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THE RELATIONSHIP BETWEEN SCHIZOPHRENIA
SPECTRUM DISORDER AND CRIMINAL
RESPONSIBILITY

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Submitted to the Faculty of the Graduate
School of Eastern Kentucky University
In partial fulfillment of the requirements for
the degree of
DOCTOR OF PSYCHOLOGY
May 2023

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ACKNOWLEDGMENTS

I would like to thank my major professor Dr. Dustin Wygant, for his guidance and patience. Without him this project simply would not exist. I would also like to thank my other committee members, Drs. Myra Beth Bundy and Michael McClellan for their comments, feedback, and assistance over the past three years. Another due thanks to Drs. Melinda Moore and Jerry Palmer for their persistence in seeing me through the completion of this project and keeping me on track with my writing goals. These core faculty members have played a foundational role in my journey becoming a clinical psychologist. A special shout out to Drs. Scott Bresler, Timothy Allen, and John Ranseen for their devotion to my clinical and forensic training. They have dedicated countless hours to my growth as a mental health professional.

I would also like to acknowledge my family for their love, unconditional acceptance, and lifelong support. I cannot thank them enough for supporting me emotionally and financially through hours of work on this project and years of intensive education. My last thank you is to Cruz Mortensen, my partner in life and best friend. He has supported me not only throughout this project, but my entire graduate education. Thank you for all the love, encouragement, patience, and guidance you share with me daily.

ABSTRACT

This original contribution to practice explores the significance of schizophrenia spectrum disorder, one of the most severe psychiatric disorders recognized in the DSM-5. This condition affects over 50 million people worldwide and is amongst one of the most common psychiatric illnesses diagnosed in criminal responsibility evaluations to date. Nonetheless, there is limited comprehensive literature specifically examining the relationship between schizophrenia and the insanity defense. Information provided in this literature review aims to fill that gap and act as a resource for clinical forensic practitioners who may encounter related cases. Specifically, this document will begin by introducing schizophrenia spectrum disorder and will be comprised of a detailed description of the disorder, symptomatology, how it presents clinically, diagnostic considerations, comorbidity/differential diagnoses, and cultural considerations. Next, I will discuss the prevalence of crime, violence, and the involvement schizophrenia spectrum disorder plays in the legal system. The succeeding section will be a review of criminal responsibility and the insanity defense to lay the foundation for understanding how this work is conducted in practice. Lastly, I will end with a redacted case study to provide a real-world example of the nuances to this type of criminal, legal evaluation, exemplifying the relationship between a specific psychiatric disorder, schizophrenia spectrum disorder, and the law.

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Section I: What is Schizophrenia Spectrum Disorder?

Description of Schizophrenia Spectrum Disorder

According to Torrey (2001), approximately 2.2 million people in the United States and 51 million people worldwide have schizophrenia at any given time. Of all the adult psychiatric illnesses presented in the Diagnostic and Statistical Manual, Fifth Edition (DSM-5; APA, 2013), Schizophrenia Spectrum Disorder is often considered one of the most debilitating and costly (both personally and financially) (Combs et al., 2018). In 2002, it was estimated that the fiscal cost of Schizophrenia in the United States was \$62.7 billion and about one-third (approximately 22.7 billion) was directed to the treatment and medical needs of this population (Wu et al., 2005). Despite the push for outpatient, community-oriented treatment, about 25% of all inpatient psychiatric beds are occupied by individuals diagnosed with schizophrenia (Combs et al., 2018). Along with the economic costs associated with this disorder, the impact on these individuals social, occupational, and adaptive functioning over their lifetimes may prove to be more demoralizing (Knapp et al., 2004). The loss of productivity over the lifetime is the largest indirect cost associated with schizophrenia, placing the disorder in the top 10 most debilitating conditions world-wide (Mueser & McGurk, 2004). Even with optimal treatment, many individuals with schizophrenia continue to experience substantial impairments throughout most of their lives (Knapp et al., 2004).

Considering that schizophrenia was first described over 100 years ago, the nature and presentation of the disorder has been in the forefront of debates, and public misconceptions have become normalized (Combs et al., 2018). Therefore, in recent years, clinicians and researchers have begun meticulously defining the psychopathology of this

disorder. While schizophrenia was once referred to as the “wastebasket diagnosis,” the term is now used more productively to describe a specific clinical condition whose characteristics can be found in the DSM-5 (American Psychiatric Association [APA], 2013).

According to the DSM-5 (APA, 2013), Schizophrenia Spectrum Disorder is a category of mental health conditions in which psychosis is the primary symptom. In previous editions of the DSM there were distinct subtypes of schizophrenia (e.g., Paranoid Type). However, in the DSM-5 (APA, 2013) the different types were removed in favor of a broader definition of schizophrenia. Meta-analyses of contemporary epidemiological data further suggest that psychosis expression is not an all-or-none phenomenon, but, rather, phenomenologically, and temporally continuous across the general population (Guloksuz & Van Os, 2017).

Schizophrenia spectrum disorder is defined by abnormalities in one or more of the following five domains: delusions, hallucinations, disorganized thinking (speech), grossly disorganized or abnormal motor behavior (including catatonia), and negative symptoms (DSM-5; APA, 2013). While individuals with this illness experience a range of different symptoms, the most common include positive symptoms (e.g., hallucinations, delusions, disorganization), negative symptoms (e.g., social withdrawal, apathy, anhedonia, poverty of speech), cognitive impairments (e.g., memory difficulties, planning abilities, abstract thinking), and mood disturbances (e.g., depression, anxiety, anger). Schizophrenia is also characterized by impairments in social functioning which appear to be exacerbated by the specific nature of these previously mentioned symptoms. Impairments in social functioning include difficulty establishing and maintaining interpersonal relationships,

problems working or fulfilling other instrumental roles (e.g., student, homemaker, employee), and difficulties caring for oneself (e.g., poor grooming and hygiene). Problems with daily living (in the absence of significant impairment in intellectual functioning) are the most distinguishing characteristics and are necessary criterion for DSM-5 (APA, 2013) diagnosis.

Unfortunately, many individuals with schizophrenia heavily rely on others to meet their daily living needs (Goldman, 1982; Torrey, 2001). According to Goldman (1982) and Torrey (2001), between 25% and 60% of persons with schizophrenia live with a relative, and an even larger number depend on these relatives as caregivers. Individuals without family support typically rely on mental health, case management, hospitals, and residential facilities to meet their basic needs. Consequently, those who fall between the cracks of the social service system often end up in jail or become homeless (Torrey et al., 1992). The various impairments associated with schizophrenia tend to be long-term, interrupted by fluctuations in severity (i.e., relapse) over time. Hence, schizophrenia has a major impact on family, and individuals are often hindered from pursuing personal life goals. While this disorder is quite severe, advances in treatment provide hope for more positive prognoses (Goldman, 1982).

Clinical Presentations

A majority of the research on schizophrenia spectrum disorder agree on at least three major groups of symptoms including positive symptoms, negative symptoms, and cognitive impairments (Combs et al., 2018). Positive symptoms refer to thoughts, sensory experiences, and behaviors that may be present in individuals with schizophrenia but are typically absent in individuals without the disorder. Some common examples of positive

symptoms include hallucinations (e.g., hearing voices, seeing visions), delusions (e.g., believing that others are persecuting them), and bizarre, disorganized behavior (e.g., maintaining a peculiar posture for no apparent reason, or wearing multiple layers of clothing) (APA, 2013). There are currently six types of delusions that are recognized in the DSM-5: persecutory, referential, grandiose, erotomanic, nihilistic, and somatic (APA, 2013). Persecutory delusions (i.e., belief that one is going to be harmed, harassed, and so forth by an individual, organization, or other group) have been found to be the most common form of delusional processes. Referential delusions involve the belief that certain gestures, comments, environmental cues, etc., are directed at oneself. Grandiose delusions occur when an individual believes that he or she has exceptional abilities, wealth, or fame. Erotomanic delusions transpire when an individual believes falsely that another person is in love with him or her. Nihilistic delusions involve the conviction that a major catastrophe will occur, and somatic delusions focus on preoccupations regarding health and organ function. According to the DSM-5, delusions are deemed “bizarre” if they are improbable, confusing to same-culture peers, and do not stem from ordinary life experiences (APA, 2013). An example of a “bizarre” delusion would be an individual believing that they have been implanted with a tracking device without showing any scars or wounds.

