2012) finding that contact experience may have the strongest inverse relationship with mental illness stigma is supported by several other studies (Yamaguchi et al., 2013; Zaninotto et al., 2018) as well as basic social psychological theories about prejudice and discrimination.

Educational Strategies. As one of the three core tenets to mental illness stigma includes lack of knowledge regarding a group, it seems rational that education and increasing knowledge base would have an impact on level of stigma. The aim of educational approaches is to supply

information about mental illness and mental illness outcomes as a means of counteracting previously held inaccurate beliefs regarding mental illness (Collins et al., 2012). The American Psychological Association (APA; 2012) suggested educational strategies that are evidence-based including recategorization (reforming social categories) and emphasizing the prevalence and recovery rates of mental illness in order to defuse the "us" versus "them" perceptions that some people hold. Education interventions can include mass media campaigns, public service announcements, community programming, and programming specific to certain professions (e.g., health providers, police officers).

Educational strategies have provided some evidence of short-term effects in attitudes towards mental illness, while there is far less support for long-term change in attitude or behavior (Corrigan & Gelb, 2006; Corrigan & Penn, 2015; Kenny & Bizumic, 2015; Penn et al., 1994, 1999). Some educational approaches have been found to have mixed consequences in terms of stigma. For example, framing mental illness as based in biology may reduce blame of the individual, but was found to increase the belief that mental illness is untreatable (Corrigan & Shapiro, 2010; Mann & Himelein, 2008). Interestingly, there appears to be an enhanced desire for social distance and an increase in negative attitudes about individuals with mental illness as mental health literature grows and becomes more accessible to the public (Angermeyer et al., 2009; Schomerus et al., 2012). This finding suggests that self-education regarding a complex issue such as mental illness may not be sufficient in reducing stigma, and a component involving someone with a higher degree of understanding (whether that be through education or first-hand experience) delivering the information may be necessary.

Training Interventions. Training interventions are a broader intervention approach that usually involve both educational and contact elements, though some training interventions focus

more on educational strategies (Collins et al., 2012). Affirming attitudes about individuals with mental illness is a key ingredient of replacing inaccurate stereotypes and beliefs, so training interventions that include information touching on the causes, treatment, and experiences of those with mental illness in addition to contact experiences have been found to reduce stigmatizing attitudes and social avoidance (Corrigan & Penn, 2015; Pinto-Foltz et al., 2011). Training interventions are generally developed for specific groups such as health care providers, employers, and agents of the criminal justice system (Corrigan, 2004b).

Crisis intervention training (CIT) is a training intervention developed originally for police officers and has been found to increase officer self-efficacy, increase knowledge, improve attitudes, and decrease stigma towards individuals with mental illness (Bahora et al., 2007; Compton et al., 2006; Dupont & Cochran, 2000). This training has since been adapted for the correctional officer population in a number of states, though further research regarding its applicability and effectiveness is needed (McNeeley & Donley, 2020). CIT will be further discussed below as it pertains to COs and stigma.

Personality and the Big Five

Five-Factor Model of Personality

The five-factor model (Big Five) of personality emerged in the 1980s and identifies five key feature personality traits: openness, conscientiousness, extraversion, agreeableness, and neuroticism (Wiggins, 1996). It is referred to as a lexical model in that the Big Five was originally established through factor-analytic studies of personality descriptions common to the English language (Goldberg, 1993; John & Srivastava, 1999; McCrae & Costa, 2008). As a theory of personality, the Big Five model accommodates vastly different approaches by providing a “common language” for psychologists and has been widely accepted as a

representation of a higher-order structure of personality (Trull, 2012; Wiggins, 1996). In other words, the five factors are the highest level in a hierarchical structure of personality and can be further broken into facet-level traits (McCrae & Costa, 2003). The five-factor personality traits have been shown to be heritable, stable over time, and generally unrelated to adverse life events (Bouchard & Loehlin, 2001; Cobb-Clark & Schurer, 2012), implying that they may be important factors to consider when researching people and social interactions. Due to its lexical origins, there are often many ways to describe the five-factor personality traits. Below are general descriptions typical for each of the five factors of the model.

Extraversion. Individuals with higher levels of extraversion are generally described as warm, outgoing, and cheerful, while those on the opposite end of extraversion tend to be reserved and withdrawn (McCrae & Costa, 2008). Unsurprisingly, extraversion has been found to be related to social accomplishment and happiness.

Conscientiousness. McCrae and Costa (2008) detailed individuals who exhibit conscientiousness as dependable, hardworking, and disciplined as compared to individuals who are unambitious and laid-back. Given the characteristics that accompany conscientiousness, this trait is the most consistent predictor of job performance and positive health habits (Barrick & Mount, 1991; Weiss & Costa, 2005). Conscientiousness has also been consistently associated with academic performance in a variety of settings (Chamorro-Premusic & Furnham, 2003; Komarraju et al., 2011).

Neuroticism. Emotional stability, impulse control, and anxiety are the hallmarks of neuroticism (Komarraju et al., 2011). Individuals who are characterized by higher levels of neuroticism tend to exhibit the traits of sadness or nervousness, contradictory to low levels of neuroticism which is typically defined as calm or stable (McCrae & Costa, 2008). Literature on

this five-factor trait has demonstrated an inverse relationship between neuroticism and well-being and mental health. For example, individuals with higher levels of neuroticism have been found to be more prone to psychiatric and personality disorders (Bagby et al., 1997; Trull & McCrae, 2002).

Agreeableness. Agreeableness typically refers to those who are perceived as helpful, empathetic towards others, cooperative, and kind (Costa & McCrae, 1992). On the other hand, individuals low in agreeableness would be expected to have little concern over the interests of other people. Costa et al. (2003) discussed how individuals with lower levels of agreeableness (more antagonistic) are more likely to commit crimes and abuse drugs. In regard to learning, agreeableness has also been found to predict overall academic performance but to a lesser degree than conscientiousness and openness (Poropat, 2009).

Openness. An individual with a higher degree of openness is often characterized by being curious, sensitive, tolerant, and creative as opposed to being more rigid and traditional (Costa & McCrae, 1992; McCrae & Costa, 2008). Being open-minded gives individuals the ability to entertain new ideas, perceive less or tolerate more perceived danger, and experience less discomfort with unconventional thinking (Brown, 2012). Therefore, those with higher degrees of openness are more likely to postpone their judgments of others. Those who are lower in openness are typically very conventional, close-minded, and prefer familiarity, making it difficult for them to be comfortable around those perceived as different from them (e.g., persons with a mental illness) (Parks-Leduc et al., 2015).

The Big Five and Mental Illness Stigma

The development of the five-factor ("Big Five") model of personality has allowed researchers to gain a clearer understanding of the relationship between personality and mental

illness stigma (Sibley & Duckitt, 2008). Research has demonstrated how mental illness stigma may impede or impact an individual's access to resources and overall quality of life, making it important for researchers and clinicians to understand what other variables influence an individual's degree of mental illness stigma. Overall, few studies have gathered data with the relationship between personality and prejudice as the main subject of concern, and even less research has explored Big Five personality traits and mental illness stigma, specifically (Ekehammar et al., 2004; Szeto et al., 2015; Qi et al., 2018).

Agreeableness and openness, sometimes referred to as openness to experience in the literature, are the two Big Five factors most associated with mental illness stigma. Qi et al. (2018) investigated the relationship between the Big Five traits and mental illness stigma, and they considered whether agreeableness and openness moderate a relationship between mental illness stigma and contact experiences. Each participant was randomly assigned to a vignette involving major depressive disorder, obsessive compulsive disorder, alcohol abuse, schizophrenia, or dementia. Three dimensions of mental illness stigma were measured through self-report questionnaires: weak-not-sick, dangerous/unpredictable, and social distance. Significant associations were found between the weak-not-sick factor and openness, agreeableness, and extraversion. The dangerous/unpredictable factor demonstrated significant associations with agreeableness and openness. Each of the five factor traits, excluding extraversion, were found to have a significant association with the social distance dimension of stigma.

Agreeableness and openness were the two factors found to have a significant negative relationship with all three domains of stigma, suggesting they are most associated with mental illness stigma overall (Qi et al., 2018). This is further supported with the findings that openness

moderated the relationship between contact and weak-not-sick and dangerous/unpredictable dimensions of stigma, while agreeableness moderated the relationship between contact and social distance. Qi et al. (2018) used an adequate sample size (N=1002), although the majority of the sample was female (71.1%) and Chinese (75.3%) with a mean age of 21.3 years (SD=3.3), indicating that their findings may have low generalizability. The use of a vignette was likely beneficial given that mental illness has a slightly different meaning to everyone, and vignettes have the capability of humanizing mental illness symptoms.

In a similar study, Brown (2012) considered the impact of Big Five traits and previous experience on three dimensions of serious mental illness (SMI) stigma (social distance, negative emotions, and perceived dangerousness). Openness had a significant negative correlation with all three dimensions of SMI stigma, and agreeableness was negatively correlated with two dimensions (social distance and negative emotions). All Big Five traits were found to account for variance, ranging from 7.8% to 15.2% on the three SMI stigma scales, demonstrating that while openness and agreeableness may have the highest contribution in variance, the other three personality traits may still play a role in SMI stigma. For instance, neuroticism was found to have a significant positive correlation with the negative emotion dimension of stigma. Comparable to Qi et al. (2018), Brown (2012) had a rather homogenous sample of 579 students from introductory psychology courses at a Midwestern university where the average age was 18.6 (SD=1.0), 66.4% were female, and 94.5% were Caucasian.

Another study that supports the notion that openness and agreeableness are the Big Five traits most correlated to mental illness stigma was conducted by Szeto et al. (2015), in which they examined the relationship between stigma toward mental disorders and individual variables (including prejudice) as well as the relationship between Big Five traits and stigma. Analyzing

self-report surveys completed by college students enrolled in psychology courses at a Canadian university, Szeto et al. (2015) found that agreeableness and openness had the highest correlation with stigma towards individuals with mental disorders. This study also demonstrated that other Big Five traits may be related to mental illness stigma to a lesser degree with the detection of a modest correlation between conscientiousness and mental illness stigma.

Social distance and contact experiences are two common constructs found in the literature regarding mental illness stigma due to the conclusion that those who report less social distance and more contact experiences exhibit or report less mental illness stigma. Tomas Smigura (2020) contributed to the literature by seeking to discover whether there is a relationship between Big Five traits and mental illness stigma. They also aimed to determine how contact experiences may influence social distance and identify moderating effects of contact experience on personality traits and mental illness stigma through a measure of social distance. When comparing mean differences in their convenience sample of 203 participants living in the United Arab Emirates (UAE), individuals with the openness to experience trait reported the least amount of social distance, followed by agreeableness and extraversion. (Tomas Smigura, 2020). Conversely, those with neuroticism and conscientiousness reported more social distance, with neuroticism having the most distance and the highest tendency of mental illness stigmatization. Tomas Smigura's (2020) conclusions support the relevant literature that proposes Big Five personality traits have a relationship with reported social distance from individuals with a mental illness. However, social distance does not equate to mental illness stigma, and the valence of contact is rarely accounted for in the literature.

Many researchers use populations that are readily available to them, which results in many samples being college student participants. However, it is important to consider

populations that relate most to the research questions and constructs being studied. For example, Solmi et al. (2020) examined personality traits, demographic variables, professional features (e.g., job role, years of experience, employment setting), and burnout as contributing factors of stigma in 265 mental health professionals in Italy. Analysis revealed the Big Five trait of openness inversely predicted stigma in mental health professionals. Interestingly, agreeableness was not found to have a statistically significant relationship with stigma; however, this may be due to a small sample size or other extraneous variables.

As indicated in Tomas Smigura (2020) and Solmi et al.'s (2020) studies, Big Five personality traits likely play a role, whether it be direct or indirect, in an individual's level of mental illness stigma, which includes how a person perceives and interacts with those with mental disorders. Solmi et al. (2020) pointed out that certain personality traits may be accompanied by characteristics that play a protective role against stigma. For example, openness often includes a higher degree of empathy and better communication skills. Agreeable individuals display more empathy and cooperativeness, which may contribute to a lower tendency of stigmatization if an individual values and cares about interacting with others in a positive way. More frequent and positive interactions with individuals with mental illness could lead to less negative emotions toward those with a mental illness. Both openness and agreeableness are more likely than other traits to be accompanied by empathy and positive communication skills, which serve a protective role against stigma (Solmi et al., 2020). Therefore, it is important to consider the characteristics inherent in each of the Big Five personality traits and how those characteristics protect against or contribute to stigma.

In contrast to the articles discussed above, there is literature that does not support the argument of agreeableness and openness being most associated with mental illness stigma and

prejudice. For instance, in a sample of 1005 undergraduate students, Zaninotto et al. (2018) explored how gender, Big Five traits, and contact predict attitudes toward mental illness. The authors found only weak associations between personality traits and stigma. However, weaknesses in their sample and methods may have contributed to these findings. For instance, 82% of their sample was female and weak associations were only found when using machine learning algorithms.

Comparably, Canu et al. (2008) studied 257 undergraduate students' desire to interact with an individual with attention deficit hyperactivity disorder (ADHD). They found extraversion and agreeableness to have an association with how desirable they perceive individuals with ADHD. Conscientiousness had a very weak association, while openness had no statistical significance. Similar to social distance, desirability to interact does not equate to mental illness stigma. However, one may surmise that there is some relation that future research may clarify. Canu et al. (2008) also identified that the gender of the rater and target influenced differences in the ratings of social desirability. However, the study sample was disproportionately male (n=185). The absence of equal gender representation within a sample is a factor that should be taken into consideration, especially when the data suggests statistically significant gender differences.

While there are studies that demonstrate little to no relationship between Big Five personality traits and mental illness stigma, these studies are typically accompanied by design and methodological issues. While studies that do establish a relationship are not flawless, the issues are more commonly related to generalizability across populations. The common weaknesses in design and methodologies used in Big Five and mental illness stigma are further

evidence that studying these constructs can be difficult given the complexities inherent in each variable.

The Big Five and General Prejudice. As previously mentioned, there is sufficient overlap between stigma and general prejudice to warrant consideration of studies on the relationship between Big Five traits and prejudice when investigating Big Five traits and stigma (Phelan et al., 2008; Thornicroft et al., 2007). Ekehammar & Akrami (2003) considered the relationship between general prejudice and Big Five personality traits in a sample of 156 non-psychology Swedish university students between the ages of 18 and 57 years (M=23.8 years). The general prejudice factor comprised of seven various prejudice scales that addressed racial prejudice, sexism, ableism, and attitudes toward homosexuality. Agreeableness and openness were discovered to have a statistically significant negative relationship with the general prejudice factor, and each trait had a significant negative correlation with each of the seven prejudice scales (Ekehammar & Akrami, 2003). When taking a variable-centered approach, Big Five traits demonstrated "a substantial and highly significant cross-validated relationship" with prejudice (Ekehammar & Akrami, 2003, p. 459). While their study considered general prejudice, this still supports the idea that agreeableness and openness personality traits have a significant relationship with stigmatizing tendencies, which may extend to mental illness stigma.