Cutting (1995) found that about 75% of individuals with schizophrenia report hallucinations with the most common form being auditory. Hallucinations are perception-like experiences that occur without an external stimulus (APA, 2013). They are vivid, clear, with the full force and impact of normal perceptions, and are involuntary (APA, 2013). Auditory hallucinations are frequently derogatory, negative, or abusive; although,

some can be benevolent, comforting, and kind (Combs et al., 2018). When individuals with schizophrenia experience auditory hallucinations, it is critical to determine whether their voices are commanding them to harm themselves or others. Such voices are often very distressing, and some people are unable to resist complying with the commands (Erkwoh et al., 2002). Command hallucinations are a specific form of auditory hallucinations that are commonly seen in forensic or inpatient settings and instruct a patient/client to act out in explicit ways; these commands can range in seriousness from innocuous to life-threatening (Combs et al., 2018). The relationship between command hallucinations and violent behavior/crime will be further discussed in section II. Less common, but more specific to schizophrenia, include voices that keep a running commentary on the individual's actions or consist of two or more voices having a continuous conversation. Auditory hallucinations can range from inaudible sounds (e.g., buzzing sounds, noises, muffled speech) to clearly perceived voices of either gender and can occur intermittently or continuously (APA, 2013).

Visual hallucinations, while less frequent, are usually reported in more severe forms of the disorder (Combs et al., 2018). This is the perception of having seen something that was not actually present. Brébion et al. (2008) suggests that source-memory deficits may be a crucial construct in explaining positive symptoms such as visual hallucinations. For example, the inability to discriminate imagined events from those that occurred in the real-world may be caused by deficits in a specific type of source-memory called "reality-monitoring" (Brébion et al., 2008). However, visual hallucinations have numerous etiologies, making these symptoms difficult to clinically treat without stabilization from psychotropic medications (Teeple et al., 2009).

Combs et al. (2018) explains that negative symptoms account for a substantial portion of the morbidity associated with schizophrenia and usually present in two main forms: diminished emotional expression and avolition. Diminished emotional expression involves reduction in the expression of emotions in the face, eye contact, intonation of speech (prosody), and movements of the hand, head, and face (body language) that normally give emphasis to speech. Avolition refers to a decrease in motivated, self-initiated purposeful activities when an individual may sit for long periods of time and show little interest in participating in work or social activities. These negative symptoms often present as blunted or flattened affect, anhedonia (i.e., the inability to experience pleasure), apathy, psychomotor retardation (e.g., slow rate of speech), and physical inertia (Combs et al., 2018).

The positive symptoms of schizophrenia are often in remission between episodes of the illness and tend to fluctuate over the course of the disorder. They also tend to be more responsive to the effects of psychotropic, antipsychotic medications (Kane & Marder, 1993). Conversely, negative symptoms and cognitive impairments are often stable over time and less responsive to antipsychotic medications (Greden & Tandon, 1991). However, some research suggests that atypical antipsychotic medications, such as clozapine, risperidone, and olanzapine may have a beneficial impact on negative symptoms as well (Brier, 2005).

Other important clinical features of schizophrenia spectrum disorder include poor insight and treatment noncompliance (Amador & Gorman, 1998). It is common for individuals with schizophrenia to have little or no insight into their psychiatric illness. In fact, many deny having any mental health problems at all. However, with this population,

it is often difficult/impossible to foster that level of introspection. Noncompliance with treatment occurs independent of poor insight often due to the severe negativity present in the illness. That is, problems with paranoia and distrust may contribute to treatment noncompliance if they believe that medications or treatment providers have mal-intentions or desires to harm them. Side-effects from antipsychotic medications such as sedation, dry mouth, or psycho-motor delays are often unpleasant and are a contributing factor to noncompliance with treatment (Combs et al., 2018).

Diagnostic Considerations

Regardless of the diagnostic system being used (i.e., International Classification of Diseases and Related Health Problems, Tenth Revision [ICD-10] vs. [DSM-5]), the diagnostic criteria for schizophrenia is largely consistent (WHO, 2016; APA, 2013). Generally, criteria specify some degree of work, social, or self-care impairment combined with positive or negative symptoms which last a significant duration of time (e.g., six months or more). According to DSM-5 (APA, 2013) one or more of the following symptoms must be present: delusions, hallucinations, disorganized speech, grossly disorganized or catatonic behavior, or negative symptoms. Further, one of the symptoms must be either delusions, hallucinations, or disorganized speech, and it must have been present for at least one month, unless successfully treated. Ultimately, there must be a significant impairment/disturbance in daily functioning for at least six months (APA, 2013).

Standard diagnosis of schizophrenia often requires a thorough review of records, medical evaluations to rule out possible organic factors (e.g., brain tumors), a clinical interview with the client/patient, and possible psychological testing such as measures of

personality, psychopathology, intelligence, etc. (Combs et al., 2018). Additionally, individuals with schizophrenia tend to be poor historians of their own mental health issues, or they may not be able to provide accurate accounts of their behavior. Therefore, it may be useful to gather collateral information from significant others, such as family members or other support systems that personally know the individual (Combs et al., 2018). Due to the subjective variations in interviewing styles across clinicians, it is recommended that clinical interviewers use the Structured Clinical Interview for DSM-5, Clinician Version (SCID-5-CV) to enhance the reliability and validity of psychiatric diagnosis (First et al., 2016). Using structured clinical interviewing tools such as the SCID-5-CV are considered the gold standard for the diagnosis of schizophrenia (Combs et al., 2018). Structured clinical interviews have two main advantages over more open approaches. First, structured interviews explicitly provide the specific symptoms required for diagnosis which include the definitions of key symptoms that are agreed upon by experts. Second, by utilizing standardized interview techniques, such as specific sequencing of questions, variations in interviewing styles are minimized, thus encouraging interrater reliability between/across clinicians. This is crucial when considering the generalizability of research studies associated with the diagnosis of schizophrenia. Efforts as such should be taken to ensure the comparability of assessment techniques across patient populations (Combs et al., 2018). Since the symptoms of schizophrenia overlap with many other psychiatric disorders, establishing the diagnosis requires particularly close considerations of three overlapping disorders: substance use disorder, mood disorders, and posttraumatic stress disorder (PTSD). I will discuss issues related to these disorders and the diagnosis of schizophrenia in the following section.

Transdiagnostic and Alternative Models of Pathology

Psychosis remains a conundrum; despite rigorous research, much remains to be clarified in terms of its etiology, diagnosis, and treatment. In recent years, a paradigm shift towards transdiagnostic dimensional approaches to classifying psychosis-related psychopathology has gained traction (Dalglish et al., 2020; Krueger et al., 2018). The main driving force behind this shift involves the growing literature in applying factor-analytic methods to overcome shortcomings of traditional diagnostic systems (e.g., DSM) by identifying the empirical structure of mental disorders. Specifically, the DSM-5 definition of schizophrenia faces many challenges. First, reliability of this diagnosis remains low (Reiger et al., 2013), and the categorical nature of the current classification system produces arbitrary boundaries. Second, such boundaries obscure many similarities with other conditions (Kessler et al., 2005). For example, schizophrenia and bipolar disorder are separate diagnoses, but many patients have features of both, and these disorders have overlapping etiology (Stahl et al., 2019). Third, there are many people in the general population that may endorse subsidiary psychotic-like experiences (PLE) but do not meet clinical criteria for a formal diagnosis (Linscott & Van Os, 2013). Originally, PLEs referred to symptoms located on a continuum ranging from normal experiences to genuine psychotic symptoms such as hallucinations and delusions (Strauss, 1969). PLEs are most recently described as “psychotic symptoms in the absence of illness” and have been identified as early indicators of psychosis (Hinterbuchinger & Mossaheb, 2021). Due to the wide variety of definitions, valid assessment tools, and concepts of PLEs, challenges are posed in diagnosis, as well as mixed findings concerning prevalence rates and clinical impact (Hinterbuchinger & Mossaheb, 2021). More research, conceptual

clarity, and a consensus concerning the terminology is necessary for more standardized practice. Last, schizophrenia diagnosis is heterogeneous and can include symptomatology that are unrelated (Kotov et al., 2017).

The Hierarchical Taxonomy of Psychopathology (HiTOP) is a classification system that seeks to address the aforementioned challenges and organize psychopathology according to patterns of co-occurrence among signs and symptoms (Kotov et al., 2022). The HiTOP model of psychosis-related psychopathology is described dimensionally, recognizing continuity between schizophrenia, psychotic disorders, certain non-psychotic disorders (e.g., dissociative disorders, schizotypal personality disorder), and normal functioning (Krueger et al., 2018; Kotov et al., 2022). By removing the distinctions between proposed psychiatric taxa at the level of classification, new ways of organizing mental health problems are unlocked, suggesting alternative conceptualizations of the processes implicated in mental health, and providing a platform for novel ways of thinking about onset, maintenance, and clinical treatment and recovery from experiences of disabling mental distress (Dalglish et al., 2020).

According to Kotov et al. (2020), the dimensional nature of the HiTOP model removes arbitrary boundaries and diagnostic instability evidenced by high test-retest reliability. Individuals with subthreshold symptoms or unusual symptom profiles can be characterized on a set of dimensions, leaving no patients excluded from the system. Reduction in the heterogeneity within constructs is achieved by grouping related symptoms together and assigning unrelated symptoms to different dimensions. Further, comorbidity is recognized by assigning related conditions to the same spectrum (Kotov et al., 2020).

Specifically, the psychosis superspectrum of the HiTOP model involves two spectra: thought disorder and detachment (Kotov et al., 2020, Kotov et al., 2022). The “thought disorder” spectrum aims to capture a range of conventional and uncreative thinking to perception and cognition based in tenuous reality. It also includes both positive symptoms and the personality trait of psychoticism (Kotov et al., 2020). The “detachment” spectrum describes individual differences in volition, sociability, and affective expression. This spectrum extends from the personality trait of introversion, to negative schizotypy, to negative symptoms (Kotov et al., 2020). Both maladaptive traits and symptoms are included in the spectra, reflecting different timescales. For example, signs and symptoms reflect the current state (i.e., problems that are acute and transient). Whereas maladaptive traits embody typical levels of these issues over many years and are often chronic in nature. Traits cover a broad range of individual differences from healthy to vulnerable to symptomatic, providing useful prognostic and etiologic information to enhance symptom-based assessment. The HiTOP conceptualization of psychotic disorders is consistent with staging models and clinical high-risk approaches, describing spectra where people may progress from subthreshold vulnerability to symptoms. Overall, structural research suggests that schizophrenia, schizophreniform disorder, schizoaffective disorder, and schizotypal and paranoid personality disorders reflect elevations on both the thought disorder and detachment spectra. The remaining psychotic disorders are found to be linked specifically to the thought disorder spectrum, while avoidant and schizoid personality disorder are linked exclusively to the detachment spectrum (Kotov et al., 2020).

The HiTOP model offers reconceptualization of psychosis and related pathology, aiming to advance the understanding of these conditions (Kotov et al., 2020; Kotov et al., 2022). It highlights that psychotic disorders are primarily influenced by two major dimensions of psychopathology, thought disorder and detachment spectra (Kotov et al., 2020; Kotov et al., 2022). The conceptualization of these two spectra agrees with established clinical observations that some individuals suffer primarily from positive symptoms, while others are largely burdened by negative symptoms (Kotov et al., 2020). Moreover, this model does not deem psychosis a required feature and can characterize individuals with prominent negative symptoms who have never been psychotic. Additionally, the HiTOP strengthens the emerging phenomena that psychosis is on a continuum with normal functioning, maladaptive traits, and subthreshold symptoms. The dimensional approach helps to understand how psychosis-related problems are distributed in the population, what processes underpin them, and how preventative interventions can be most effective (Kotov et al., 2020). Last, heterogeneity is also addressed within psychotic disorders by illuminating specific trait and symptom dimensions that represent the thought disorder and detachment spectra (Kotov et al., 2020)

Comorbidity and Differential Diagnosis

Along with the core positive and negative symptoms of schizophrenia that have been previously discussed, many individuals with this illness experience comorbid diagnoses. First, substance use disorder is the most common differential diagnosis to schizophrenia or comorbid disorder (i.e., an individual may have both schizophrenia and a substance use disorder) (Corty et al., 1993). Regarding differential diagnosis, substance use disorders make it extremely difficult for a clinician to provide an accurate diagnosis,

especially if the substance abuse is covert, denied, or not reported truthfully (Corty et al., 1993). Psychoactive substances such as alcohol, marijuana, cocaine, and amphetamines, can produce symptoms that mimic symptoms of schizophrenia, such as hallucinations, delusions, and social withdrawal (Schuckit, 1995). In such cases when substance use is involved, it is most appropriate to diagnose a substance-induced psychotic disorder. Complicating matters further, the use of substances can exacerbate previously existing psychotic symptoms and potentially lead to a return of acute psychosis (Combs et al., 2018). In individuals with a history of substance abuse, schizophrenia can only be diagnosed by examining the individual's functioning during sustained periods of abstinence of drugs and alcohol (APA, 2013). However, it is often uncommon for persons with schizophrenia to have such periods of abstinence, thus making it quite difficult to confirm or rule out a diagnosis (APA, 2013). Moreover, substance use disorder is the most common comorbid diagnosis for individuals with schizophrenia (Schuckit, 1995). Substance use can worsen the overall clinical course and prognosis of schizophrenia; therefore, recognition and treatment of the substance abuse component are crucial intervention goals (Combs et al., 2018). Substance use disorders are associated with several different negative outcomes in schizophrenia including incarceration, homelessness, violence, and suicide (Bjorn, 2018). Various models have been proposed to explain the connection between substance abuse and schizophrenia, though the field remains undecided as to why such comorbidity occurs (Schuckit, 1995).

Major mood disorders, specifically, bipolar I with psychotic features and major depression, overlap with schizophrenia more prominently than any other psychiatric disorder (Combs et al., 2018). Concerning differential diagnosis, mood symptoms are

frequently present in all phases of schizophrenia (prodrome, acute, and remission), whereas psychotic symptoms may be present in individuals with severe mood disorders (APA, 2013). Determining whether psychotic symptoms are present in the absence of mood symptoms is fundamental in making a differential diagnosis between schizophrenia and major mood disorder (APA, 2013). For example, it is common for people with bipolar disorder to experience hallucinations or delusions during a manic episode, but these symptoms should remit once their mood becomes stable again. Likewise, individuals with major depression may experience hallucinations or delusions during a severe depressive episode which typically subsides as their mood improves. If there are no sustained periods of stable mood, it may be difficult or impossible to establish a diagnosis of schizophrenia.

Empirical research has revealed that the prevalence of posttraumatic stress disorder (PTSD) in individuals with schizophrenia or severe mental illness is substantial (Grubaugh et al., 2011). Further, psychotic disorders such as schizophrenia are conceptually consistent with diathesis-stress models of psychopathology which assumes that most forms of serious mental illness have both a genetic/biological component, as well as an environmental component (Mueser et al., 2002). That is, an individual's biological susceptibility or symptom severity can be strongly influenced by environmental factors. Considering this model, exposure to a traumatic event would constitute an extreme stressor, exacerbating the expression and severity of a serious mental illness (e.g., schizophrenia). There is also some evidence to suggest that psychotic episodes themselves may qualify as a traumatic event, initiating the development of PTSD in individuals with schizophrenia (Grubaugh et al., 2011). Nonetheless, individuals

with serious mental illness are at higher risk for exposure to trauma, PTSD, and other trauma-related mental health problems (Grubaugh et al., 2011).

Cultural Considerations

Schizophrenia is among the world's top ten causes of long-term disability with about 1% of the population being affected (similar rates are seen across different countries, cultural groups, and sexes; Mueser & McGurk, 2004). The prevalence of schizophrenia is the same across sexes, however, women tend to have a later age of onset than men and a less severe course of illness (e.g., fewer hospitalizations and better social functioning). Specifically, schizophrenia has been found to develop between the ages of 16 and 30 with a slightly earlier age of onset for men (Eranti et al., 2013). Further, the later onset for women as been associated with better prognosis. Generally, due to the onset of schizophrenia being during early adulthood (a time when important educational, social, and occupational milestones are often achieved), individuals with this disorder are less likely to complete higher education and more likely to have issues with work-place performance (Combs et al., 2018).

Furthermore, epidemiologic evidence from several studies reveals that schizophrenia and other psychotic disorders are among the most common psychiatric disorders among homeless people and are associated with a greater risk of comorbid physical disease, substance use, and disability as well as mortality from different causes (Ayano et al., 2019). Accordingly, schizophrenia is associated with a significantly increased risk for self-injurious and suicidal behaviors. That is, suicide attempts and suicide completion are one of the largest contributors to the increased morbidity and mortality rates in schizophrenia, respectively (Ayano et al., 2019). Hettige et al. (2017)

reported that immigrant and minority populations have an increased risk for developing schizophrenia, suggesting that social factors play a vital role in the pathology of this condition. Previous research suggests that the immigrant population are at a higher risk of developing schizophrenia and suicidal behaviors. Identifying a risk for suicide attempt that is due to factors associated with immigration and ethnicity can help clinicians pinpoint prevention efforts (Hettige et al., 2017).

Another important consideration is the stigmatization of a schizophrenia spectrum diagnosis. Wüsten and Lincoln (2021) emphasize that stigmatizing family attitudes have a negative influence on the course of treatment for individuals living with schizophrenia and is a major barrier on recovery. Moreover, the role of the family as a stigmatizing agent is especially important due to the family playing a crucial role in providing care for the individual, especially in low-middle-income families where there is limited access to mental health services (Wüsten & Lincoln, 2021). It is important that mental health professionals work diligently to reduce the stigma associated with serious mental illness such as schizophrenia spectrum disorder.