In an attempt to integrate previous research demonstrating relationships between Big Five personality traits, general prejudice, social dominance orientation (SDO), and right-wing authoritarianism (RWA), Ekehammar et al. (2004) studied a sample of 183 Swedish college students. RWA and SDO are social attitudes that were developed through the dual-process motivational approach to prejudice, which proposed personality affects prejudice indirectly by means of SDO and RWA (Duckitt, 2001). A major strength of Ekehammar et al.'s (2004) study

was the inclusion of a measure of social desirability, which has been suggested to increase the relation between general prejudice and personality. Ekehammar et al. (2004) found social desirability to have a significant correlation only with agreeableness. When accounting for the social desirability effect, both agreeableness and openness were found to have a significant negative relationship with general prejudice. Neuroticism demonstrated a significant positive relationship with general prejudice, though to a slightly lesser extent than agreeableness and openness. Of note, these findings align with studies examining the Big Five and mental illness stigma where agreeableness and openness demonstrated a negative relationship with elements of stigma (including prejudice) and neuroticism demonstrated a positive relationship with stigmatizing tendencies.

Although there appears to be agreement in the literature that prejudice is affected by personality in general terms, Sibley and Duckitt (2008) conducted the first meta-analysis that examined the relationships between prejudice, RWA, SDO, and Big Five personality traits using a sample of 71 studies (N=22,068 participants). Analyses revealed that agreeableness and openness were both negatively associated with SDO. RWA was shown to have a moderate negative correlation with openness, and there was a weak significant positive relationship between RWA and conscientiousness. In relation to general prejudice, agreeableness and openness were the two Big Five traits with the strongest correlations. In their review, Sibley and Duckitt (2008) additionally identified moderating factors such as differences across personality and prejudice domains as well as cross-cultural differences in neuroticism and conscientiousness. This corroborates the notion that variety in personality and prejudice theories and constructs has influenced what is understood about the relationship between them, but personality has been found to impact prejudice in both direct and indirect routes. Overall, the relationships between

openness and agreeableness with general prejudice were “robust and consistent across samples” (Sibley & Duckitt, 2008, p. 248).

As mentioned previously, it may be beneficial to consider the unique characteristics, or facets, that accompany each of the Big Five personality factors. Examining Big Five trait facets versus factors may provide further insight into how agreeableness and openness relate to prejudice. For example, Ekehammar and Akrami (2007) compared the predictive power of Big Five facets to Big Five factor scores in three studies examining generalized prejudice. The facets with the strongest predictive power, tendermindedness (within agreeableness) and values (within openness) demonstrated more robust predictive power than the strongest predictive factors, agreeableness and openness. Future research may want to further explore facet levels to identify the more specific mechanisms of personality traits that impact prejudice and stigma.

Correctional Officers

Personality Characteristics of Correctional Officers

The most frequently researched variables within the correctional officer population are job satisfaction, job stress and burnout, and organizational commitment (Butler et al., 2019; Gordon, 2014). Research on correctional staff personality is limited and is usually in relation to how the job influences personality or how personality moderates the impact of occupational stress (Einat & Suliman, 2021; Harizanova et al., 2018; Levell & Brown, 2017; Marzuki & Ishak, 2011; Suliman & Einat, 2018). However, understanding the prevalence of certain personality traits in addition to how personality impacts other aspects of the correctional officer role would be beneficial in informing officer selection and understanding officer-inmate relationships. Research does suggest that there is some benefit to completing pre-employment psychological testing as a means of predicting job performance (Lough et al., 2007). However,

job performance is typically related to the ability to manage occupational stress and carry out duties rather than promote positive relationships with incarcerated individuals.

Initial research on correctional officer personality and how it pertains to building relationships with incarcerated individuals found officers to exhibit traits of emotional stability, openness, dutifulness, friendliness, and intellectual curiosity (Gordon, 2014). A significant study that recognized and sought to address the difficulty in accessing the correctional officer population for research was conducted by Holland et al. (1976). This study involved the assessment of 359 correctional officer applicants on the MMPI followed by a cluster analysis of the collected profiles. The "average" profile demonstrated a tendency to be action-oriented, ambitious, outgoing, though somewhat manipulative or superficial in social interactions with certain difficulty with empathy. When considering the profiles as a whole, the researchers concluded correctional officers to be a heterogenous group. Interestingly, the two most pathological officer profile subgroups were similar to two inmate subgroups from a previous sample of inmate MMPI profiles, though officer profiles were generally less pronounced. The authors argued that the overlap in traits may actually be "occupationally adaptive" for correctional officers by allowing them to better relate to inmates as well as find the dangerous and exciting role of their job manageable.

Officer Stigma Towards Mental Illness

While the research is limited, there is literature to support that COs hold varying degrees of mental illness stigma. One of the first studies to consider COs perception of incarcerated individuals with mental illness found that COs perceived those with mental illness less favorably and as more unpredictable, irrational, and mysterious as compared to offenders without a mental illness (Kropp et al., 1989). The perceived seriousness of a particular mental illness (e.g.,

schizophrenia) or presence of violence have been proposed as factors that may increase negative views about incarcerated persons with mental illness (Callahan, 2004). To better address the gap in the literature regarding criminal justice professionals' (i.e., attorneys, community COs, jail correctional staff, and prosecutors) attitudes towards mental illness, Lowder et al. (2019) conducted a study and found that community correctional officers held more positive attitudes towards mental illness and substance use as compared to jail correctional staff and prosecutors. Personal contact was found to moderate attitudes towards substance use, which supports the notion that contact-based interventions may help promote more positive attitudes towards individuals with mental illness.

In a replication of the Kropp et al. (1989) study, Lavoie et al. (2006) found that COs actually had more positive attitudes towards those with mental illness compared to those without mental illness. COs predominately reported believing offenders with mental illness were good people, deserved help, needed praise, had the capacity to love, and could be rehabilitated more so than other offenders. The researchers proposed that this difference in results may be due to attributional processes since many of the COs believed that the individuals with mental illness were victims of circumstance and, perhaps, less culpable for their behaviors and current situation. Lavoie et al. (2006) aligned with other literature in finding that mentally ill offenders were still viewed less favorably compared to non-incarcerated individuals.

The issue of stigma towards mental illness among correctional officers appears to be complex, and the literature has shown mixed findings. Preliminary research demonstrated varied perceptions of mental illness and suggested that there are a number of factors that may moderate this relationship. Researchers should continue to focus on CO stigma as the literature regarding the relational aspect of the CO role expands. Moreover, a better understanding of the origins and

maintenance of stigma in COs would benefit research that could assist COs and those with mental illness.

Personality as a Moderator. Understanding the relationship between personality and correctional officers' perceptions of mentally ill inmates may help improve the utilization of resources and reduce the recidivism rate of mentally ill inmates by identifying what personality traits are related to an officer having a rehabilitative versus punitive approach to inmates (Cunnings & Thompson, 2009; Daniel, 2006; Greineder, 2013). However, this is an area of research that is somewhat lacking as most of the literature on COs pertains to occupational variables (Butler et al., 2019; Keeler, 2017)

A preliminary study found federal correctional officers who scored higher in openness to experience were more likely to have positive perceptions of mentally ill inmates; however, research is lacking in terms of considering how the Big Five traits influence correctional officers' mental illness stigma and overall treatment of offenders with mental illness (Keeler, 2017). The study compared 97 federal correctional officers' and 45 licensed psychologists' perceptions of mental illness, mentally ill inmates and each other's professions. Perception was defined as an "individuals' response and behavior in accordance with their personality traits" (Keeler, 2017, p. 46). While perception differs from stigma, both concepts relate to an individual's attitudes and behaviors toward others. The influence of Big Five traits on the three perceptions was also measured. In addition to findings related to the author's other hypotheses, federal correctional officers who exhibited more openness to experience were shown to have less negative perceptions of mentally ill inmates. openness to experience was shown to have a significant negative relationship with predicting perceptions of mentally ill inmates in federal correctional officers. A similar finding was not found for licensed psychologists, suggesting that personality

traits may have a stronger relationship with perceptions of mental illness in correctional officers. There was no significant relationship found between the perceptions of licensed psychologists and federal correctional officers' personality traits. This supports the notion that personality traits may play a unique role in the perception of mentally ill inmates, a population with a higher degree of stigmatization than licensed psychologists.

While Keeler (2017) yielded several promising results in support of what has been found in the broader personality and stigma literature, it is an unpublished dissertation, and research concerning the relationship between correctional officer personality traits and mental illness stigma is extremely limited. In conducting a search for literature using several databases (e.g., Google Scholar, Academic Search Premier, APA PsycInfo) and variations of the keywords mental illness, stigma, prejudice, five-factor personality, and correctional officers, Keeler (2017) was the only identified study that considered Big-Five personality traits as a moderating factor in correctional officers' beliefs and behaviors toward persons with a mental illness.

Role of Correctional Officers in Outcomes for Offenders

As mentioned previously, correctional officers have historically been underrepresented in the literature and an increase in attention on this population has been growing steadily since the 1980s (Butler et al., 2019). Generally, the main role of a correctional officer position is believed to be security and safety. Correctional officers continue to be primarily responsible for maintaining the security and safety of incarcerated individuals, other correctional staff, and the public at large (Liebling et al., 2011). However, Liebling et al. (2011) argue that the role of a correctional office is complex and challenging given the unique demands of the prison environment, though it is the relationship that officers develop with the incarcerated persons that is essential for positive offender outcomes. The responsibility of managing a vast array of

individuals with differing offenses and needs involves correctional officers being “on the front lines” so to speak, in that they have routine contact with incarcerated individuals more than any other correctional staff.

In Serafini’s (2018) argument that mental health is a prominent issue within the prison population, they established that while CO’s were fairly knowledgeable about mental health, they held the perception of having a limited role in rehabilitation. However, there is a great deal of literature to support the notion that correctional officers play a vital role in the rehabilitation of incarcerated individuals, including those with mental illness. This conflict can potentially be explained by one of the original studies on individuals involved in the correctional setting. Sykes (1958) relayed that the job of the correctional officer is fraught with role conflict due to the inherent nature of the correctional setting. For instance, while CO training may promote an untrusting “them” versus “us” mentality regarding relationships with incarcerated individuals, CO’s are also often the ones who individuals come to with their problems or who see people progress and make life changes. Another example Sykes (1958) provided is how some officers are assigned to different departments where their role may include security and safety but also one more of a teacher or counselor (e.g., education). Role ambiguity and role conflict resulting from a system that views treatment and custody as incompatible lends to higher levels of stress and burnout among COs (Cheeseman, 2010).

Taxman and Ainsworth (2009) completed a literature review examining research regarding the impact of the working alliance between incarcerated individuals and criminal justice workers (e.g., COs, judges, probations officers, and special counselors). They noted that research considering the importance of relationship factors between criminal justice workers and offenders is relatively new, and a thorough search only resulted in 20 relevant articles. Overall,

they found that COs play a role in recidivism rates of offenders through their working alliance in that those who perceive they are treated fairly and are cared for demonstrate more positive outcomes in terms of recidivism (Taxman & Ainsworth, 2009). The researchers argued that based on a therapeutic community model, COs must be involved in treatment to promote a therapeutic environment within the correctional setting. These findings align with other more general literature on the importance of relationship factors (e.g., working alliance).

Studies have also demonstrated how COs may have the capacity to influence offenders' adjustment to prison, help-seeking behavior, and recidivism upon release into the community, given their important connection to incarcerated individuals (Callahan, 2004; Galanek, 2015; Greineder, 2013; Taxman & Ainsworth, 2009; Vuolo & Kruttschnitt, 2008). However, research in this specific area is scarce and the influence of officers on offender outcomes may be best understood through secondary mechanisms such as the working alliance and treatment participation. For example, Greineder (2013) completed a review of the literature and found that officer perception was linked to sexual offenders' willingness to participate in treatment. Participation in sexual offender treatment has been shown to lower recidivism rates, therefore the researcher concluded that officers may impact recidivism rates via their impact on treatment participation. When considering the secondary gains of a positive working alliance between officer and offender, one begins to see how correctional officers may play an important role in (1) how individuals spend their incarceration (e.g., seeking education or mental health treatment), (2) reducing the likelihood that an individual reoffends after incarceration, and (3) promoting overall community wellness.

Correctional Officer Training

Overview of Training Standards.

CO training standards are relatively new; the American Correctional Association Commission for Accreditation for Corrections developed the first set of CO training standards in the late 1970's (Jose & Sechrist, 1998). Today, training standards differ greatly from state to state in terms of length and coursework, though it is an important issue given the vast number of people in the United States who have the job title "correctional officer" (Burton et al., 2018; Cheeseman, 2010). Some states require as few as 200 training hours (Pennsylvania) to 600 training hours (California). Cheeseman (2010) described three elements that all CO training academies should serve to promote including being decisive in a multitude of situations, increasing effectiveness and productivity, and fostering unity and cooperation. In addition to initial academy training, many states require new COs to shadow a senior officer, be assigned a mentor, or complete a probationary period that involves more supervision due to the "on the job learning" nature of the correctional environment (Cheeseman, 2010).

Kropp et al. (1989) reported that 95% of COs included in their study on perceptions of mental illness stated a desire for more training in how to effectively work with individuals with mental illness. Similar to findings discussed above, training on mental illness has been found to be positively associated with perceptions of incarcerated individuals with mental illness among COs (Lavoie et al., 2006). While mental health training has been found to be effective in reducing stigma and facilitating positive correctional environments, Kois et al. (2019) performed a review of 52. U.S. jurisdictions and found that only about half of the jurisdictions (46.15%) provided courses on general psychoeducation. Kois et al. (2019) also reported that while all jurisdictions required some form of mental health training, the breadth and depth of training varied greatly (1.5 to 80 hours across jurisdictions). A national survey of state departments of corrections was conducted to examine the current status of CO training (Burton et al., 2018).

Overall, Burton et al. (2018) provided the following recommendations for a model of CO training. First, officer training should be expanded to better encompass the various roles and duties COs encounter, and training regarding inmate custody and management also needs expanding. Secondly, COs would benefit greatly from better training in how to adequately understand and care for special populations (e.g., mentally ill, elderly, suicidal inmates, gang members), which also lends to training placing more emphasis on COs' rehabilitative role. Lastly, Burton et al. (2018) stressed the need for CO training to prioritize officer wellness and teach officers the importance of coping with the psychological and physical challenges of their work.