Section II: Prevalence of Schizophrenia in Crime and Violence

Schizophrenia, Crime, and Violence

There is a discrepancy in the research regarding the prevalence of crime in individuals diagnosed with schizophrenia. While much of the literature suggests that only a minority of individuals with schizophrenia commit violent crimes, and that the total number of crimes committed in society by individuals with severe mental illness (such as schizophrenia) is low (some studies report a small, but statistically significant relationship) (Bo et al., 2021; Douglas et al., 2009; Swanson et al., 2006; Short et al., 2013). According to Heinrichs and Sam (2012), criminality, interpersonal conflict, violence, and dangerousness have been found to be associated with schizophrenia in the public mind despite a low prevalence of these behaviors in people with the illness and evidence that they are more likely to be victims than perpetrators of crime. Nonetheless, several population cohort and meta-analytic studies over the past three decades have reported that violent offenses in schizophrenia were about 7 times higher than the general population, and those with schizophrenia were 7 times more prone to display violent behavior compared with people without a severe mental illness (Bo et al., 2021). Further, recent reviews, meta-analyses, and empirical reports have found small, statistically significant associations between psychotic disorders (including schizophrenia), and both violent and non-violent criminal offences, arrest rates, and police contacts (Douglas et al., 2009).

Of note, specific violence risk instruments such as the Historical Clinical Risk Management-20, Version 3 (HCR-20-V3; Douglas et al., 2013) assesses for historical and current psychosis as major risk factors for violence (Warren et al., 2005). That instrument

provide a comprehensive set of professional guidelines which allows evaluators to determine the presence of 20 key violence risk factors and their relevance to a specific client. The literature suggests researching specific factors that have been shown to increase the risk of offending in this population to advance the knowledge base/understanding of this phenomenon. Bo et al. (2021) found that criminal behavior in schizophrenia has been linked to several putative risk factors including the pathology of schizophrenia itself, symptomatology (e.g., hallucinations and delusions), comorbid psychiatric conditions such as personality disorders (PDs) and substance abuse, intellectual and cognitive dysfunctions, criminogenic factors such as arrest history, and sociodemographic risk factors.

Besides linking schizophrenia with the risk for violence and crime, evidence also points to a relationship between violence and specific psychotic symptoms. Hallucinations and delusions seem to incrementally account for much of the violence and offending in schizophrenia (Bo et al., 2021). Moreover, the results of a survey including 1,410 people with schizophrenia showed that positive symptoms, specifically those underlying persecutory ideations, were associated with increased proclivity to exhibit violent behavior (Swanson et al., 2006). Remarkably, findings from this study also suggested that negative symptoms could have a moderating effect on the association between positive symptoms and the occurrence of violence, such that positive symptoms accounted for a significant increase in violence only when the level of negative symptoms were low (Swanson et al., 2006). Another study by Short et al. (2013) found that schizophrenia patients were more likely than controls to have a record of offending and criminal violence as well as significantly more likely to have been subject to a

restraining order or involved in family violence incidents in which the police were involved. Those results provided further evidence to suggest that partners and family members may be particularly likely to experience violence and that violence in patients with schizophrenia extends beyond behavior, resulting in criminal conviction (Short et al., 2013).

Regarding other sociocultural factors, Heinrichs and Sam (2010) found that younger age, frequent address changes, residential instability, and poor social functioning predicted crime-related indicators. Similarly, Fischer et al. (2008) found that homelessness predicted increases in non-violent and violent crime in people with psychotic and mood disorders. Moreover, the high proportion of males in the schizophrenia population may contribute to the relative frequency of crime-related behaviors (Krakowski & Szobor 2004). But perhaps the most powerful context variable is co-existing substance abuse. Although, the literature in this domain is also quite conflicted with some studies supporting and others refuting the relationship. For example, Short et al. (2013) discredited the notion that the increased prevalence of violence in schizophrenia can be solely attributed to substance misuses. That is, even patients without a known substance use disorder were still significantly more likely to behave violently than the general community (Short et al., 2013). In summary, previous research identifies an unresolved relationship between schizophrenia and violence/crime. However, uncertainty remains as to which of the multitude of identified risk factors best account for this relationship.

Command Hallucinations, Crime, and Violence

Empirical literature on the relationship between hallucinations and violence is scarce, inconsistent, and mainly concentrated on the role of command hallucinations. The impact of auditory command hallucinations on the behavior of individuals living with schizophrenia appears to be unpredictable. Therefore, it is important to first understand the prevalence of these command hallucinations. Studies suggest that between 30-50% of psychiatric inpatients not only experience auditory hallucinations but describe them to be commanding in nature (Rogers et al., 2002). Indeed, it is recommended to interpret these findings with caution due to some patients being hesitant to disclose the presence of commanding aspects to hallucinatory experiences to clinical staff (Alastair et al., 2006). Specifically, in forensic populations, there is a concern that reporting of command hallucinations may represent a form of malingering by criminal defendants (Resnick & Knoll, 2018), or that disclosure may result in longer detention.

Case reports have suggested a significant association between auditory command hallucinations and a range of dangerous behaviors. Some of these reported dangerous behaviors include self-inflicted injuries, sexual assault, self-mutilation, and suicidal and homicidal ideation (Alastair et al., 2006). However, this body of literature also remains inconsistent and uncertain as to the rate of compliance with these hallucinations as well as whether content or belief factors play a stronger role in the patient's relationship with the voices. It may be important for future research endeavors to focus on compliance to better understand how command hallucinations impact patients' decision-making processes and proclivity to enacting violent behaviors.

Section III: Criminal Responsibility and The Insanity Defense

History of Insanity Defense and Evolution of Legal Standards

In nearly all jurisdictions, the Anglo-American legal system includes what is commonly referred to as the “insanity defense” (Ewing, 2008). Otherwise known as criminal responsibility, the insanity defense is arguably one of the most controversial doctrines in criminal law. When successful (which is a rarity), a defendant who has committed a criminal act, is deemed not guilty and may not be punished. Though, such defendants are almost always required to undergo mental health treatment and are deprived of their freedom during such time. That is, defendants found not guilty by reason of insanity are frequently confined by the state for periods of time much longer than what they might have served had they been found guilty of the crime of which they were charged. For these reasons, professionals involved in the legal system often debate this defense (Ewing, 2008). In most cases, there are two key elements that the prosecution must prove for a defendant to be found guilty. These include *mens rea* (intention/mental capacity to commit a crime) and *actus reus* (physical act of the crime) (Roesch et al., 2010). Supporters of the insanity defense note that this doctrine is fundamental to our system of justice as it prevents the punishment of individuals who suffer from serious mental illness and consequently cannot fairly be held responsible for their criminal acts. It is for this reason that the insanity defense remains honored, despite its history of being subject to judicial and legislative tinkering. On the other hand, critics of the insanity defense note that this defense is subject to many abuses, rarely living up to the lofty ideals it is intended to advance. For example, in practice, the legal result of an insanity defense is unpredictable, often appears subjective or unreliable, and frequently

seems focused more on who the defendant is, what his/her crime was, what lawyer represented him/her, what witnesses testified against him/her, and what jury judged him/her, rather than the mental status and criminal responsibility of the defendant. The general public appears to evaluate the insanity defense with great skepticism and sees it as a legal loophole by which criminals avoid or minimize punishment (Roesch et al., 2010). Nonetheless, the question of how criminal law should deal with mentally ill offenders has provoked controversy for centuries and continues to be one of the most debated doctrines of all time (Ewing, 2008).

Dating back to the 14th century, English law recognized that it was morally unethical to punish someone whose mentality did not allow them to understand the difference between “good and evil” (Michael Perlin, 1994, as cited in Ewing, 2008). By the 1720s, the courts had developed a standard of insanity that forbade criminal punishment of “a mad man...a man that is totally deprived of his understanding and memory, and doth not know what he is doing, no more than a brute or a wild beast” (Michael Perlin, 1994, as cited in Ewing, 2008). However, modern insanity law refers most directly to the 1843 English Supreme Court case of Daniel M’Naghten (Ewing, 2008). Specifically, Daniel M’Naghten shot and killed a man named Edward Drummond, who he mistakenly believed was the Prime Minister, Robert Peel. M’Naghten was found not guilty by reason of insanity, provoking anger from the queen and clarification of the law. Refinement of the law led to the development of the M’Naghten Standard which included two “prongs” – (1) inability to know the nature of and quality of the act and (2) inability to know that the act was wrong. That is, these “prongs” have been referred to as cognitive incapacity and moral incapacity. While controversial, this standard (or some

variation of it) is still the law in most American jurisdictions (Ewing, 2008). In the United States, the sole emphasis on cognitive impairment of the M’Naghten test was balanced by the development of the “irresistible impulse” test in the 1887 *Parsons v. State* and 1897 *Davis v. United States* decision. The *Davis* case stated that a defendant would be considered insane if “though conscious and able to distinguish between right and wrong...his will...has been otherwise than voluntarily so completely destroyed that his actions are not subject to it but are beyond his control.” The irresistible impulse test has been rejected by many jurisdictions with none using it solely. However, it is combined with the M’Naghten test as the legal standard in many states in the U.S. The M’Naghten test and/or its derivatives is frequently referred to as the “cognitive prong” of these two-pronged insanity standards. Whereas the irresistible impulse test and/or its derivatives is often referred to as the “volitional prong.”