These reviews make it clear that there is a wide variety of CO training standards, though the research would support more in-depth training regarding how to appropriately interact with special inmate populations such as the mentally ill. More training would not only benefit the relationship between incarcerated individuals and officers, but it would more adequately prepare officers to manage their duties, which has been related to higher job satisfaction and organizational commitment (Armstrong et a., 2015).

Crisis Intervention Training (CIT). As mentioned previously, CIT is a training intervention developed originally for police officers and has been found to increase officer self-efficacy, increase knowledge, improve attitudes, and decrease stigma towards individuals with mental illness (Bahora et al., 2007; Compton et al., 2006; Dupont & Cochran, 2000; Rogers et al., 2019). The CIT model, also known as the "Memphis Model," originated in 1988 and was developed through a collaboration between the Memphis police department, the National Alliance for Mental Illness, the University of Tennessee, and the University of Memphis (Dupont et al., 2007). The overall goal of the CIT model is to promote safe encounters between

law enforcement officers and individuals with mental illness as well as divert individuals who would benefit more from mental health treatment rather than criminal justice system processes (Watson & Fulambarker, 2012).

CIT involves 40 hours of specialized training on the topics of mental illness symptoms and disorders, mental health treatment, legal issues, and de-escalation techniques (CIT International, 2012). Watson & Fulambarker (2012) described the training to include "didactic, experiential, and practical skills/scenario-based training formats" (p. 2) in addition to panels of individuals with close contact with individuals with mental illness. Panels may include mental health professionals providing psychoeducation or individuals with mental illness (or their family members) discussing first-hand experiences. Officers typically volunteer for CIT as it is not a required training for employment.

Research on the efficacy in promoting safe encounters is still in its infancy, though results are promising. For example, Morabito et al. (2010) found that CIT officers were more likely than non-CIT officers to use "less force for an increasingly resistant demeanor" (p. 71), which fits with the de-escalation training goals of CIT. The body of literature on CIT is limited and is not yet considered to be "evidence-based," though it is considered a best practice model for law enforcement (Thompson & Borum, 2006).

CIT has been adapted for the correctional officer population in a number of states; further research regarding its applicability and effectiveness is needed (McNeeley & Donley, 2020). For example, in a search for literature on CIT within the correctional officer population specifically, one study was found in relation to the training's impact on use of force, one evaluation of CO perceptions of CIT was located, and one article examining CIT to improve stigmatizing attitudes was identified. Initial outcomes suggest that CIT may slightly increase COs ability to de-escalate

situations and increase mental health referrals (McNeeley & Donley, 2020). CIT was found to have no significant effect on incidents of use of force in a correctional officer population in this initial study. However, this may be explained by the fact that CIT techniques are often required only in escalated situations where use of force is necessary (McNeeley & Donley, 2020).

Canada et al. (2020) conducted a quasi-experimental, mixed-methods study involving 235 CIT COs to examine CIT's influence on mental illness knowledge and stigma in addition to analyzing officers' experiences of CIT use. As compared to non-CIT COs, Canada et al. (2020) found that CIT COs had significantly lower stigmatizing attitudes, more mental health knowledge, and improved perceptions of options in managing individuals with mental illness (e.g., providing referral for treatment rather than discipline). This supports previous research that proposes an increase in mental health knowledge and contact may result in lower levels of stigma.

Rationale

According to the literature, Big Five personality traits may be related to mental illness stigma among correctional officers as well as other populations (Brown, 2012; Ekehammar & Akrami, 2007; Keeler, 2017). Studies have found varying relationships among the five personality traits and different aspects of stigma, but both openness and agreeableness have demonstrated a negative relationship with mental illness stigma (Brown, 2012). Whether the correctional officer population holds certain levels of the five-factor personality traits compared to the general population is an area of research that has yet to be adequately explored.

Research has shown that correctional officers hold varying degrees of stigma towards offenders with mental illness (Callahan, 2004; Lavoie et al., 2006; Serafini, 2018). Literature has also demonstrated that correctional officer attitudes and perceptions influence offenders'

adjustment, help-seeking behavior, and recidivism upon release into the community (Callahan, 2004; Greineder, 2013; Taxman & Ainsworth, 2009; Vuolo & Kruttshnitt, 2008). Despite these findings, in a qualitative study interviewing correctional officers Serafini (2018) found that correctional officers perceived themselves to have little involvement in the rehabilitation of offenders with mental illness, which demonstrates a disconnect between correctional officers' perceptions of and actual influence on mentally ill offender outcomes. Given the research mentioned above, the role of a correctional officer should extend beyond security and safety of a facility and be considered to include a degree of promoting offender and community wellness. It is important to understand potential moderating factors in correctional officer mental illness stigma (i.e., personality) in order to better facilitate positive relationships between correctional officers and incarcerated individuals.

Crisis intervention training (CIT) is a specialized police-based program developed to train officers to interact more safely with individuals with mental illness (Dupont & Cochran, 2000). This training has been shown to reduce stigma towards mentally ill community members among community police officers (Compton et al., 2006). Initial research suggests CIT may have a similar impact on reducing mental illness stigma among correctional officers (Canada et al., 2020). An examination of the relationship between five-factor personality traits and CIT may deepen our understanding of the effectiveness of training programs developed to reduce mental illness stigma and provide insight into how personality traits influence the efficacy of these programs.

The depth and breadth of current research examining the relationship between personality and mental illness stigma in correctional officers is insufficient. In particular, research which examines how personality may moderate CIT's impact on correctional officers' mental illness

stigma is limited. In the proposed research, the relationship between personality, mental illness stigma, and CIT will be investigated. Specifically, personality will be examined as a moderating factor in correctional officers' mental illness stigma pre-and post-CIT. This research aims to add to the minimal literature involving the correctional officer population by considering how a correctional officer's personality impacts CIT's influence on mental illness stigma.

Research Questions and Hypotheses

The first research question asks what the relationship between the Big Five personality traits and mental illness stigma among correctional officers is. Hypothesis I is that there will be a significant negative relationship between agreeableness and mental illness stigma. Hypothesis II states that there will be a significant negative relationship between openness and mental illness stigma. Support for these hypotheses comes from previous work (Tomas Smigura, 2020; Solmi et al., 2020; Brown 2012; Qi et al., 2018; Ekehammar & Akrami, 2003; Szeto et al., 2015) that found a significant negative relationship between the traits of openness and agreeableness and mental illness stigma or generalized prejudice.

The second research question asks what the relationship between the Big Five personality traits and CIT's impact on mental illness stigma is. Hypothesis III is that there will be a significant positive relationship between conscientiousness and CIT effects on mental illness stigma. Hypothesis IV asserts that there will be a significant relationship between openness and CIT effects on mental illness stigma. These hypotheses are supported by the work of Paunonen and Ashton (2001) and Komarraju et al. (2011), who found conscientiousness and openness to be positively related to course performance and the elaborative processing learning style.

Chapter 3: Method

Participants

This study used convenience sampling to collect data from state-level correctional officers from Minnesota and Wisconsin who voluntarily enrolled in CIT (as provided through Pro-Crisis, Inc.). CIT was originally a community-based intervention for police that has since been adapted for correctional officers as a means of promoting "effective, respectful, and safe interactions" between officers and offenders with mental illness (Canada et al., 2020). Typically, correctional officers must have at least two years of experience in order to be eligible for Crisis Intervention Training. Each training can accommodate up to 30 officers. Given that CIT was not being regularly offered during the data collection period, data was collected over the course of three trainings. At the onset of the training week, all training participants were given a pre-training packet of measures that included an informed consent form. Individuals had the opportunity to opt out of the study prior to beginning training, and those who signed an informed consent were made aware that they may drop out of the study at any time without consequence. Pro-Crisis Inc. president and training facilitator, Patti Hecht-Kressly, agreed to allow access to training participants and aided in the distribution of the pre- and post-training packets for the reduction of any major barriers to accessing participants.

To be eligible for participation in this study, individuals had to be currently employed as a state correctional officer working in a prison (as opposed to jail) to minimize potential confounding variables between correctional facility types. Participants must not have completed CIT previously, because the purpose of the current study included examining change in mental illness stigma from pre-to-post-CIT. Those who dropped out of the training prior to completion or who did not receive certification were not included in the analyses.

Procedures

Data was gathered as part of a larger study on personality traits in the correctional officer population. Participants were recruited at the beginning of each CIT certification session. All participants were given a pre-training packet that included information regarding informed consent, at which time they had the opportunity to opt out of the study. Each participant received a hard-copy packet containing research measures distributed by the training class coordinator at the beginning and conclusion of the week-long training. This researcher and Lindsay Bergeson both completed research with data collected from the correctional officer population, and, therefore, packets included measures from both clinical research projects. Participants who provided informed consent then completed the pre-training packet measures (demographics, personality, and mental illness stigma) prior to beginning CIT.

Following the 5-day 40-hour training, which included lectures and intensive role-plays, participants completed a post-training packet. The post-training packet included mental illness stigma measures and an item regarding whether the participant received CIT certification. Data received from individuals who did not meet the eligibility criteria were removed prior to analysis. A short debriefing was provided for study participants following the completion of the post-training packet. Debriefing involved a discussion of this research project's specific aims, where to find the study's results, and the provision of a mental health resource handout.

Measures

For the purposes of the current study, data on mental illness stigma, Big Five personality traits, and demographics were gathered.

Demographic information. Participants were asked their gender, race, ethnicity, length of employment as a correctional officer, current facility security level, offender population at

current facility, and state of employment (Minnesota or Wisconsin). Participants were also asked, “What percentage of your average day involves working with offenders with mental illness?” (Appendix A)

Mental illness stigma vignette. Participants were asked to read a vignette involving an offender diagnosed with schizophrenia who exhibited violent behavior adapted by this researcher. A vignette describing a violent inmate with symptoms of schizophrenia was chosen for the current study due to Callahan’s (2004) findings that demonstrated officers were most likely to attribute an inmate’s problem to mental illness when presented with the “schizophrenia, violence” vignette as compared to vignettes describing an inmate with depression or no disorder (with or without violence). Adaptations to the Callahan (2004) vignette for the current study included changing the name and age of the individual and condensing the vignette, though, all main details remained the same. Given the current study is seeking to measure mental illness stigma, a vignette with the most mental illness salience is appropriate.

Participants then responded to items from the Attribution Questionnaire-27 (AQ-27; Corrigan et al., 2003), using a 5-point Likert scale (1= “Strongly Disagree” to 5= “Strongly Agree”). Scores for each subscale were determined by summing the items that load onto each corresponding factor; items for the avoidance factor were reverse scored. The Attribution Questionnaire-27 was originally developed to assess nine constructs (responsibility, pity, anger, danger, fear, no help, coercion, segregation and avoidance) derived from the attributional model of stigma toward persons with mental illness and is published on the MedEdPORTAL (Fridberg & Ahmed, 2013). Initial confirmatory factor analysis demonstrated the factors of help/avoidance and coercion/segregation to be highly correlated (r = .68 and r = .74) and as a result were combined into help-avoidance and coercion-segregation (Corrigan et al., 2003). Corrigan et al.

(2003) found acceptable internal consistency reliability for six factors: responsibility (α= .70), pity (α= .74), anger (α= .89), fear (α= .96), helping (α= .88), and coercion/segregation (α= .89). For example, items involved asking the participant if they would feel pity for, unsafe around, and be likely to help the individual who displayed symptoms of schizophrenia. Overall, internal consistency was considered good (α= .88) with studies supporting the initial factor analysis showing a range of reliability for the individual subscales (de Sousa et al., 2012; Pingani et al., 2012). Additionally, test-retest reliability for the subscales has been shown to range from .55 (responsibility) to .87 (dangerousness) (Corrigan et al., 2004a).

Significant convergent correlations ($r > .20$) have been found for individual subscales of the AQ-27 (e.g., pity, fear, coercion, and segregation) with ratings of the importance of funding mandated treatment. There was also a significant convergent correlation for blame and no help with money donated to mental illness advocacy group (Corrigan et al., 2004a). Luty et al. (2006) administered the Attitudes to Mental Illness Questionnaire and the Attribution Questionnaire to a sample and found good convergent validity between the two mental illness stigma measures ($r = .70$, $p < .001$). Research has also demonstrated the AQ-27's sensitivity to change in stigmatizing attitudes following anti-stigma programs and has been used in diverse adult samples, suggesting it is an appropriate measure for the purposes of the current study (Blair Irvine et al., 2012; Corrigan et al., 2004a).

The original AQ-27 vignette was replaced with the Callahan (2004) vignette due to the original vignette addressing the general public's stigma toward non-incarcerated persons with mental illness rather than correctional officer stigma towards offenders with mental illness stigma. Items from the AQ-27 were rewritten by this researcher in a manner to align with the name used in the vignette (Appendix B).

Police and community attitudes towards offenders with mental illness scale (PACAMI-O). The PACAMI-O, published by Emerald Group Publishing, is a 40-item self-report measure developed to assess police and community attitudes towards mentally ill offenders (Glendinning & O'Keeffe, 2015). The PACAMI-O is an adaptation of the Community Attitudes towards the Mentally Ill Scale (CAMI), which has been used in numerous studies to examine attitudes towards mental health problems in non-specified groups in a variety of populations (e.g., nurses, community members, police officers) (Taylor & Dear, 1981; Glendinning & O'Keeffe, 2015). By altering the phrase 'adult' to 'offender', the researchers believed that they would be able to measure police and community attitudes towards offenders with mental illness, specifically (Glendinning & O'Keeffe, 2015). The PACAMI-O is made up of four subscales: self-preservation, societal reservation, mental health awareness, and treatment ideology. Self-preservations relate to an individual's perception of personal safety and include items such as, "Forensic mental health facilities should be kept out of residential areas." Societal reservation pertains to opinions regarding the treatment of individuals with mental illness within the social context. For example, "Offenders with mental illness should not be treated as outcasts of society." The mental health awareness subscales involve items such as, "Offenders with mental illness have far too long been the subject of ridicule." Lastly, the treatment ideology measures an individual's perception of treatment for individuals with mental illness such as, "More tax money should be spent on the care and treatment of offenders with mental illness." Participants will respond using a 5-point Likert scale with 1 meaning "Strongly Disagree" to 5 meaning "Strongly Agree." Answers were added together to obtain subscale scores, with positively worded items being reverse-scored prior to summation. Higher scores reflected more positive attitudes towards offenders with mental illness.