The Durham or “product” test was proposed in 1954 by Judge Bazelon of the U.S. Court of Appeals (Stafford & Ben-Porath, 2002). This insanity standard stated that “an accused is not criminally responsible if his unlawful act was the product mental disease or mental defect.” The broader, more open-ended nature of this insanity standard was hoped to encourage psychologists and psychiatrists to testify more fully about their observations and findings, providing the judge with more scientific information to consider in making the ultimate legal decision. Nonetheless, experts continued to testify in a conclusory manner, giving opinions about criminal responsibility without presenting data and reasoning. In fact, this issue remains as a concern today. The Durham test was overturned and replaced by the American Law Institute (ALI) test (1962). In the wake of the exoneration by reason of insanity of John Hinckley in the attempted assassination of

President Reagan, there was public clamor for the reformation of the insanity standard and/or for the abolition of the defense all together. Thus, Congress responded with the Insanity Defense Reform Act of 1984, which is the current applicable standard in all federal jurisdictions (U.S. Code Section 20). The Insanity Defense Reform Act adopts a large portion of the M’Naghten standards. However, some major changes involved eliminating, the volitional prong (irresistible impulse test) of the test, adding the qualifier “severe” to “mental disease or defect,” establishing that the defendant has the burden of proving the defense of insanity by clear and convincing evidence, and placing the burden of proof on the NGRI acquittee to demonstrate that his or her release would not create substantial risk of bodily injury or serious property damage, due to a present mental disease or defect (Stafford & Ben-Porath, 2002).

Additionally, a new rule, Rule 704(B), was added to the Federal Rules of Evidence, barring expert witnesses from stating “whether the defendant did or did not have the mental state or condition constituting an element of the crime or of a defense thereto (Stafford & Ben-Porath, 2002).” That is, expert witnesses are not permitted to speak to the legal opinion; rather, they must only provide expertise about their mental state. In other words, this change was designed to prevent expert witnesses from giving an opinion about the ultimate legal issue to be decided by the judge or jury, regardless of if the defendant is sane or not (Stafford & Ben-Porath, 2002).

Psychological and Psychiatric Expertise

It is a common misconception that the insanity defense is a psychological or psychiatric concept (Ewing, 2008). In fact, it is and always has been a legal notion, pre-dating the inception of psychology and psychiatry as professional disciplines. However,

by the 19th century, the mental health fields began to play an integral role in the application of the insanity defense. In today's time, although it is not required by law, expert psychological/psychiatric testimony is a staple in nearly all insanity trials. Even in cases that do not go to trial, most all defendants contemplating an insanity defense will be examined by one or more mental health professionals whose input will help determine whether the plea will be offered and/or opposed by the prosecution. Psychological and psychiatric experts have a nearly guaranteed role in the administration of the insanity defense. Indeed, all insanity laws, whether rooted in M'Naghten or the ALI standard, require first and foremost that the defendant be suffering from a mental disease or defect. Yet, the terms "mental disease" and "mental defect" often have not been defined by the law. For example, the terms are undefined in federal law and maintain that the court not impinge upon the jury's interpretation of competing psychiatric definitions. Therefore, although the final determination of insanity is generally left to the jury, in most cases, mental health experts are free to utilize their own definitions of what constitutes a mental disease or defect. There is still controversy on this issue even within the mental health field. Nonetheless, in most cases, when mental health experts speak of "mental disease," they equate that term with mental illness. On the other hand, when they speak of "mental defect," they mean an intellectual disability or some other disabling developmental disorder (Ewing, 2008). In today's time, while not legally required, most mental health professionals rely upon the Diagnostic and Statistical Manual of Mental Disorders (DSM), published by the APA (APA, 2013).

Brief Review of Forensic Mental health Assessment

Over the last 25 years, the fields of forensic psychology and psychiatry have grown substantially. The term “forensic,” refers to professional activities related to law and legal decision making. Forensic mental health assessment (FMHA) is currently conducted by mental health professionals on a variety of criminal, civil, and juvenile cases (Heilbrun et al., 2009). Currently, there are two ways to define FMHA. The first definition identifies FMHA according to its domains of assessment, and the second is based on distinguishing FMHA from general clinical mental health assessments. Dictionaries define “forensic” as “pertaining to or employed in legal proceedings or argumentation” (Heilbrun et al., 2009, p.11). Therefore, FMHAs are assessments that are used in legal proceedings. Traditionally, a forensic assessment should be guided by the specific legal question facing the legal decision maker. For all FMHAs, the examiner performing the assessment must know the relevant law within the jurisdiction in which the assessment is being administered, as well as the legal question at hand. They then will determine the relevant data to answer that specific legal question and develop an assessment procedure that is specifically designed to obtain that data. In other words, the legal issue forms the “referral question” for a forensic assessment which is often quite different from referral questions in general clinical practice. Typically, general clinical assessments focus on diagnosis and intervention formulation. Whereas forensic assessments focus on helping the court decide whether an examinee has certain capacities, abilities, or behavioral tendencies that must be understood in order to decide how to resolve the legal question (Heilbrun et al., 2009).

Understanding the fundamentals to FMHA has important implications for professionals working in the field. For starters, it takes knowledge and experience to translate the law's definitions of relevant human abilities/conditions into concepts that are amenable with psychological and psychiatric practice (Heilbrun et al., 2009). Second, the relationship between the examiner and the examinee is much different from that of the clinician assessing a client or patient. General clinical assessment occurs within the context of doctor-patient relationship directed toward the best interest of the client/patient. In FMHA, the examiner's primary allegiance is to the legal process and its decision makers (i.e., the judge), not the examinee or defendant. A third difference between forensic and clinical assessments has implications for communicating assessment results. While clinical assessments are geared towards informing other clinicians, forensic evaluations must inform non-clinicians who need the information translated for use in a non-clinical context. Therefore, FMHA results must be interpreted and described in markedly different ways than clinical evaluations (Heilbrun et al., 2009).

According to Heilbrun et al. (2009), the term "mental health" distinguishes FMHAs from other subfields of forensic science. In the forensic field, assessments such as hair, skin, and DNA samples are performed to examine various forensic evidence. However, the term "mental health" is used to separate psychological and psychiatric assessments from other types of forensic assessment. FMHAs include assessment of various mental states, psychological constructs, personality characteristics, and behavioral predispositions that are relevant for legal questions regarding human behavior (Heilbrun et al., 2009).

Lastly, the term “assessment” anchors FMHA in scientific and clinical methods (Heilbrun et al., 2009). Although general clinical and forensic assessment have very different referral questions, they share a methodological approach rooted in the essentials of “assessment.” Some of these systems involve reliance on objective observation, theoretical support, and empirical research. Considering the gravity of the legal decisions for which FMHAs provide guidance, examiners and the assessments themselves must operate at a much higher standard than in general clinical practice.

Principles, Specialty Guidelines, and Ethical Considerations

Over the past 50 years, forensic psychological practice has expanded considerably. Because the practice of forensic psychology differs in important ways from more traditional clinical practice, the Ethical Principles of Psychologists and Code of Conduct (American Psychological Association, 1992) contains a section on forensic activities that is pertinent to assessment of criminal responsibility. These guidelines are better known as the “Specialty Guidelines for Forensic Psychologists,” and are intended to provide detailed standards to consider in making informed decisions about difficult areas of forensic practice (See Table 1 in Appendix A). Specifically, the goals of the Specialty Guidelines for Forensic Psychology are to improve the quality of forensic psychological services, encourage high-level quality in professional practice, and encourage forensic practitioners to acknowledge and respect the rights of those they serve (American Psychological Association Specialty Guidelines, 2012). Within these guidelines, the term forensic psychology refers to “professional practice by any psychologist working within any subdiscipline of psychology (e.g., social, cognitive, developmental) when applying the scientific, technical, or specialized knowledge of

psychology to the law to assist in addressing legal, contractual, and administrative matters” (American Psychological Association Specialty Guidelines, 2012). In addition to these specialty guidelines, the section on general principles in the APA Ethics Code defines five aspirational goals of which psychologists should strive to meet in their practice, teaching, and research. A complete list of these principles can be found in Table 2 of Appendix B.

One of the most basic ethical concerns regarding forensic assessment involves recognizing that the ultimate decision is a legal, moral, or social policy issue to be determined by the trier of fact, rather than a psychological dispute. Psychologists are asked to address only aspects of the ultimate legal issue to which some degree of expertise can be applied (Stafford & Ben-Porath, 2002). Nonetheless, it is important to consider the limitations in applying our scientific knowledge to the assessment of “mental state at the time of the offense.” Specifically, there are two particularly important aspects of this practice that warrant further elaboration: (1) the obligation of practitioners to prevent their personal values from affecting their professional conduct, and (2) the professional responsibility of forensic psychologists to resist expectations or demands of attorneys that may counter psychology’s ethical principles and standards (Weiner & Hess, 2014). First, the ethics code calls psychologists to be cognizant of how their values as well as their limitations might affect their work. Forensic practitioners must be conscientious in how they present the factual bases of their opinions and their level of certainty about their inferences. They must also be sensitive to the possible impact of their personal needs and beliefs on their interpretation of the data. It is unrealistic to think that experts will conduct their professional affairs completely free of biases derived from

their values; of course, forensic practitioners are entitled to their own personal beliefs. Nevertheless, they must strive to remain objective and neutral when working on their cases. Second, forensic practitioners have to take responsibility for resisting attorney expectations and/or demands that reflect adversarial aspects of the judicial system (even if they fall within the boundaries of the law) that are not consistent with practicing principled forensic psychology. That is, forensic psychologists have no professional obligations to either party in the case (attorney or attorney's client) other than to conduct a competent evaluation and report their findings honestly, clearly, and accurately (Weiner & Hess, 2014).

Assessment of criminal responsibility or "mental state at the time of the offense" is controversial (Stafford & Ben-Porath, 2002). Some individuals argue that reconstructing a defendant's past psychological functioning is nearly impossible to do with scientific precision. Others believe that regardless of mental illness, individuals are capable of behaving rationally and normally when there are incentives to do so. Because the nature of this defense is so nuanced, mental health professionals are asked to contribute knowledge beyond that of laypersons. In addition to the assessment needing to be based on professional expertise, a second major ethical issue to be considered is, who is the client? The psychologist is required to clarify his or her role of the defendant and inform the defendant of the level of confidentiality that applies to the evaluation regardless of if they are retained by the defense or the prosecutor. In some jurisdictions, the defense-retained expert may be covered by the attorney-client privilege and the evaluation is privileged as part of the attorney's work product. However, other courts have ruled that raising the insanity defense constitutes a waiver of privilege regarding

psychological records. Therefore, it is important to clarify with the attorney the exceptions to confidentiality that may arise and to inform the defendant of these limitations before proceeding with the evaluation (Stafford & Ben-Porath, 2002).

Weiner and Hess (2014), summarize the ethical principles of forensic psychology ethically:

1. Generally, adhere to the Ethics Code and attend to particular ethical principles and standards (e.g., the Specialty Guidelines for Forensic Psychology) that offer specific implications for providing forensic services.
2. Be sure to offer services that reflect competency achieved through knowledge, skills, education, training, and experience, and hold consistency over time.
3. Be familiar with terminology, concepts, practices, and standards common in the legal community as well as acquainted with the regulations, statutes, and procedures in the state of which you are practicing.
4. Prepare accurate and detailed records that are stored securely and retained for the length of time specified by state requirements.
5. Be mindful of the role of a forensic psychologist which may differ from what attorneys' clients expect and be sensitive to conflicts of interest that could compromise principled practice.
6. When confronting unfamiliar matters, consult with a respected colleague or mentor.

Assessing Criminal Responsibility

In forensic psychological evaluations, it is common for the same evidence to be interpreted differently by different experts (Scarpazza et al., 2021). Moreover, it is even more common that different experts will come to different legal conclusions or diagnoses based off the same data. This is specifically evident in assessing for criminal responsibility, which is frequently requested in criminal courts to evaluate an individual's mental state at the time of an alleged offense (Scarpazza et al., 2021). Forensic psychologists and psychiatrists are often depended upon by the criminal justice system to provide these evaluations, which require a high degree of training and expertise (Knoll & Resnick, 2008). For the purposes of standardization and promotion of evidenced-based evaluations, there have been several different guides proposed to help aid in the assessment of criminal responsibility.

First, Knoll and Resnick (2008), thoroughly discuss moving toward a model of evidence-based practice in clinical forensic evaluations. Provided are primary objectives that have been cited as fundamental and generally accepted goals for forensic evaluators: (1) Educate the court, (2) clarify psychiatric issues, (3) be honest and objective, (4) strive for accuracy, (5) offer opinions based on factual data and sound reasoning, (6) readily acknowledge limitations. Additionally offered, is a brief list of recommended procedures for conducting these types of evaluations (see Table 3 in Appendix C).

In 2002, the American Academy of Psychiatry and the Law published Practice Guideline for Forensic Psychiatric Evaluation of Defendants Raising the Insanity Defense (AAPL, 2002). This guideline was developed as a review of legal and psychiatric factors to give practical guidance in the performance of insanity defense evaluations conducted

by psychiatrists and other clinicians who are working in a forensic role. The AAPL task force (2002) begins by introducing the history of the insanity defense and providing an overview of legal standards. Next, issues of voluntary and involuntary intoxication are discussed, illuminating the impact that use of substances has on these types of evaluations. Non-traditional mental conditions such as PTSD, automatism, dissociative identity disorder, impulse control disorders, intermittent explosive disorder, pyromania, gambling disorder, paraphilic disorders, and battered woman syndrome are covered due to the expansion of psychiatric diagnostic categories that may justify an insanity acquittal. Of course, a discussion of agency relationships helps to provide guidance on navigating interactions with the courts system and attorneys involved in a particular case. The next topic covered in these guidelines is a review of ethical standards. Forensic interviewing, collateral data, the forensic report, and the forensic opinion conclude these guidelines by challenging practitioners approaches to analyzing case data and providing comprehensive, evidenced-based evaluations (AAPL, 2002). For a comprehensive list of the topics discussed in these guidelines see Table 4 in Appendix D.

Additionally, Stafford and Ben-Porath (2002) formulated a set of 12 questions to guide the clinician in conducting a criminal responsibility evaluation (See Table 5 in Appendix E). This model can be referenced in conceptualizing the clinical/forensic case study in Section V. The first question involves defining the referral question and relevant legal standard that the clinician is being asked to address. At this point, the professional should obtain a copy of the statute or case law that includes the legal standard for the jurisdiction in which the defendant is being tried. This must happen prior to the start of the insanity evaluation. Second, the psychologist must identify the client and clarify the

level of confidentiality, if any, that applies to that particular evaluation. Third, once the examiner has clarified these issues, the defendant must be informed, verbally, and in writing, of the limits to confidentiality and relationship between examiner and defendant. It is also the role of the examiner to determine whether the defendant understands his or her legal situation and the purpose of the evaluation. If it is suspected or known that the defendant does not understand the nature and/or purpose of the evaluation, then it should proceed no further until he or she has had the opportunity to deliberate with the defense counsel. Although competency to stand trial may not be the direct psycho-legal question, the examiner must roughly assess the defendant's ability to understand the nature of the court proceedings and to work with his or her defense counsel. Fourth, prior to interviewing the defendant, the examiner should obtain as much information about the facts of the case as possible. This may be police reports, witness statements, interview transcripts, medical or mental health treatment record, etc. Collateral information can provide particularly useful data about the defendant's thinking and behavior around the time of the offense.

Fifth, sixth, and seventh, once the examiner has gained adequate background information and clarified the logistics of the evaluation procedures, the examiner is in a good position to begin interviewing the defendant for their accounts of events at the time. It is imperative to collaboratively explore the defendant's thoughts, feelings, mood, and behavior before, during, and after the alleged offense(s). The defendant's perception of these internal and external occurrences needs to be covered in as much detail as possible over multiple instances. Should there be inconsistencies with the defendant's account and

other available collateral information, the examiner may engage in mild confrontation and clarification (Stafford & Ben-Porath, 2002).

The eighth step involves inquiry about the defendant's use of drugs or psychoactive substances (Stafford & Ben-Porath, 2002). Voluntary intoxication is generally not considered a mental disease or defect for the purposes of the insanity defense. However, pathological intoxication is an uncommon disorder that may affect mental state at the time of the offense. In states California and Colorado, case law on the notion of "settled insanity" (mental impairment persisting after the acute effects of a drug have worn off) has been developed that may qualify the defendant for the insanity defense (People v. Kelly, 1973; People v. Bieber, 1992). Due to the well-documented statistical relationship between alcohol, drug abuse, and violence, it is crucial to obtain a clear, detailed, substance abuse history from the defendant and collateral sources. Of note, drug testing and medical records near the time of the alleged offense(s) can be very useful to corroborate this information as well (Stafford & Ben-Porath, 2002).