Taylor and Dear (1981) demonstrated the original CAMI to have high internal reliability, with an average Cronbach alpha of .78 for the four subscales The PACAMI-O demonstrated high internal reliability in its original study sample of police officers and community participants and in a validation study involving a convenience sample of the public (α= 0.93) (Glendinning & O'Keeffe, 2015; Walkden et al., 2020). Literature speaking to the PACAMI-O's validity or its use within correctional officer populations is scarce. However, given there is no known measure for correctional officer mental illness stigma specifically, the PACAMI-O's inclusion of police attitudes in its development is believed to give support for its use in the present study. (Appendix C)

Big Five Inventory (BFI). Participants were asked to complete the BFI, which is a 44-item self-report questionnaire developed to measure the Big Five personality dimensions: extraversion, agreeableness, conscientiousness, neuroticism, and openness to experience (John et al.,1991). While there are many measures of the Big Five personality traits, the BFI was developed for the purpose of creating a brief inventory, which is particularly important to the current study given that participants will be asked to complete several measures encompassing two research studies. Items on the BFI were developed based on the involvement of prototypical markers of the Big Five personality traits (John et al., 2008). For example, the item "perseveres until the task is finished" stemmed from the Conscientiousness adjective of *persevering*. Participants answer items using a 5-point Likert scale (1= "Disagree strongly" to 5= "Agree strongly"). The BFI was scored using SPSS software, including reverse scoring for all negatively-keyed items and followed by the creation of scale scores through averaging the items that load onto each of the 5 domains.

Reliability of the BFI has been shown to range from .75 to .90 and averaging above .80 in U.S. and Canadian samples, with three-month test-retest reliabilities ranging from .80 to .90 (Rammstedt & John, 2005; 2007). DeYoung (2006) analyzed a large community sample with self-reports and peer ratings and found interrater agreement to be somewhat higher for the BFI. John et al. (2008) reanalyzed data from DeYoung's (2006) community study with BFI self-reports and BFI peer ratings and found validity correlations of .60 for Openness, .67 for Extraversion, .52 for Neuroticism, .48 for Agreeableness, and .47 for Conscientiousness. Additionally, in a study of 829 undergraduates who completed the BFI, Trait Descriptive Adjectives (TDA), and NEO Five-Factor Inventory (NEO-FFI), reliability for the BFI was .83, with Extraversion, Neuroticism, and Conscientiousness measuring as the most reliable (above .80 on all three measures) (John & Soto, 2007; Soto et al., 2008). The BFI has been demonstrated to have appropriate convergent validity with other measures of personality such as the TDA (r = .80) and the NEO-FFI (r = .77) (John et al., 2008). (Appendix D)

Data Analysis

Research Design. The current study was a quantitative research design that sought to investigate the relationship between Five-Factor personality traits and mental illness stigma (Aim 1) and Five-Factor personality traits and Crisis Intervention Training's (CIT) influence on mental illness stigma (Aim 2) in a sample of correctional officers. The current study addressed four main hypotheses:

1. There will be a significant negative relationship between agreeableness and mental illness stigma among correctional officers prior to CIT training. More agreeable correctional officers will hold less mental illness stigma.

2. There will be a significant negative relationship between openness and mental illness stigma among correctional officers prior to CIT training. Correctional officers higher on openness to experience will hold less mental illness stigma.

A bivariate correlation analysis was conducted using SPSS to test hypotheses I and II in order to define the association between each Five-Factor personality trait and mental illness stigma. The independent variables were personality traits (e.g., agreeableness and openness) and mental illness stigma. Pearson's correlation coefficient was the outcome variable as it is a standardized measure of the strength of relationship between two interval or ratio variables (Field, 2018).

3. There will be a significant positive relationship between conscientiousness and CIT effects on mental health stigma. Correctional officers with higher levels of conscientiousness will demonstrate more change in mental illness stigma after completing CIT as compared to other correctional officers from the sample.

4. There will be a significant positive relationship between openness and CIT effects on mental illness stigma. Correctional officers with lower levels of openness will demonstrate less change in mental illness stigma after completing CIT as compared to other correctional officers from the sample.

A mixed model analysis of variances (ANOVA) was conducted using SPSS to understand whether there is an interaction between level of personality trait and CIT training on mental illness stigma. The within-subjects variable was time (pre- and post-CIT training); the between-subjects variable was level of personality trait (high openness to experience, low openness to experience, high conscientiousness, low conscientiousness). Homogeneity tests were conducted to determine whether the assumptions of variance and sphericity are met (Field,

2018). Follow up *t*-tests were conducted to determine whether there is a significant difference in mental illness stigma between high and low levels of a personality trait.

Power and Effect Size. Based on previous research (Szeto et al., 2015; Ekehammar & Akrami, 2003; Brown, 2012; Qi et al., 2018; Ekehammar & Akrami, 2007; Keeler, 2017) demonstrating a relationship between personality traits and prejudice/stigma, the current study was expected to establish a medium effect size (r = 0.3 to 0.5) in terms of personality's influence on mental illness stigma. A conservative alpha criterion ($p < .05$) was adopted to minimize Type I errors. The maximum accepted Type II error will be $\beta = 0.20$ as proposed by Cohen (2013). A sample size calculator for correlational research designs recommended a sample size of 142 given the expected alpha, beta, and correlation coefficient (Kohn & Senyak, 2021). This sample size was not obtained for the current study, which will be discussed further below.

Software. Statistical Product and Service Solutions (SPSS) Statistics 28 (IBM Corp., 2021) was used to analyze the data obtained from participants.

Ethical Issues

Consent. A Subject Consent Form was provided to all participants with the pre-training packet. Participants provided the researchers with a signed Subject Consent Form and were given a copy for their personal records. The letter of informed consent included a description of the study and its purpose as well as the expected duration. Participants were informed of the voluntary nature of the study, and that they may withdraw from the study at any time without impacting their employment status or eligibility to complete CIT. The letter of informed consent discussed the measures taken to ensure anonymity and confidentiality and the potential risks and benefits of participation. Contact information was provided for the student researcher and the

clinical research project committee chairperson in the case participants had further questions. See Appendix E for the complete Subject Consent Form.

Risks. Participants read statements pertaining to personality traits and perceptions of mental illness. Disclosing this type of information may have caused some participants to feel discomfort or pressure to answer in a desirable manner. Participants were informed of the potential risk of negative emotional reactions to the measures involved in the study. A mental health resource handout was provided to each participant following participation in the study.

Deception. No deception was used in this study.

Confidentiality. All data were de-identified aside from the participant's name on the Subject Consent Form. Participants were distributed a hard copy of the Subject Consent Form to read and sign. Following the provision of informed consent, participants were randomly assigned an identification number and given the assessment measures packet. Subject Consent Forms were stored separately from the assessment measure packets in a locked file cabinet. Data relevant to this study were voided of personal identifying information and stored on an encrypted flash drive, available only to this student researcher and clinical research project committee members. No instances that may have required the participant's confidentiality to be violated were identified for this study.

Information and Debriefing. Participants were provided a concise debriefing following completion of CIT regarding the specific research questions being addressed by each study contributing to the assessment measures packet. Information summarizing the results of the study are accessible on the Pro-Crisis training website: www.procrisis.com

Retention of Data. Participant data and information were collected in-person via paper and pencil administration. All administration materials and assessment measure data were stored

in a locked file cabinet separate from Subject Consent Forms. Data entered into IBM SPSS for the purpose of data analysis were kept on a secured flash drive for five years following the completion of this clinical research project. After five years, all data and materials will be permanently deleted. In the case that this study is submitted for publication, data will be retained for seven years after the date of publication in accordance with American Psychological Association Record Keeping guidelines.

Permissions. Permission to access participants for the purposes of this study was granted by Patti Hecht-Kressly, Pro-Crisis president and training facilitator as evidenced in the letter below (Appendix E). Public domain measures include the Attribution Questionnaire via MedEdPORTAL and the Big Five Inventory via Berkeley Personality Lab. Permission to use the Police and Community Attitudes towards Offenders with Mental Illness Scale was obtained from the scale's developer.

Chapter 4: Results

Demographic data for the sample used are described in Table 1. Participants' ages ranged from 23 to 59 years old. Years as a correctional officer ranged from 2 to 25 years, with a mean of 5.4 years. All participants in the sample successfully completed CIT and received certification.

Table 1

Demographic Characteristics of Sample Participants

Demographic	*n*	%
Gender		
Female	15	55.6
Male	12	44.4
Race		
White	24	88.9
American Indian/Alaska Native	2	7.4
Asian American	1	3.7
Ethnicity		
Not of Hispanic, Latino/a, or Spanish Origin	26	96.3
Mexican, Mexican American, Chicano/a	1	3.7
Percentage of workday working with mental illness		
0-25	6	22.2
25-50	6	22.2
50-75	9	33.3
75-100	6	22.2
State of Employment		
Minnesota	27	100
Offender Population		
Adult, males	24	88.9
Adult, females	2	7.4
Juvenile, males	1	3.7

Note. Demographic areas with zero reported participants were not included. All demographic characteristics measured can be found in Appendix A.

Sample Size

Due to CIT not being offered on a regular basis during the data collection period, the sample was smaller than the desired sample size to obtain adequate statistical power. There were 28 participants who completed the measures. However, one participant was excluded from all analyses due to not answering the BFI correctly, which was used in all analyses. Additionally, several individuals did not complete the PACAMI-O as instructed, therefore, they were removed from analyses involving this measure. Analyses with the AQ-27 as the stigma measure had a sample size of 27 whereas analyses using the PACAMI-O as the stigma measure had a sample size of 23.

Analyses

Prior to analysis all measures were scored in SPSS with the use of bootstrapping (95% confidence interval). Overall scores for mental illness stigma measures were computed. Higher scores on the AQ-27 reflected a higher level of overall stigmatizing attitudes towards mental illness. Conversely, higher scores on the PACAMI-O reflected more positive attitudes towards offenders with mental illness.

Hypothesis I

A bivariate correlation analysis was conducted to test the association between agreeableness and mental illness stigma measures (e.g., PACAMI-O and AQ-27) prior to completing CIT. It was expected that agreeableness would have a negative association with mental illness stigma measures. In other words, officers who scored higher in agreeableness would endorse less mental illness stigma. A Pearson correlation coefficient was computed to

assess the relationship between PACAMI-O scores (M = 95.22) and agreeableness (M = 3.99). There was a significant large negative correlation between the two variables, $r(21)$= -.63, p= .001, 95% CI[-.90, -.18]. That is, as participant agreeableness increased, mental illness stigma scores as measured by the PACAMI-O decreased. There was a non-significant negative correlation between AQ-27 mental illness scores (M = 130.30) and agreeableness, $r(25)$ = -.17, p = .40, 95% CI[-.71, .40]. This reflects a lack of evidence to support an association between agreeableness and mental illness as measured by the AQ-27. Given the confidence interval includes the value of zero there may be no relationship present.

Hypothesis II

Hypothesis II stated that there would be a significant negative relationship between openness and mental illness stigma. A bivariate correlation analysis was conducted to test the association between openness and mental illness stigma. The relationship between openness to experience (M = 3.57) and PACAMI-O scores was non-significant, $r(21)$ = -.38, p = .08, 95% CI[-.77, .03]. There was no association between AQ-27 mental illness scores and openness to experience, $r(25)$ = -.04, p = .84, 95% CI[-.76, .64]. In addition to non-significant p values, the confidence intervals included the value of zero, indicating there was no association between openness and mental illness stigma. However, a small sample size may have impacted the ability to detect correlations, which will be discussed further in the limitations section.

Research Question II

To address hypotheses III and IV, a mixed model of analysis of variances (ANOVA) was conducted to test the interactions between level of personality trait and CIT training on mental illness stigma. The within-subjects variable was time (pre- and post-training); the between-subjects variable was level of personality trait (high openness to experience, low openness to

experience, high conscientiousness, low conscientiousness). Categorical variables were created for “high” and “low” groups of Big Five personality traits as measured by the BFI. This was done by splitting scores into two groups based on the median of the sample. For example, the median sample score for the BFI Openness scale was 3.7. When creating the Openness category variable, all scores 3.7 and higher were coded as the “high” group and all others as the “low” group. Homogeneity tests were conducted to determine whether the assumptions of variance and sphericity are met. Effect sizes were measured by partial eta squared (ηp 2) with a value of .01 indicating a small effect, .06 reflecting a medium effect, and .14 demonstrating a large effect size.

Hypothesis III

Hypothesis III stated there would be a significant positive relationship between conscientiousness and CIT effects on mental illness stigma. Regarding mental illness stigma as measured by the AQ-27, there was an observed reduction in the mean score for both high and low conscientiousness groups from pre- to post-training. A significant difference was found in AQ-27 scores pre- (M = 130.30) versus post-training (M = 110.60), $F(1, 1) = 20.26$, $p < .001$, ηp2 = .47. However, there was not a significant interaction effect between level of conscientiousness and AQ-27 scores, $F(1, 1) = 2.58$ $p = .12$, ηp 2 = .10. There was a significant difference in pre- (M = 95.22) versus post-training (M = 86.23) PACAMI-O scores, $F(1, 18) = 17.96$, $p < .001$, ηp 2 = .51. However, there was no significant interaction between level of conscientiousness and time, $F(1, 18)= .391$, $p = .54$, ηp 2 = .02. Overall, while there was a significant change in both mental illness stigma measures’ scores from pre- to post-training, correctional officers with higher levels of conscientiousness did not demonstrate a greater change in stigma after completing CIT.

Hypothesis IV

Hypothesis IV asserted that there would be a significant relationship between openness and CIT effects on mental illness stigma. There was no significant interaction found between and level of openness and AQ-27 scores, $F(1, 1) = .11$, $p = .74$, ηp 2 = .01, or PACAMI-O scores, $F(1, 1) = 3.93$, $p = .06$ ηp 2 = .19. In other words, correctional officers with higher levels of openness did not demonstrate a greater change in mental illness stigma after completing CIT. Similar to results regarding hypothesis III, there was a significant difference found between pre- ($M = 112.91$) and post- ($M = 110.60$) AQ-27 scores, $F(1, 1) = .20.30$, $p < .001$, ηp 2 = .47. Additionally, there was a significant difference found between PACAMI-O pre- ($M = 95.68$) and post- ($M = 84.95$) scores, $F(1, 1) = .19.36$, $p < .001$, ηp 2 = .53.