Ninth, psychological testing is another important source of data for criminal responsibility evaluations (Stafford & Ben-Porath, 2002). There have been many objections raised about the routine use of psychological tests for the assessment of mental state at the time of the offense because they have not been validated specifically for that purpose. One argument is that psychological testing measures an individual's current or present level of functioning not past (Melton et al., 1997). Nonetheless, selective use of psychological testing can be a useful tool in clarifying diagnoses, assessing long-standing psychopathology, measuring levels of cognitive functioning, and providing data about the defendant's response style. Some of the most common measures of personality and

psychopathology in forensic evaluations include the Minnesota Multiphasic Personality Inventory-2-Restructured Form (MMPI-2-RF; Ben-Porath & Tellegen, 2008), Minnesota Multiphasic Personality Inventory-3 (MMPI-3; Ben-Porath & Tellegen, 2020), and the Personality Assessment Inventory (PAI; Morey, 1990, 2007). These measures are primarily clinical assessment instruments, providing information about the scope and severity of a variety of psychological problems. Yet, they are often used in a variety of non-clinical and forensic evaluation contexts (Ben-Porath, 2013). For example, tests like the MMPI-3 can tackle the issue of malingering in criminal responsibility and competency to stand trial evaluations by providing data on how the defendant approached the test, which can further provide information about how the overall evaluation was approached (Sellbom et al., 2022). While these measures do not provide direct answers to legal issues such as insanity or competency to stand trial, the extensive empirical support for these instruments does provide other relevant information that can be used to inform the court's decision, such as personality characteristics, behavioral tendencies, and psychological symptoms and functioning (Ben-Porath, 2013; Douglas et al., 2001; Ferguson & Ogloff, 2011).

Tenth, due to the serious consequences at stake for the defendant should they be convicted of the crime(s) in question, he or she may have considerable incentive to exaggerate or fabricate symptoms of psychopathology (Stafford & Ben-Porath, 2002). Hence, it is always necessary to rule out the possibility of malingering when conducting insanity evaluations. The term “malingering” appears to emerge from a late eighteenth century French idiom (*malingrer*) meaning either “to suffer” or “pretend to be ill” (Online Etymology Dictionary, 2021). Modern connotations typically reflect more incriminating

and pejorative nuance. The DSM-5 describes Malingering as “the intentional production of false or grossly exaggerated physical or psychological symptoms, motivated by external incentives such as avoiding military duty, avoiding work, obtaining financial compensation, evading criminal prosecution, or obtaining drugs” (APA, 2013, p.726). The most effective means for assessing malingering is to gather data from multiple sources. For example, it is recommended to interview the defendant on more than one occasion, exploring inconsistencies in self-report over time, and comparing self-reports with third party information (Stafford & Ben-Porath, 2002). Psychological testing such as the MMPI-2-RF and PAI validity scales, the Test of Memory Malingering (TOMM; Tombaugh, 1996), Miller Forensic Assessment of Symptoms Test (M-FAST; Miller, 2001), and the Structured Interview of Reported Symptoms, 2nd Edition (SIRS-2; Rogers et al., 2010) assess malingering of psychological impairments, effort, and response styles. Such measures assess for feigned symptom presentations such as, inconsistencies between reported and observed symptoms, exaggerated presentations of symptoms, and combinations of symptoms that are inconsistent with genuine psychopathology (Resnick, 1999; Wygant et al., 2022). Methods including structured interviews, memory tasks, and self-reports yield scores indicating genuine or feigned responses (Resnick & Knoll, 2018). Listed above are just a few of the most common and empirically supported measures used in the field. Defendants that are more unsophisticated sometimes exaggerate symptoms due to anxiety about their legal situation. However, many of these defendants will provide more genuine responding should they be mildly confronted. Should a defendant continue to fabricate or exaggerate symptoms, malingering and its

implications for assessment of criminal responsibility need to be included in the evaluation report (Stafford & Ben-Porath, 2002).

Specifically, the detection of malingered psychosis is a complex endeavor, requiring significant time, effort, a systematic approach, and consideration of multiple sources (Resnick & Knoll, 2018). In assessing for malingered psychosis in the context of an insanity defense, clinicians must determine whether they are malingering at the time of the offense only or are continuing to mangle at the time of the evaluation/court proceedings. According to Resnick and Knoll (2018), malingering should be suspected if any of the following are present:

1. A nonpsychotic, alternative motive for the crime
2. Suspect hallucinations or delusions
3. Current offense fits a pattern of prior criminal conduct
4. Absence of negative symptoms of psychosis during the evaluation
5. Report of sudden, irresistible impulse
6. Presence of a partner in the crime
7. “Double denial” of responsibility (disavowal of crime + attribution to psychosis)
8. Alleged illness inconsistent with documented level of functioning
9. Alleged intellectual deficit coupled with alleged psychosis

Overall, identifying malingered psychosis is necessary to bring accuracy to forensic assessment and prevent breeches of justice, and clinicians bear the responsibility in differentiating true psychosis from malingering (Resnick & Knoll et al., 2018).

Eleventh, an alternative, equally problematic approach to an insanity evaluation involves the denial or minimization of psychopathology by the defendant. One of the most common instances when this occurs is with defendants who have major mental disorders but lack insight into their difficulties. In this case, it is also important to utilize collateral information and psychometric data in assessing response style, documenting the extent and nature of symptomatology, and the relationship of those with their mental state at the time of the alleged offense(s). This raises ethical concerns if the defendant does not agree with the defense strategy due to an absence of discernment.

Twelfth, when it comes to diagnostic formulation, the examiner must determine whether the defendant meets diagnostic criteria for one or more mental disorders, define the severity of the disorder, and whether the symptoms of the disorder may have impaired the defendant's capacity to meet the legal standard for criminal responsibility. Finally, if the examiner suspects that the defendant was suffering from a serious mental illness at the time of the alleged offense, the examiner must consider the relationship between that disorder and the crime (Stafford & Ben-Porath, 2002).

Reliability of Legal Sanity Evaluations

Considering the controversial nature of legal sanity evaluations, it is important to consider the reliability of this work. That is, when different clinicians evaluate the same criminal defendant for criminal responsibility, do they come to the same conclusions? Due to few highly publicized insanity cases, the lay public's perception of the insanity defense is that it is overused and distrustful of the evaluation process. Specifically, the general public has expressed doubt regarding whether forensic evaluators can accurately, objectively, and reliably reach conclusions about a defendant's mental state at the time of

the offense (Gowensmith et al., 2013). This public skepticism has been proven to fail empirical scrutiny. For instance, empirical research regarding legal proceedings reveal that the insanity defense is used less often than the public perceives, and the defense is rarely “successful” even when it is called into question (Silver et al., 1994). However, there is less research addressing the clinical evaluations that underly these legal proceedings. Packer (2009) concluded:

As this review shows, the practice of [legal sanity] evaluations does not have as much empirical support as would be desirable. The problem is not that research challenges the value of [legal sanity] evaluations, but that too little research has been done (p. 76).

The scarce empirical base on sanity evaluations is understandable considering the study of an individual’s mental state at the time of an offense can be quite challenging to reconstruct. However, this gap in the research is problematic because we have limited knowledge regarding the complex process of evaluating a defendant’s legal sanity. Afterall, an inaccurate sanity opinion can create at least two serious issues: a sincerely insane/mentally ill defendant could lose the opportunity to explain they were not criminally responsible for a crime caused by psychiatric illness, or a truly sane defendant could be acquitted, bypass the correctional system, and disturb a psychiatric hospital with limited treatment resources. Still, most systems seem to assume evaluators are interchangeably reliable and others rely on a single evaluator’s opinion. Hence, the big question remains; how reliable are insanity evaluations and the evaluators conducting them?

Several studies attempt to provide data of legal sanity evaluations, however, few of them provide data that reflects the reliability among forensic practitioners in more contemporary practice (Gowensmith et al., 2013). That is, most studies are either specific to one forensic instrument or they relied solely on a brief written vignette of a defendant (Gowensmith et al., 2009). Through a meta-analytic review, Guarnera and Murrie (2017) examined the field reliability of competency and legal sanity opinions using eight empirical studies that examined the interrater reliability of these evaluations. Results showed a moderate level of field reliability across evaluators. While these reported reliability estimates are in the range we may reasonably expect, it does not preclude attempts to improve in the field.

Overall, assessing for criminal responsibility/insanity is arguably one of the most challenging forensic evaluations, especially when there is the potential presence of a schizophrenia spectrum disorder. While this combination is quite common in clinical practice, the extant literature does not provide a comprehensive look into the nuances of this relationship. While the previous sections aimed to set the foundation for understanding schizophrenia spectrum disorder and criminal responsibility evaluations, the final section functions as a real-world case example, applying some of the previously mentioned techniques and recommendations for these evaluations.

Section V: Case Study

The case study below serves as an educational tool for better understanding the assessment of criminal responsibility with a defendant who presents with Schizophrenia Spectrum Disorder.