Chapter 5: Discussion

This study sought to explore two research questions. First, what is the relationship between Big Five personality traits and mental illness stigma among correctional officers? It was hypothesized that there would be significant negative relationships between agreeableness and mental illness stigma (hypothesis I) and openness and mental illness stigma (hypothesis II). Secondly, this study sought to examine the relationship between Big Five personality traits and CIT's impact on mental illness stigma. Specifically, it was hypothesized that correctional officers with higher levels of conscientiousness (hypothesis III) and openness (hypothesis IV) would exhibit a greater reduction in mental illness stigma following CIT. A convenience sample of 27 Minnesota correctional officers was utilized. The officers identified predominantly as white (88.9%), with 15 females and 12 males. Additionally, the majority of the sample (88.9%) worked in an adult male correctional facility.

While it may not have been a direct aim of the researcher, this study adds to the literature that suggests CIT does play a role in reducing mental illness stigma. There was a clinically significant reduction in mental illness stigma scores for both stigma measures following the completion of CIT. This indicates that correctional officers who completed CIT endorsed less mental illness stigma on both the AQ-27 and the PACAMI-O. These findings corroborate previous studies that also found that CIT COs had lower stigmatizing attitudes (Canada et al., 2020). As discussed above, CIT's impact on mental illness stigma may be partially due to increasing COs knowledge and improving perceptions of how to work with individuals with mental illness stigma (Corrigan & Penn, 2015; Pinto-Foltz et al., 2011).

Regarding hypotheses I and II, which tested the association between mental health stigma scores and two Big Five traits (agreeableness and openness to experience), only one significant

correlation was found. There was a moderate negative correlation between agreeableness and mental illness stigma measured by the PACAMI-O. This aligns with previous research that established agreeableness as one of the Big Five traits to have a significant negative relationship with stigma as a broad concept and mental illness stigma specifically (Szeto et al., 2015; Qi et al., 2018). This finding further bolsters the notion that the characteristics associated with agreeableness (e.g., empathetic towards others, helpful) lend to a lower level of mental illness stigma (Solmi et al., 2020). While there was no significant correlation found between agreeableness and AQ-27 scores or openness to experience and either mental health stigma measure, the relationships remained negative in nature (as proposed by the literature). Possible explanations for these findings will be discussed further below.

Hypotheses III and IV considered the degree of an individual's self-reported openness and conscientiousness, and how that level (high versus low) may interact with CIT's impact on mental illness stigma. There was no significant interaction found for an individual's level of personality trait and their post-training mental illness stigma scores. In other words, whether someone was considered "high" or "low" in openness or conscientiousness did not have a significant impact on their mental illness stigma post-training. Correctional officers in the high conscientiousness group did not demonstrate more change in mental illness stigma after completing CIT; correctional officers low in conscientiousness did not demonstrate less change in mental illness stigma. There are several potential explanations for the lack of significant findings discussed further in the limitations section. These non-significant findings may be perceived positively when one considers that any correctional officer, no matter their personality traits, may benefit from a reduction in mental illness stigma following CIT.

Limitations

The first aim of this study was to investigate the relationship between specific Big Five personality traits and mental illness stigma, which was partially confirmed by the clinically significant correlation found between agreeableness and the PACAMI-O. However, the majority of findings from this study did not confirm the presented hypotheses. There are several methodological issues that are believed to have contributed to the non-significant relationships found in this study.

While the means of participant recruitment were the best available to this researcher, it created several issues. First, the CIT training was not offered on a regular basis; therefore, the sample size was lower than the desired sample size, which further increased the likelihood of Type II error. A small sample size also contributed to issues of generalizability, given the discrepancy between the number of participants compared to the number of correctional officers in Minnesota and Wisconsin. Additionally, this study only involved officers who *volunteered* to complete CIT. One may hypothesize that individuals with certain personality traits or lower levels of mental illness stigma may see more value or have interest in such a training, thereby making it more difficult to find a sizable effect between participants and the variables being analyzed. Future research would benefit from a larger sample size that is more representative of all correctional officers.

Other limitations that must be mentioned are the use of self-report measures and the social desirability effect. While a disclaimer regarding the confidentiality of this study was given, studies have found that individuals tend to portray themselves in a more positive, socially oriented light on self-report measures (Krumpal, 2013; Randall & Fernandes, 1991). This tendency to endorse statements that match social norms versus reflecting one's true feelings may

lead to misleading findings (Goethals et al., 1991; Tourangeau & Yan, 2007). Additionally, measures used in this study had a high degree of face validity, and therefore may have contributed to participants being able to portray themselves favorably. Potential evidence of this is the fact that the Attribution Questionnaire was a notably weaker metric and required participants to endorse negative statements about those with mental illness. One may hypothesize that individuals felt more comfortable passively not endorsing a positive statement on the PACAMI-O as compared to endorsing an active negative belief. Lastly, self-stigma is also a factor that may have influenced officers' manner of responding to the items. These limitations may be rectified in future research by using measures with less face validity, controlling for the social desirability bias, and considering how one's personal relationship to mental illness may influence mental illness stigma.

Clinical Implications

The most significant implication of this study is that mental illness stigma scores were reduced across measures and differences in personality traits. This suggests that all correctional officers, despite their personality, may benefit from CIT as a means of reducing mental illness stigma. When one considers the amount of individuals experiencing mental illness involved in our criminal justice system, it may be beneficial for agencies to offer CIT on a more regular and not solely voluntary basis. This training could be supported or facilitated by psychologists who have a more in depth understanding of both stigma and how to create a positive working alliance with individuals who suffer from mental illness.

In this study, the level of personality traits (high vs. low) did not influence mental illness stigma scores following CIT. This may imply that Big Five personality traits do not play a role in the degree of a correctional officer's mental illness stigma nor a training's impact on reducing

mental illness stigma. However, the current literature would indicate that personality does play a role in an individual's degree of mental illness stigma. Additionally, there was a moderate negative correlation between PACAMI-O mental illness stigma scores and agreeableness further supporting the literature. Given the limitations discussed above, further research is needed to better understand the relationship between mental illness stigma and personality traits amongst correctional officers, specifically.

Overall, more research is needed to fully understand correctional officers as a unique population who have an important role in reducing recidivism amongst incarcerated individuals who experience mental illness. Conducting research on a larger sample of correctional officers would further our understanding of the relationships this study attempted to examine, and it would contribute information that would aid in the development of anti-stigma interventions. Further, exploring the relationship between personality and mental illness stigma amongst correctional officers may lead to advancements in our understanding of positive working alliances, which could potentially influence officer training and hiring practices for correctional facilities.

Conclusion

This study aimed to fill a gap in the literature regarding personality and mental illness stigma in correctional officers. Broadly, the negative impact of mental illness stigma is well established in the research. Therefore, it is important to understand how we may address mental illness stigma in a correctional system that is aimed to reduce recidivism and aid individuals in becoming contributing, pro-social members of society. Due to our current healthcare and judicial systems, there is a high likelihood that a correctional officer will encounter an individual with a mental health concern, whether that concern preceded incarceration or not. While research has

established how working (or residing) in a correctional environment impacts an individual's overall well-being and mental health, little attention has been given to the role correctional officers play through positive working relationships with incarcerated individuals. Studying correctional officer characteristics and mental illness stigma as well as training aimed to increase knowledge and reduce stigma are ways to begin to better understand and address systemic issues. While there may be barriers to conducting such research, the importance and potential consequences of such research is apparent. The current literature on how personality may impact training interventions targeting mental illness stigma, specifically in correctional officers, is near non-existent. Therefore, there continues to be a need for further research in this area, taking this study's limitation into account when addressing future methodology.

References

Allport, G. W. (1958). *The nature of prejudice: Abridged*. Doubleday.

American Psychological Association, Presidential Task Force on Preventing Discrimination and Promoting Diversity. (2012). *Dual pathways to a better America: Preventing discrimination and promoting diversity*. American Psychological Association. Retrieved from http://www.apa.org/pubs/info/reports/ promoting-diversity.aspx

Angermeyer, M. C., Holzinger, A., & Matschinger, H. (2009). Mental Health Literacy and attitude towards people with mental illness: A trend analysis based on population surveys in the eastern part of Germany. *European Psychiatry*, *24*(4), 225–232. https://doi.org/10.1016/j.eurpsy.2008.06.010

Armstrong, G. S., Atkin-Plunk, C. A., & Wells, J. (2015). The relationship between work–family conflict, correctional officer job stress, and job satisfaction. *Criminal Justice and Behavior, 42*, 1066-1082.

Bagby, M. R., Bindseil, K., Schuller, D. R., Rector, N. A., Young, T., Cooke, R. G., Seeman, M. V., McCay, E. A., & Joffe, R. (1997). Relationship between the five-factor model of personality and unipolar, bipolar and schizophrenic patients. *Psychiatry Research*, *70*(2), 83–94. https://doi.org/10.1016/s0165-1781(97)03096-5

Bahora, M., Hanafi, S., Chien, V. H., & Compton, M. T. (2007). Preliminary evidence of effects of crisis intervention team training on self-efficacy and social distance. *Administration and Policy in Mental Health and Mental Health Services Research*, *35*(3), 159–167. https://doi.org/10.1007/s10488-007-0153-8

Baillargeon, J., Binswanger, I. A., Penn, J. V., Williams, B. A., & Murray, O. J. (2009). Psychiatric disorders and repeat incarcerations: The revolving prison door. *American*

Journal of Psychiatry, *166*(1), 103–109. https://doi.org/10.1176/appi.ajp.2008.08030416

Ban T. A. (2007). Fifty years chlorpromazine: a historical perspective. *Neuropsychiatric disease and treatment*, *3*(4), 495–500.

Barrick, M. R., & Mount, M. K. (1991). The Big Five Personality Dimensions and job performance: A meta-analysis. *Personnel Psychology*, *44*(1), 1–26. https://doi.org/10.1111/j.1744-6570.1991.tb00688.x

Blair Irvine, A., Billow, M. B., Eberhage, M. G., Seeley, J. R., McMahon, E., & Bourgeois, M. (2012). Mental illness training for licensed staff in long-term care. *Issues in Mental Health Nursing*, *33*(3).

Bos, A. E., Pryor, J. B., Reeder, G. D., & Stutterheim, S. E. (2013). Stigma: Advances in theory and research. *Basic and Applied Social Psychology*, *35*(1), 1–9. https://doi.org/10.1080/01973533.2012.746147

Bouchard, Jr., T. J., & Loehlin, J. C. (2001). Genes, evolution, and personality. *Behavior Genetics*, *31*(3), 243–273. https://doi.org/10.1023/a:1012294324713

Branca, F., Macchiarulo, E., Costanza, A., Ambrosetti, J., Amerio, A., Aguglia, A., Serafini, G., Amore, M., & Merli, R. (2021). Stigma, mental illness, and covid-19 from a frontline clinician perspective: a way to go against the grain? *Acta Bio-Medica : Atenei Parmensis*, *92*(S6), 2021442. https://doi.org/10.23750/abm.v92iS6.12235

Bronson, J., & Berzofsky, M. (2017). Indicators of mental health problems reported by prisoners and jail inmates, 2011–12. *Bureau of Justice Statistics*, 1-16.

Bronson, J., Stroop, J., Zimmer, S., & Berzofsky, M. (2017). Drug Use, Dependence, and Abuse Among State Prisoners and Jail Inmates, 2007-2009. *Bureau of Justice Statistics*.

Brown, S. A. (2008). Factors and measurement of mental illness stigma: a psychometric examination of the attribution questionnaire. *Psychiatric Rehabilitation Journal*, *32*(2), 89–94. https://doi.org/10.2975/32.2.2008.89.94

Brown, S. A. (2012). The contribution of previous contact and personality traits to severe mental illness stigma. *American Journal of Psychiatric Rehabilitation*, *15*(3), 274–289. https://doi.org/10.1080/15487768.2012.703553

Burton, A. L., Lux, J. L, Cullen, F. T., Miller, W. T., Burton, V. S. (2018) Creating a model correctional officer training academy: Implications from a national survey. *Federal Probation, 82 (1),* 26-36, 60.

Butler, H. D., Tasca, M., Zhang, Y., & Carpenter, C. (2019). A systematic and meta-analytic review of the literature on correctional officers: identifying new avenues for research. *Journal of Criminal Justice*, *60*, 84–92. https://doi.org/10.1016/j.jcrimjus.2018.12.002

Callahan, L. (2004). Correctional officer attitudes toward inmates with mental disorders. *The International Journal of Forensic Mental Health, 3*(1), 37–54. https://doi.org/10.1080/14999013.2004.10471195

Canada, K. E., Watson, A. C., & O'kelley, S. (2020). Utilizing crisis intervention teams in prison to improve officer knowledge, stigmatizing attitudes, and perception of response options. *Criminal Justice and Behavior*, *009385482094227*, 009385482094227009385482094227. https://doi.org/10.1177/0093854820942274

Canu, W. H., Newman, M. L., Morrow, T. L., & Pope, D. L. (2008). Social appraisal of adult adhd: stigma and influences of the beholder's big five personality traits. *Journal of Attention Disorders*, *11*(6), 700–10.

Caspar, S. M., & Joukov, A. M. (2020). Mental Health and the Constitution: How Incarcerating the Mentally Ill Might Pave the Way to Treatment. *Nevada Law Journal*, *20*(2), 6.

Cheeseman, K. (2010). *Stress and the correctional officer the challenges, consequences, and search for a satisfied staff*. LFB Scholarly Publishing LLC.

Chisholm, J., & Greene, B. (2008). Women of color: Perspectives on 'multiple identities' in psychological theory, research, and practice. *Psychology of women: A handbook of issues and theories*, 40-69.

Chamorro-Premuzic, T., & Furnham, A. (2003). Personality traits and academic examination performance. *European Journal of Personality*, *17*(3), 237–250. https://doi.org/10.1002/per.473

CIT International. (2012). *Memphis Model*. Retrieved from https://www.citinternational.org/CustomUrlHandler

Cobb-Clark, D. A., & Schurer, S. (2012). The stability of big-five personality traits. *Economics Letters*, *115*(1). https://doi.org/https://doi.org/10.1016/j.econlet.2011.11.015

Cohen, J. (2013). *Statistical power analysis for the behavioral sciences*. Elsevier Science.

Collier, L. (2014, October). *Incarceration nation*. Monitor on Psychology. Retrieved from https://www.apa.org/monitor/2014/10/incarceration

Collins, R. L., Wong, E. C., Cerully, J. L., Schultz, D., & Eberhart, N. K. (2012). *Interventions to reduce mental health stigma and discrimination a literature review to guide evaluation of California's Mental Health Prevention and early intervention initiative*. RAND Corporation.

Compton, M. T., Esterberg, M. L., McGee, R., Kotwicki, R. J., & Oliva, J. R. (2006). Crisis intervention team training: changes in knowledge, attitudes, and stigma related to schizophrenia. *Psychiatric Services*, *57*(8), 1199–1202.

Conklin, J. J. (1985). Homelessness and De-Institutionalization. *Journal of Sociology and Social Welfare*, 12(1), 41-61.

Corrigan, P. W. (2000). Mental health stigma as social attribution: Implications for Research Methods and attitude change. *Clinical Psychology: Science and Practice*, *7*(1), 48–67. https://doi.org/10.1093/clipsy.7.1.48

Corrigan, P. W. (2004a). How stigma interferes with mental health care. *American Psychologist*, *59*(7), 614–625. https://doi.org/10.1037/0003-066x.59.7.614

Corrigan, P. W. (2004b). Target-specific stigma change: A strategy for impacting mental illness stigma. *Psychiatric Rehabilitation Journal*, *28*(2), 113–121. https://doi.org/10.2975/28.2004.113.121

Corrigan, P. W. (2006). *On the stigma of mental illness: Practical strategies for research and Social Change*. American Psychological Association.

Corrigan, P. W., Druss, B. G., & Perlick, D. A. (2014a). The impact of mental illness stigma on seeking and participating in mental health care. *Psychological Science in the Public Interest*, *15*(2), 37–70.

Corrigan, P., & Gelb, B. (2006). Three programs that use mass approaches to challenge the stigma of mental illness. *Psychiatric Services*, *57*(3), 393–398. https://doi.org/10.1176/appi.ps.57.3.393

Corrigan, P. W., & Kosyluk, K. A. (2013). Erasing the stigma: Where science meets advocacy. *Basic and Applied Social Psychology*, *35*(1), 131–140. https://doi.org/10.1080/01973533.2012.746598

Corrigan, P. W., Kosyluk, K. A., Konadu Fokuo, J., & Park, J. H. (2014b). How does direct to consumer advertising affect the stigma of mental illness? *Community Mental Health Journal*, *50*(7), 792–9. https://doi.org/10.1007/s10597-014-9698-7

Corrigan, P. W., & Penn, D. L. (2015). Lessons from social psychology on discrediting Psychiatric Stigma. *Stigma and Health*, *1*(S), 2–17. https://doi.org/10.1037/2376-6972.1.s.2

Corrigan, P. W., & Shapiro, J. R. (2010). Measuring the impact of programs that challenge the public stigma of mental illness. *Clinical Psychology Review*, *30*(8), 907–922. https://doi.org/10.1016/j.cpr.2010.06.004

Corrigan, P.W., Markowitz, F. E., Watson, A., Rowan, D., & Kubiak, M. A. (2003). An attribution model of public discrimination towards persons with mental illness. *Journal of Health and Social Behavior*, *44*(2), 162–179.

Corrigan, P. W., Morris, S. B., Michaels, P. J., Rafacz, J. D., & Rüsch, N. (2012). Challenging the public stigma of mental illness: a meta-analysis of outcome studies. *Psychiatric Services (Washington, D.c.)*, *63*(10), 963–73. https://doi.org/10.1176/appi.ps.201100529

Corrigan, P. W., Watson, A. C., Warpinski, A. C., & Gracia, G. (2004). Implications of educating the public on mental illness, violence, and stigma. *Psychiatric Services*, *55*(5), 577–580. https://doi.org/10.1176/appi.ps.55.5.577

Costa, P. T., Widiger, T. A., Brooner, R. K., Schmidt, C. W., & Herbst, J. H. (2002). Personality trait characteristics of opioid abusers with and without comorbid personality disorders.

In *Personality disorders and the five-factor model of personality* (pp. 249–268). American Psychological Association.

Crandall, C. S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, *129*(3), 414–446. https://doi.org/10.1037/0033-2909.129.3.414

Crocker, J., Major, B., & Steele, C. (1998). Social stigma. In B. Major (Ed.), *The handbook of social psychology* (4th ed., Vol. 2, pp. 504–553). McGraw-Hill.

Cummings, D. L., & Thompson, M. N. (2009). Suicidal or manipulative? the role of mental health counselors in overcoming a false dichotomy in identifying and treating self-harming inmates. (practice)(report). *Journal of Mental Health Counseling*, *31*(3), 201

Daniel, A. E. (2006). Preventing suicide in prison: a collaborative responsibility of administrative, custodial, and clinical staff. *Journal of the American Academy of Psychiatry and the Law*, *34*(2), 165–175.

de Sousa, S., Marques António, Curral Rosário, & Queirós Cristina. (2012). Stigmatizing attitudes in relatives of people with schizophrenia: a study using the attribution questionnaire aq-27. *Trends in Psychiatry & Psychotherapy*, *34*(4).

DeYoung, C. G. (2006). Higher-order factors of the big five in a multi-informant sample. *Journal of Personality and Social Psychology*, *91*(6), 1138–1151. https://doi.org/10.1037/0022-3514.91.6.1138

Dovidio, J. F., Major, B., & Crocker, J. (2000) Stigma: Introduction and overview. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Ed.), *The social psychology of stigma* (pp. 1-28). Guilford.

Duckitt, J. (2001). A dual-process cognitive-motivational theory of ideology and prejudice. *Advances in Experimental Social Psychology*, *33*, 41–114.

Dupont, R., & Cochran, S. (2000). Police response to mental health emergencies—Barriers to change. *Journal of the American Academy of Psychiatry and the Law, 28*(3), 338–344.

Dupont, R., Cochran, M., & Pillsbury, S. (2007, September). *Crisis Intervention Team Core Elements*. CIT International. Retrieved from https://www.citinternational.org/research

Eagly, A. H., Ashmore, R. D., Makhijani, M. G., & Longo, L. C. (1991). What is beautiful is good, but…: A meta-analytic review of research on the physical attractiveness stereotype. *Psychological Bulletin, 110*(1), 109–128. https://doi.org/10.1037/0033-2909.110.1.109

Einat, T., & Suliman, N. (2021). Prison changed me—and I just work there: Personality changes among prison officers. *The Prison Journal*, *101*(2), 166–186. https://doi.org/10.1177/0032885521991091

Ekehammar, B., & Akrami, N. (2003). The relation between personality and prejudice: a variable- and a person-centred approach. *European Journal of Personality*, *17*(6), 449–464. https://doi.org/10.1002/per.494

Ekehammar, B., & Akrami, N. (2007). Personality and prejudice: from big five personality factors to facets. *Journal of Personality*, *75*(5), 899–925.

Ekehammar, B., Akrami, N., Gylje, M., & Zakrisson, I. (2004). What matters most to prejudice: big five personality, social dominance orientation, or right-wing authoritarianism? *European Journal of Personality*, *18*(6), 463–482. https://doi.org/10.1002/per.526

Federal Bureau of Prisons. BOP Statistics: Inmate Offenses. (n.d.). Retrieved February 1, 2022, from https://www.bop.gov/about/statistics/statistics_inmate_offenses.jsp

Field, A. P. (2018). *Discovering statistics using Ibm Spss statistics*. Sage Publications Inc.

Fridberg, D. J., & Ahmed, A. O. (2013). Critical synthesis package: Attribution questionnaire-short form (AQ-27). *MedEdPORTAL*. https://doi.org/10.15766/mep_2374-8265.9532

Gagliardi, G. J., Lovell, D., Peterson, P. D., & Jemelka, R. (2004). Forecasting recidivism in mentally ill offenders released from prison. *Law and Human Behavior*, *28*(2), 133–55.

Galanek, J. D. (2015). Correctional officers and the incarcerated mentally ill: responses to psychiatric illness in prison.(report). *Medical Anthropology Quarterly*, *29*(1), 116–136.

Garfield, R.L. (2011). *Mental health financing in the United States: A primer*. Henry J. Kaiser Family Foundation.

Glendinning, A. L., & O'Keeffe, C. (2015). Attitudes towards offenders with mental health problems scale. *Journal of Mental Health Training, Education and Practice*, *10*(2), 73–84. https://doi.org/10.1108/JMHTEP-08-2014-002

Goethals, G. R., Messick, D. M., & Allison, S. T. (1991). The uniqueness bias: Studies of constructive social comparison. In J. Suls & T. A. Wills (Eds.), *Social comparison: Contemporary theory and research* (pp. 149–176). Lawrence Erlbaum Associates, Inc.

Goffman, E. (1963). *Stigma: notes on the management of spoiled identity* (Ser. A spectrum book). Prentice-Hall.

Goldberg, L. R. (1993). The structure of phenotypic personality traits. *American Psychologist*, *48*(1), 26–34. https://doi.org/10.1037/0003-066x.48.1.26

Gordon, M. (2014). Personality of correction officers and their attitudes towards resocialization tasks. *Current Issues in Personality Psychology*, *2*, 118–132. https://doi.org/10.5114/cipp.2014.44307

Greineder, B. (2013). Correctional officers' perceptions of sexual offenders in the United States: A qualitative analysis. *International Journal of Criminal Justice Sciences*, *8*(1).

Gutwinski, S., Schreiter, S., Deutscher, K., & Fazel, S. (2021). The prevalence of mental disorders among homeless people in high-income countries: An updated systematic review and meta-regression analysis. *PLoS medicine*, *18*(8), e1003750. https://doi.org/10.1371/journal.pmed.1003750

Harizanova, S., Stoyanova, R., & Mateva, N. (2018). Do personality characteristics constitute the profile of burnout-prone correctional officers? *Open Access Macedonian Journal of Medical Sciences*, *6*(10), 1912–1917. https://doi.org/10.3889/oamjms.2018.328

Hinshaw, S. P. (2010). *The Mark of Shame: Stigma of mental illness and an agenda for change*. Oxford University Press.

Holland, T. R., Heim, R. B., & Holt, N. (1976). Personality Patterns Among Correctional Officer applicants. *Journal of Clinical Psychology*, *32*(4), 786–791. https://doi.org/10.1002/1097-4679(197610)32:4<786::aid-jclp2270320409>3.0.co;2-f

IBM Corp. Released 2021. IBM SPSS Statistics for Windows, Version 28.0. Armonk, NY: IBM Corp

Jackson, J. J., Hill, P. L., Payne, B. R., Roberts, B. W., & Stine-Morrow, E. A. (2012). Can an old dog learn (and want to experience) new tricks? cognitive training increases openness to experience in older adults. *Psychology and Aging*, *27*(2), 286–92. https://doi.org/10.1037/a0025918

John, O. P., Donahue, E. M., & Kentle, R. L. (1991). Big five inventory. *PsycTESTS Dataset*. https://doi.org/10.1037/t07550-000

John, O. P., Naumann, L. P., & Soto, C. J. (2008). Paradigm shift to the integrative Big Five trait taxonomy: History, measurement, and conceptual issues. In O. P. John, R. W. Robins, &

L. A. Pervin (Eds.), *Handbook of personality: Theory and research* (pp. 114–158). The Guilford Press.

John, O. P., & Soto, C. J. (2007). The importance of being valid: Reliability and the process of construct validation. In R. W. Robins, R. C. Fraley, & R. F. Krueger (Eds.), *Handbook of research methods in personality psychology* (pp. 461–494). The Guilford Press.

John, O. P., & Srivastava, S. (1999). The Big Five trait taxonomy: History, measurement, and theoretical perspectives. In L. A. Pervin & O. P. John (Eds.), *Handbook of personality: Theory and research* (2nd ed., pp. 102–138). Guilford Press.

Josi, D. A., & Sechrest, K. D. (1998). *The changing career of the correctional officer: Policy implications for the 21st Century*. Butterworth-Heinemann.

Keeler, C. (2017). *Correctional officers' and psychologists' personality traits and perceptions of mentally ill inmates* [Unpublished manuscript]. The Chicago School of Professional Psychology.

Kenny, A., & Bizumic, B. (2016). Learn and act: Changing prejudice towards people with mental illness using stigma reduction interventions. *Journal of Contextual Behavioral Science*, *5*(3), 178–185. https://doi.org/10.1016/j.jcbs.2016.06.004

Kohn, M.A. & Senyak, J. (2021, August). *Sample size calculators*. UCSF CTSI. Available at https://www.sample-size.net/

Kois, L. E., Hill, K., Gonzales, L., Hunter, S., & Chauhan, P. (2019). Correctional officer mental health training: Analysis of 52 U.S. jurisdictions. *Criminal Justice Policy Review*, *31*(4), 555–572. https://doi.org/10.1177/0887403419849624

Komarraju, M., Karau, S. J., Schmeck, R. R., & Avdic, A. (2011). The big five personality traits, learning styles, and academic achievement. *Personality and Individual Differences*, *51*(4), 472–477. https://doi.org/10.1016/j.paid.2011.04.019

Kropp, P. R., Cox, D. N., Roesch, R., & Eaves, D. (1989). The perceptions of correctional officers toward mentally disordered offenders. (special issue: mental disorder and the criminal justice system). *International Journal of Law and Psychiatry*, *12*(2-3), 181–188

Krumpal, I. (2013). Determinants of social desirability bias in sensitive surveys: A literature review. *Quality & Quantity: International Journal of Methodology, 47*(4), 2025–2047. https://doi.org/10.1007/s11135-011-9640-9

Lavoie, J. A., Connolly, D. A., & Roesch, R. (2006). Correctional Officers' Perceptions of Inmates with Mental Illness: The Role of Training and Burnout Syndrome. *International Journal of Forensic Mental Health*, *5*(2), 151–166. https://doi.org/10.1080/14999013.2006.10471239

Liebling, A., Price, D., & Shefer, G. (2012). *The prison officer*. Routledge.

Link, B. G., Cullen, F. T., Frank, J., & Wozniak, J. F. (1987). The social rejection of former mental patients: Understanding why labels matter. *American Journal of Sociology, 92*(6), 1461–1500. https://doi.org/10.1086/228672

Lough, J., Wald, E., Bryne, K., & Walker, G. (2007). The impact of psychological profiling of Australian correctional officers. *American Correctional Association*, *32*(4).

Lovell, B., & Brown, R. (2017). Burnout in U.K. prison officers: The role of personality. *The Prison Journal*, *97*(6), 713–728. https://doi.org/10.1177/0032885517734504

Lowder, E. M., Ray, B. R., & Gruenewald, J. A. (2019). Criminal Justice Professionals' attitudes toward mental illness and substance use. *Community Mental Health Journal*, *55*(3), 428–439. https://doi.org/10.1007/s10597-019-00370-3

Luty, J., Fekadu, D., Umoh, O., & Gallagher, J. (2006). Validation of a short instrument to measure stigmatised attitudes towards mental illness. *Psychiatric Bulletin*, *30*(7), 257–260. https://doi.org/10.1192/pb.30.7.257

Ma, Z. (2017). How the media cover mental illnesses: a review. *Health Education*, *117*(1), 90–109.

Mann, C. E., & Himelein, M. J. (2008). Putting the person back into psychopathology: An intervention to reduce mental illness stigma in the classroom. *Social Psychiatry and Psychiatric Epidemiology*, *43*(7), 545–551. https://doi.org/10.1007/s00127-008-0324-2

Marzuki, N. A., & Ishak, A. K. (2011). Towards healthy organization in correctional setting: Correctional officers' wellness, occupational stress and personality. *International Journal of Social Sciences, 3,* pp. 355-365.

McCrae, R. R., & Costa, P. (2003). *Personality in adulthood: A five-factor theory perspective e* (2nd ed.). Guilford Publications.

McCrae, R., & Costa, P. (2008). Empirical and Theoretical Status of the Five-Factor Model of Personality Traits. In *The sage handbook of personality theory and Assessmant* (pp. 273–294). SAGE.

McNeeley, S., & Donley, C. (2020). Crisis intervention team training in a correctional setting: Examining compliance, mental health referrals, and use of Force. *Criminal Justice and Behavior*, *48*(2), 195–214. https://doi.org/10.1177/0093854820959394

Mechanic, D., McAlpine, D. D., & Rochefort, D. A. (2014). *Mental Health and Social Policy: Beyond managed care*. Pearson.

Meyer, I. H. (2003). Prejudice, social stress, and Mental Health in lesbian, gay, and bisexual populations: Conceptual issues and research evidence. *Psychological Bulletin*, *129*(5), 674–697. https://doi.org/10.1037/0033-2909.129.5.674

Monteith, M. J., Zuwerink, J. R., & Devine, P. G. (1994). Prejudice and prejudice reaction: Classic challenges, contemporary approaches. In P. G. Devine, D. L. Hamilton, & T. M. Ostrom (Ed.), *Social cognition: Impact on social psychology* (pp. 323-346). Academic Press.

Morabito, M. S., Kerr, A. N., Watson, A., Draine, J., Ottati, V., & Angell, B. (2010). Crisis intervention teams and people with mental illness. *Crime and Delinquency*, *58*(1), 57–77. https://doi.org/10.1177/0011128710372456

Mumola, C. J., & Karberg, J. C. (2006). Drug use and dependence, state and federal prisoners, 2004. *PsycEXTRA Dataset*. https://doi.org/10.1037/e560272006-001

Musto, D. F., & Korsmeyer, P. (2002). The Quest for Drug Control. https://doi.org/10.12987/yale/9780300090369.001.0001

Naslund, J. A., & Deng, D. (2021). Addressing mental health stigma in low-income and middle-income countries: a new frontier for digital mental health. *Ethics, Medicine and Public Health*, *19*. https://doi.org/10.1016/j.jemep.2021.100719

Nettles, R., & Balter, R. (2011). *Multiple minority identities : applications for practice, research, and training*. Springer Pub.

Parks-Leduc, L., Feldman, G., & Bardi, A. (2015). Personality traits and personal values: A meta-analysis. *Personality and Social Psychology Review*, *19(1)*, 3-29. doi:

10.1177/1088868314538548

Paunonen, S. V., & Ashton, M. C. (2001). Big five predictors of academic achievement. *Journal of Research in Personality*, *35*(1), 78–90. https://doi.org/10.1006/jrpe.2000.2309

Penn, D. L., Guynan, K., Daily, T., Spaulding, W. D., Garbin, C. P., & Sullivan, M. (1994). Dispelling the stigma of schizophrenia: What sort of information is best? *Schizophrenia Bulletin*, *20*(3), 567–578. https://doi.org/10.1093/schbul/20.3.567

Penn, D. L., Kommana, S., Mansfield, M., & Link, B. G. (1999). Dispelling the stigma of schizophrenia: II. the impact of information on dangerousness. *Schizophrenia Bulletin*, *25*(3), 437–446. https://doi.org/10.1093/oxfordjournals.schbul.a033391

Penn, D. L., & Martin, J. (1998). The stigma of severe mental illness: Some potential solutions for a recalcitrant problem. *Psychiatric Quarterly, 69,* 235-247.

Penn, D. L., Mueser, K. T., & Doonan, R. (1997). Physical attractiveness in Schizophrenia. *Behavior Modification*, *21*(1), 78–85. https://doi.org/10.1177/01454455970211004

Pettigrew, T. F., & Tropp, L. R. (2006). A meta-analytic test of intergroup contact theory. *Journal of Personality and Social Psychology*, *90*(5), 751–783. https://doi.org/10.1037/0022-3514.90.5.751

Phelan, J. C., Link, B. G., & Dovidio, J. F. (2008). Stigma and prejudice: one animal or two? *Social Science & Medicine (1982)*, *67*(3), 358–67. https://doi.org/10.1016/j.socscimed.2008.03.022

Pingani, L., Forghieri, M., Ferrari, S., Ben-Zeev, D., Artoni, P., Mazzi, F., Palmieri, G., Rigatelli, M., & Corrigan, P. W. (2012). Stigma and discrimination toward mental illness: translation and validation of the italian version of the attribution questionnaire-27 (aq-27-i). *Social Psychiatry and Psychiatric Epidemiology: The International Journal for*

Research in Social and Genetic Epidemiology and Mental Health Services, *47*(6), 993–999. https://doi.org/10.1007/s00127-011-0407-3

Pinto-Foltz, M. D., Logsdon, M. C., & Myers, J. A. (2011). Feasibility, acceptability, and initial efficacy of a knowledge-contact program to reduce mental illness stigma and improve mental health literacy in adolescents. *Social Science & Medicine*, *72*(12), 2011–2019. https://doi.org/10.1016/j.socscimed.2011.04.006

Poropat, A. E. (2009). A meta-analysis of the five-factor model of personality and academic performance. *Psychological Bulletin*, *135*(2), 322–338. https://doi.org/10.1037/a0014996

Pullen, E., Ekl, E. A., Felix, E., Turner, C., Perry, B. L., & Pescosolido, B. A. (2022). Labeling, causal attributions, and social network ties to people with mental illness. *Social Science & Medicine*, *293*. https://doi.org/10.1016/j.socscimed.2021.114646

Qi, Y., Esmond, S., Edimansyah, A., Boon, Y. C., Hui, L. O., Ellaisha, S., … Mythily, S. (2018). Direct and moderating effects of personality on stigma towards mental illness. *Bmc Psychiatry*, *18*(1), 358–358. https://doi.org/10.1186/s12888-018-1932-3

Rammstedt, B., & John, O. P. (2005). Big five inventory--short version. *PsycTESTS Dataset*. https://doi.org/10.1037/t68752-000

Rammstedt, B., & John, O. P. (2007). Measuring personality in one minute or less: A 10-item short version of the Big Five Inventory in English and German. *Journal of Research in Personality*, *41*(1), 203–212. https://doi.org/10.1016/j.jrp.2006.02.001

Randall, D. M., & Fernandes, M. F. (2013). The social desirability response bias in ethics research. In A. C. Michalos & D. C. Poff (Eds.), *Citation classics from the Journal of Business Ethics: Celebrating the first thirty years of publication* (pp. 173–190). Springer Science + Business Media. https://doi.org/10.1007/978-94-007-4126-3_9

Rogers, M., McNeil, D., & Binder, R. (2019). Effectiveness of police crisis intervention training programs. *American Academy of Psychiatry and the Law*, *47*(4).

Schomerus, G., Schwahn, C., Holzinger, A., Corrigan, P. W., Grabe, H. J., Carta, M. G., & Angermeyer, M. C. (2012). Evolution of public attitudes about mental illness: A systematic review and meta-analysis. *Acta Psychiatrica Scandinavica*, *125*(6), 440–452. https://doi.org/10.1111/j.1600-0447.2012.01826.x

Serafini, A.R. (2018). Correctional officers' perceptions and attitudes toward mental health within the prison system. *Electronic Theses, Projects, and Dissertations.* 735. https://scholarworks.lib.csusb.edu/etd/735

Sibley, C. G., & Duckitt, J. (2008). Personality and prejudice: a meta-analysis and theoretical review. *Personality and Social Psychology Review : An Official Journal of the Society for Personality and Social Psychology, Inc*, *12*(3), 248–79. https://doi.org/10.1177/1088868308319226

Smith, M. (2002). Stigma. *Advances in Psychiatric Treatment, 8*(5), 317-323. doi:10.1192/apt.8.5.317

Solmi, M., Granziol, U., Danieli, A., Frasson, A., Meneghetti, L., Ferranti, R., … Zaninotto, L. (2020). Predictors of stigma in a sample of mental health professionals: network and moderator analysis on gender, years of experience, personality traits, and levels of burnout. *European Psychiatry : The Journal of the Association of European Psychiatrists*, *63*(1), 4. https://doi.org/10.1192/j.eurpsy.2019.14

Soto, C. J., John, O. P., Gosling, S. D., & Potter, J. (2008). The developmental psychometrics of big five self-reports: Acquiescence, factor structure, coherence, and differentiation from

ages 10 to 20. *Journal of Personality and Social Psychology*, *94*(4), 718–737. https://doi.org/10.1037/0022-3514.94.4.718

Stuart, H., Arboleda-Flórez, J., & Sartorius, N. (2012). *Paradigms lost: Fighting stigma and the lessons learned*. Oxford University Press.

Stuber, J., Meyer, I., & Link, B. (2008). Stigma, prejudice, discrimination and Health. *Social Science & Medicine*, *67*(3), 351–357. https://doi.org/10.1016/j.socscimed.2008.03.023

Suliman, N., & Einat, T. (2018). Does work stress change personalities? working in prison as a personality-changing factor among correctional officers. *Criminal Justice and Behavior*, *45*(5), 628–643. https://doi.org/10.1177/0093854818758141

Sykes, G. M. (1958). *The society of captives: a study of a maximum security prison*. Princeton University Press.

Szeto, A. C. H., O'Neill, T. A., & Dobson, K. S. (2015). The association between personality and individual differences and stigma toward people with mental disorders. *American Journal of Psychiatric Rehabilitation*, *18*(4)

Taylor, S. M., & Dear, M. J. (1981). Scaling community attitudes toward the mentally ill. *Schizophrenia Bulletin*, *7*(2), 225–40.

Taxman, F. S., & Ainsworth, S. (2009). Correctional milieu: The key to quality outcomes. *Victims & Offenders*, *4*(4), 334–340. https://doi.org/10.1080/15564880903227347

Teplin, L. A. (1984). Criminalizing mental disorder: The comparative arrest rate of the mentally ill. *American Psychologist*, *39*(7), 794–803. https://doi.org/10.1037/0003-066x.39.7.794

Thompson LE, Borum R. (2006). Crisis Intervention Teams (CIT): Considerations for knowledge transfer. *Law Enforcement Executive Forum. 6(3):*25–36.

Thornicroft, G., Brohan, E., Rose, D., Sartorius, N., & Leese, M. (2009). Global pattern of experienced and anticipated discrimination against people with schizophrenia: A cross-sectional survey. *The Lancet*, *373*(9661), 408–415. https://doi.org/10.1016/s0140-6736(08)61817-6

Thornicroft, G., Rose, D., Kassam, A., & Sartorius, N. (2007). Stigma: ignorance, prejudice or discrimination?. *The British journal of psychiatry : the journal of mental science*, *190*, 192–193. https://doi.org/10.1192/bjp.bp.106.025791

Tomas Smigura, M.M.A. (2020). The Impact of Contact Experiences on Personality and Mental Illness Stigma in the UAE. *Psychology Theses,* (5). https://scholarworks.uaeu.ac.ae/psych_theses/5.

Tourangeau, R., & Yan, T. (2007). Sensitive questions in surveys. *Psychological bulletin*, *133*(5), 859–883. https://doi.org/10.1037/0033-2909.133.5.859

Travis, J., Redburn, S., Western, B., Redburn, S., Western, B., & Travis, J. (2014). *The growth of incarceration in the United States: Exploring causes and consequences*. National Academies Press.

Trull, T. J. (2012). The five-factor model of personality disorder and dsm-5. *Journal of Personality*, *80*(6), 1697–720. https://doi.org/10.1111/j.1467-6494.2012.00771.x

Trull, T. J., & McCrae, R. R. (2002). A five-factor perspective on personality disorder research. *Personality Disorders and the Five-Factor Model of Personality.*, 59–71. https://doi.org/10.1037/10140-022

Volkow, N. D., Poznyak, V., Saxena, S., & Gerra, G. (2017). Drug use disorders: Impact of a public health rather than a criminal justice approach. *World Psychiatry*, *16*(2), 213–214. https://doi.org/10.1002/wps.20428

Vuolo, M., & Kruttschnitt, C. (2008). Prisoners' adjustment, correctional officers, and context: the foreground and background of punishment in late modernity. *Law & Society Review*, *42*(2), 307–336.

Walkden, S. M., Rogerson, M., & Kola-Palmer, D. (2020). Public attitudes towards offenders with mental illness scale (PATOMI): Establishing a valid tool to measure public perceptions. *Community Mental Health Journal*, *57*(2), 349–356. https://doi.org/10.1007/s10597-020-00653-0

Watson, A. C., & Fulambarker, A. J. (2012). The Crisis Intervention Team Model of Police Response to Mental Health Crises: A Primer for Mental Health Practitioners. *Best practices in mental health*, *8*(2), 71.

Weiss, A., & Costa, P. T. (2005). Domain and facet personality predictors of all-cause mortality among Medicare patients aged 65 to 100. *Psychosomatic Medicine*, *67*(5), 724–733. https://doi.org/10.1097/01.psy.0000181272.58103.18

Wiggins, J. S. (1996). *The five-factor model of personality: theoretical perspectives*. Guilford Press.

Yamaguchi, S., Wu, S.-I., Biswas, M., Yate, M., Aoki, Y., Barley, E. A., & Thornicroft, G. (2013). Effects of short-term interventions to reduce mental health-related stigma in university or college students: a systematic review. *Journal of Nervous & Mental Disease*, *201*(6).

Yohanna, D. (2013). Deinstitutionalization of people with mental illness: Causes and consequences. *AMA Journal of Ethics*, *15*(10), 886–891. https://doi.org/10.1001/virtualmentor.2013.15.10.mhst1-1310

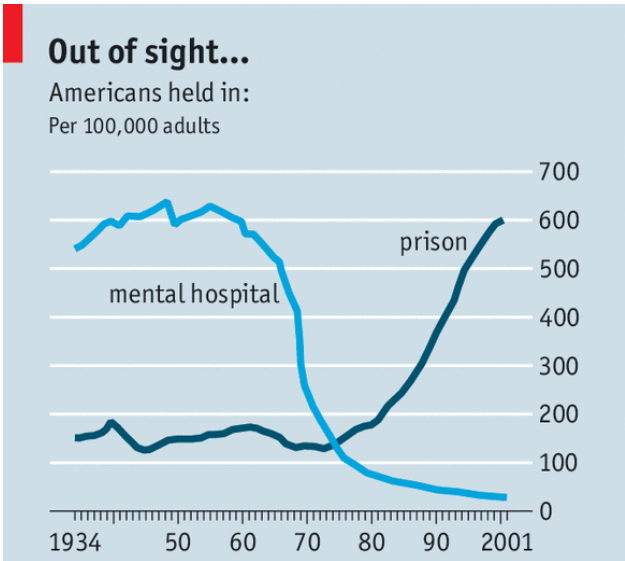
Zaninotto, L., Qian, J., Sun, Y., Bassi, G., Solmi, M., & Salcuni, S. (2018). Gender, personality traits and experience with psychiatric patients as predictors of stigma in italian psychology students. *Frontiers in Public Health*, *6*. https://doi.org/10.3389/fpubh.2018.00362

Zgoba, K. M., Reeves, R., Tamburello, A., & Debilio, L. (2020). Criminal recidivism in inmates with mental illness and substance use disorders. *Journal of the American Academy of Psychiatry and the Law*, *48*(2), 209–215.

Figures

Figure 1

Mental Hospital versus Prison Population in the United States



Note. Retrieved from "Mental Health and the Constitution: How Incarcerating the Mentally Ill Might Pave the Way to Treatment," by S. Caspar& A. Joukov, 2020, *Nevada Law Journal, 20*(2), p. 574. Copyright 2020 by Nevada Law Journal.

Appendix A

Demographics

What is your gender?

- ☐ Male
- ☐ Female
- ☐ Transgender
- ☐ Other

Are you Hispanic, Latino/a, or of Spanish origin? (One or more categories may be selected)

- ☐ No, not of Hispanic, Latino/a, or Spanish origin
- ☐ Yes, Mexican, Mexican American, Chicano/a
- ☐ Yes, Puerto Rican
- ☐ Yes, Cuban
- ☐ Yes, Another Hispanic, Latino/a or Spanish origin

What is your race? (One or more categories may be selected)

- ☐ White
- ☐ Black or African American
- ☐ American Indian or Alaska Native
- ☐ Asian Indian
- ☐ Chinese
- ☐ Filipino
- ☐ Japanese
- ☐ Korean
- ☐ Vietnamese
- ☐ Other Asian
- ☐ Native Hawaiian
- ☐ Guamanian or Chamorro
- ☐ Samoan
- ☐ Other Pacific Islander
- ☐ Other, not listed: _____

Location of Correctional Facility

- ☐ Minnesota
- ☐ Wisconsin

Facility Security level

- ☐ Minimum
- ☐ Medium
- ☐ Maximum
- ☐ Other, not listed: _____

Offender Population at Current Facility

- ☐ Juvenile, males
- ☐ Juvenile, females
- ☐ Adult, males
- ☐ Adult, females

How many years have you been a correctional officer?

_____ years

What percentage of your average day involves working with offenders with mental illness? *(For the purposes of this study, mental illness is defined as a condition involving changes in emotion, thinking, or behavior. Offenders with mental illness may be distinguished as those who have or currently participate in substance use or mental health treatment, are housed in a mental health unit, or who have required officer intervention related to emotional, cognitive, or behavioral issues).*

- ☐ 0-25%
- ☐ 25-50%
- ☐ 50-75%
- ☐ 75-100%

Included in post-assessment only:

- ☐ I have successfully completed CIT

Appendix B

Harry Adams is a 32-year-old male currently incarcerated for participating in an armed robbery about three years ago. He has a history of homelessness and being hospitalized for mental health problems. He sees a mental health provider in prison and has been taking psychiatric medications since his sentence began. He participated in mental health group programming and has held a job while incarcerated. He typically gets along with his cellmates and other men in the unit as well as the officers. Harry was functioning relatively well up until about a year ago at which point officers noted changes in his behavior. He started to think the other men were talking bad about him behind his back and accused his cellmate of stealing his things. He was convinced that others could hear what he was thinking and that comments made on TV programs were directed at him. Harry began to miss so many days of work that he received citations. He withdrew from his friends on the unit, stopped participating in mental health groups, and spent the majority of the day in his cell alone. Harry told officers he was hearing voices even when no one was around. He stated these voices told him what to do and think. He has been having these behaviors for approximately 6 months. He rarely talks aside from episodes of pacing, shouting, and tearing apart his cell. He has physically threatened two different cellmates as well as unit officers, occasionally throwing furniture and attempting to punch them.

Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1 2 3 4 5 6 7 8 9
Not at all Very Much

	Answer:
1. I would feel aggravated by Harry.	_____
2. I would feel unsafe around Harry.	_____
3. Harry would terrify me.	_____
4. I would feel angry at Harry.	_____
5. If I were in charge of Harry's treatment, I would require him to take his medication.	_____
6. I think Harry poses a risk to his neighbors unless he is hospitalized.	_____
7. If I were an employer, I would interview Harry for a job.	_____
8. I would be willing to talk to Harry about his problems.	_____
9. I would feel pity for Harry.	_____
10. I would think that it was Harry's own fault that he is in the present condition.	_____
11. I think the cause of Harry's present condition is within his control.	_____
12. I would feel irritated by Harry.	_____
13. I would feel Harry is dangerous.	_____
14. Harry should be forced into treatment with his doctor even if he does not want to.	_____
15. I think it would be best for Harry's community if he were put away in a psychiatric hospital.	_____
16. I would share a carpool with Harry every day.	_____
17. I think an asylum, where Harry can be kept away from his neighbors, is the best place for him.	_____
18. I would feel threatened by Harry.	_____
19. I would feel scared of Harry.	_____

20. It is likely that I would help Harry. _____
21. I'm certain I would feel the need to help Harry. _____
22. I would feel sympathy for Harry. _____
23. Harry is responsible for his present condition. _____
24. I would feel frightened by Harry. _____
25. If I were in charge of Harry's treatment, I would force him to live in a group home. _____
26. If I were a landlord, I probably would rent an apartment to Harry. _____
27. I would feel concern for Harry. _____

Appendix C

Police and Community Attitudes towards Offenders with Mental Illness Scale

Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1 Strongly Disagree	**2** Disagree a little	**3** Neither agree nor disagree	**4** Agree a little	**5** Strongly Agree

1. ____ As soon as an offender shows signs of mental disturbance, he should be hospitalized
2. ____ More tax money should be spent on the care and treatment of offenders with mental illness
3. ____ An offender with mental illness should be isolated from the rest of the community
4. ____ The best therapy for many offenders with mental illness is to be part of a normal community
5. ____ Mental illness is an illness like any other
6. ____ Offenders with mental illness are a burden on society
7. ____ Offenders with a mental illness are far less of a danger than most people suppose
8. ____ Locating forensic mental health facilities in a residential area downgrades the neighborhood
9. ____ There is something about offenders with mental illness that makes it easier to tell them from normal people
10. ____ Offenders with mental illness have far too long been the subject of ridicule
11. ____ A woman would be foolish to marry an offender who suffered from a mental illness, even though he seems fully recovered
12. ____ As far as possible forensic mental health services should be provided through community-based facilities
13. ____ Less emphasis should be placed on protecting the public from offenders with mental illness
14. ____ Increased spending on forensic mental health services is a waste of tax money
15. ____ No one has the right to exclude offenders with mental illness from their neighborhood
16. ____ Having offenders with mental illness living within residential neighborhoods might be good therapy, but the risk to residents is too great
17. ____ Offenders with mental illness need the same kind of control and discipline as a young child
18. ____ We need to adopt a far more tolerant attitude towards offenders with mental illness in society
19. ____ I would not want to live next door to an offender who has been mentally ill
20. ____ Residents should accept the location of forensic mental health facilities in their neighborhood to service the needs of the community
21. ____ Offenders with mental illness should not be treated as outcasts of society

22. ____ There are sufficient existing services for offenders with mental illness
23. ____ Offenders with mental illness should be encouraged to assume the responsibilities of normal life
24. ____ Local residents have good reason to resist the location of forensic mental health services in their neighborhood
25. ____ The best way to handle offenders with mental illness is to keep them behind locked doors
26. ____ Our forensic mental hospitals seem more like prisons than places where offenders can be cared for
27. ____ Offenders with a history of mental illness should be excluded from taking public office
28. ____ Locating forensic mental health services in residential neighborhoods does not endanger local residents
29. ____ Forensic mental hospitals are an outdated means of treating offenders with mental illness
30. ____ Offenders with mental illness do not deserve our sympathy
31. ____ Offenders with mental illness should not be denied their individual rights
32. ____ Forensic mental health facilities should be kept out of residential neighborhoods
33. ____ One of the main causes of offender mental illness is a lack of self-discipline and will power
34. ____ We have the responsibility to provide the best possible care for offenders with mental illness
35. ____ Offenders with mental illness should not be given any responsibility
36. ____ Residents have nothing to fear from offenders coming into their neighborhood to obtain forensic mental health services
37. ____ Virtually anyone can become mentally ill
38. ____ It is best to avoid an offender who has mental illness
39. ____ Most women who were once patients in a forensic mental hospital can be trusted as babysitters
40. ____ It is frightening to think of offenders with mental illness living in residential neighborhoods

Appendix D

Here are a number of characteristics that may or may not apply to you. For example, do you agree that you are someone who *likes to spend time with others*? Please write a number next to each statement to indicate the extent to which **you agree or disagree with that statement.**

1 Disagree Strongly	**2** Disagree a little	**3** Neither agree nor disagree	**4** Agree a little	**5** Agree strongly

I am someone who…

1. _____ is talkative
2. _____ tends to find fault with others
3. _____ does a thorough job
4. _____ is depressed, blue
5. _____ is original, comes up with new ideas
6. _____ is reserved
7. _____ is helpful and unselfish with others
8. _____ can be somewhat careless
9. _____ is relaxed, handles stress well
10. _____ is curious about many different things
11. _____ is full of energy
12. _____ starts quarrels with others
13. _____ is a reliable worker
14. _____ can be tense
15. _____ is ingenious, a deep thinker
16. _____ generates a lot of enthusiasm
17. _____ has a forgiving nature
18. _____ tends to be disorganized
19. _____ worries a lot
20. _____ has an active imagination
21. _____ tends to be quiet
22. _____ is generally trusting
23. _____ tends to be lazy
24. _____ is emotionally stable, not easily upset
25. _____ is inventive

26. _____ has an assertive personality
27. _____ can be cold and aloof
28. _____ perseverates until the task is finished
29. _____ can be moody
30. _____ values artistic, aesthetic experiences
31. _____ is sometimes shy, inhibited
32. _____ is considerate and kind to almost everyone
33. _____ does things efficiently
34. _____ remains calm in tense situations
35. _____ prefers work that is routine
36. _____ is outgoing, sociable
37. _____ is sometimes rude to others
38. _____ makes plans and follows through with them
39. _____ gets nervous easily
40. _____ likes to reflect, play with ideas
41. _____ has few artistic interests
42. _____ likes to cooperate with others
43. _____ is easily distracted
44. _____ is sophisticated in art, music, or literature

Appendix E

P.O. Box 833
Hudson, Wisconsin 54016
www.procrisis.com
651.210.8036

February 2, 2022

Permission to access participants for a Clinical Research Project

Name of Students: Trista Wolfgram and Lindsay Bergeson

Name of Agency: Pro-Crisis, Inc.

Name(s) of Agency staff responsible for permitting access to participants: Patti Hecht-Kressly

Title of Project: An Exploration of Personality among Correctional Officers

Brief Description of purpose of the study: The purpose of this study is two-fold: (1) to examine the relationship between Big Five personality traits, mental illness stigma, and Crisis Intervention (CIT) and (2) to examine how psychopathy intersects with aggression in correctional officers.

Description of the participants who will be accessed: This study aims to gather data from state-level correctional officers with at least two years of experience who currently work in an adult facility in either Minnesota or Wisconsin and are actively enrolled in CIT provided by Pro-Crisis.

Description of the procedure(s) used to access the participants: Participants will be recruited at the onset of each CIT certification session. Individuals will be given a pre-training packet that includes information regarding informed consent, at which time they have the opportunity to opt out of the study. Participants who provide informed consent will then complete the pre-training packet measures prior to beginning CIT. Following the 5-day 40-hour training, participants will complete a post-training packet. Data received from individuals who do not meet the eligibility criteria will be removed prior to analysis.

Description of the potential benefits and risks of this study for the participants, the program, Augsburg University, or the community: Participants will read statements about personality traits, behaviors, and perceptions of mental illness. The disclosure of this type of information may cause some participants to feel discomfort, anxiety, or embarrassment. These questions may also provoke uncomfortable memories. Participants who have experienced a traumatic event will be informed during the informed consent process that some questions and statements may trigger

strong emotional reactions. A mental health resources handout will be provided to each participant following their participation in this study.

Procedure for ensuring anonymity or confidentiality of the data provided by the participants: All data will be de-identified except the names of subjects on consent forms. First, participants will be distributed a paper version of the informed consent form to read and sign. Once a participant has signed the consent form, the participant will receive the assessment measures packet. All informed consent forms will be stored separately from the assessment measures packet in a locked cabinet. No identifying information will be stored, so participants' answers will not be connected to them personally. Instead, participants will be randomly assigned an identification number. Thus, the SPSS file containing participant questionnaire data relevant to this study will be removed of any personal identifying information. In addition, all participants will be guaranteed that no information gathered for the purposes of this study will be shared with their employing agency and has no bearing on employment or CIT certification. Data relevant to this study will be preserved on an encrypted flash drive, accessible to only the student investigators and clinical research project committee members.

Procrisis, Inc. invites Trista Wolfgram and Lindsay Bergeson to conduct the research project. Trista Wolfgram and Lindsay Bergeson are granted permission to access the potential participants and to use the results of their analysis as the basis for a Clinical Research Project at Augsburg University.

The Chair of this CRP along with the Clinical Psychology Program Director agree to supervise the data collection process, and to ensure that the process conforms to applicable ethical and legal requirements. Final permission to access the participants is contingent upon approval by the Augsburg University Institutional Review Board.

Patti Hecht-Kressly M.A	02/02/2022
Patti Hecht-Kressly MA, President	Date
Marcia A. Bennett, Ph.D., LP	*03/31/22*
Signature of CRP Chair	Date
Trista Wolfgram	1/12/22
Signature of Student	Date
Lindsay Bergeson	1/12/22
Signature of Student	Date