Background Information

Adilia Okonkwo¹ was a 33-year-old African woman who was referred for a Criminal Responsibility evaluation by her defense attorney after being criminally charged with Assault 1st Degree (B Felony) in 2018. Details of the alleged criminal offense will be discussed in a later section. Ms. Okonkwo was born in Ethiopia where she resided until she was 22 years old. It was reported that her mother was 14 years old when she gave birth to Ms. Okonkwo (which is not uncommon for that region of the world). Ms. Okonkwo's parents were separated, and she was mostly raised by her mother and other relatives. She has never been married and does not possess any children. Regarding her educational history, Ms. Okonkwo graduated from both high school and college in Ethiopia prior to moving to the United States (U.S.). She denied a history of learning difficulties and was fluent in five languages including Amharic, Oromigna, English, Tigrinya, and Wolaytta. It was reported that Ms. Okonkwo moved to Louisville in 2010 after winning a "lottery." Upon arrival to the U.S., she resided with a sponsor family for some time. Ms. Okonkwo was homeless from 2013 until she moved in with a family friend (an Ethiopian woman who agreed to allow Ms. Okonkwo to live with her) in 2018. Ms. Okonkwo's employment history has primarily consisted of warehouse and packaging jobs, though she had been unemployed since 2014.

¹ Personal information has been altered to ensure the de-identification and safety of the defendant.

Mental Health History

Ms. Okonkwo had a long history of mental health challenges and diagnoses. Specifically, in 2015, Ms. Okonkwo jumped out of a second floor building seriously injuring her back, requiring a brace for nine months and a wheelchair for five. She reportedly had been hearing voices that would threaten her life if she did not conform to their commands. After this incident, Ms. Okonkwo was seen for inpatient psychiatric care where she was first diagnosed with schizophrenia. Her intake noted that she had been cited 12-13 times for trespassing around hospitals and stealing food from hospital cafeterias. She was described as having rapid speech, tangential thought processes, and grossly disorganized behavior. Upon discharge reports, her condition was described as “improved,” but she still exhibited limited insight into her trespassing charges and mental health condition. Ms. Okonkwo denied a long-acting antipsychotic injection but agreed to be compliant with her prescribed daily medication.

Ms. Okonkwo was later evaluated by the state when this current case surfaced. At that time, she was observed to be mumbling to herself and was characterized as disheveled and had evidenced poor self-care. She appeared to have bruises on her face and was uncooperative with staff. Her admission diagnoses included Unspecified Psychosis and a Rule Out for Bipolar Disorder Most Recent Episode Manic with Psychotic Features. Ms. Okonkwo was described as paranoid, disorganized, and seemed to respond to internal stimuli. Of note, she complained whenever male security staff were present near her.

Ms. Okonkwo was seen on multiple occasions for Competency to Stand Trial evaluations where she was described as “nervous, thought blocking, blunted, and

disheveled.” She remained confused about her mental health status, commenting that she did not believe she experienced any mental illness and that she would not take any medication voluntarily. Subsequent diagnoses included Unspecified Psychotic Disorder, Rule Out for Substance-Induced Psychotic Disorder, and Unspecified Personality Disorder (with Narcissistic and Borderline Traits).

Observations from Clinical Interview with Ms. Okonkwo

During a clinical interview conducted with Ms. Okonkwo, she reported that she began hearing a male voice in 2015. At the time these “voices” began, she was homeless and unemployed. She characterized the voice as a “demon” that often “possesses” her. She claimed that the “voice” insisted she refer to him as “Mr. Howard” and that he “terrifies” and “mocks” her when she prays. These auditory/command hallucinations became a daily occurrence. She portrayed these experiences as very scary, and she exhibited noticeable symptoms of anxiety when describing the voice. Indeed, her hands tensed up, balling them into fists. She also was observed to be slightly rocking in her seat. Ms. Okonkwo stated that she believes that the voice “takes my thoughts [sic].” Further, she appeared disheveled, and her cognitive functioning appeared to be hampered by these symptoms of mental illness. Due to her cultural background, Ms. Okonkwo struggled with the notion that she lives with a mental illness. A diagnosis of Schizophrenia Spectrum Disorder was given at the time of her criminal responsibility evaluation.

Standing Criminal Offense

The information provided in this section was obtained from various collateral records including but not limited to surveillance footage, bodycam footage, interviews with the defendant, police investigation reports, and interrogation footage.

According to the aforementioned accounts, Ms. Okonkwo entered a department store due to it having been raining outside. After walking around the store for some time, she ended up by the fish aquariums where she noticed a man and his partner. At that time, Ms. Okonkwo reported that she started hearing a voice, Mr. Howard, repeatedly telling her “That’s your enemy. If you don’t stop him, I am going to kill you. If you don’t stab him, this is your last day. You’re gonna die in a scary way.” Ms. Okonkwo indicated that she “argued” with the voice for about five minutes, but she eventually listened to the voice’s commands because “the voice was very scary.” According to Ms. Okonkwo, the voice (Mr. Howard) instructed her to hurt the victim or “he’s gonna cut my neck with a big knife, take out my two kidney [sic] and put them in his refrigerator. You have to stop this guy.” On the surveillance footage, it appeared that Ms. Okonkwo was talking to herself while standing alone near the victim. This persisted for several minutes leading up to when she stabbed the victim with a knife. She was seen running from the fish department, chasing the victim out of the store. An off-duty police officer witnessed Ms. Okonkwo and the victim running out of the store and persisted by pulling his service weapon and yelled, “Police, Drop the knife!” Ultimately, Ms. Okonkwo was arrested, brought to the police department, and interviewed.

Psychological Testing

During the criminal responsibility evaluation regarding the stabbing incident, Ms. Okonkwo was administered the Miller Forensic Assessment of Symptoms Test (M-FAST), a 25-item screening interview for adults that helps assess the likelihood that an individual is feigning psychiatric illness. Ms. Okonkwo received a passing score of 4/6, suggesting that she was not feigning or malingering symptoms of a mental disorder. Due

to cross-cultural concerns and language barriers, Ms. Okonkwo was not administered a measure of personality and/or psychopathology. While it could have been useful to examine Ms. Okonkwo's psychological functioning, it was predicted that the validity and reliability of the results would be hindered. Therefore, a decision was made to rely solely on the M-FAST, collateral information, a review of records, and interviews with the defendant to make final conclusions, diagnoses, and recommendations.

Clinical Summary

Ms. Okonkwo was an African woman who was referred for a Criminal Responsibility evaluation by her defense attorney after being criminally charged with Assault 1st Degree (B Felony). She immigrated to the U.S. around 2010, though it was unclear whether her mental health symptoms began prior to her coming to the U.S. Nonetheless, sometime in 2015, Ms. Okonkwo began to experience symptoms of severe mental illness, exhibiting a downward spiral, losing employment, and becoming homeless. Currently, she is residing with people from the Ethiopian community, taking her prescribed medications, and has been described as "doing better."

At the time of the alleged offense, Ms. Okonkwo maintained a marginal existence. She was mostly withdrawn and alienated from others, maintaining very few attachments with others. In terms of diagnosis, Ms. Okonkwo meets criteria for schizophrenia, a chronic psychiatric/psychological disorder characterized by significant dysfunction of thought processes that is accompanied by deficits in emotional functioning. Common symptoms of schizophrenia include auditory hallucinations, paranoid delusions, and disorganized thinking, which often leads to significant social and occupational dysfunction. Associated symptoms of schizophrenia include inappropriate

affect (e.g., flat emotions and lack of positive emotions) and dysphoric mood that can take the form of depression, anxiety, and anger. Over the past few years, Ms. Okonkwo experienced periods of decompensation, reflecting these above symptoms.

It was particularly important to consider Ms. Okonkwo's cultural heritage with respect to her mental health challenges. In many African countries (like Ethiopia), mental illness, specifically severe mental illness like schizophrenia, is considered a form of spiritual possession. During this evaluation, Ms. Okonkwo characterized the symptoms of her mental illness in this regard, describing her auditory hallucination as a demonic spirit that she refers to as "Mr. Howard." Likewise, in many African communities, people misinterpret the concept of mental illness and are cautious to talk about the topic. This lack of understanding leads many to believe that a mental health condition is a personal weakness or a punishment from God. Individuals from this region of the world may be hesitant to discuss mental health issues and pursue treatment because of the shame and stigma associated with such conditions.

Forensic Conclusion

The Kentucky Revised Statute for Criminal Responsibility §504.020 states "A person is not responsible for criminal conduct if at the time of such conduct, as a result of mental illness or intellectual disability, he lacks substantial capacity either to appreciate the criminality of his conduct or to conform his conduct to the requirements of law." The following conclusions were centered around this statute and the Kentucky Revised Statute §504.020 definition of mental illness: "Substantially impaired capacity to use self-control, judgment, or discretion in the conduct of one's affairs and social relations, associated with maladaptive behavior or recognized emotional symptoms where impaired

capacity, maladaptive behavior, or emotional symptoms can be related to physiological, psychological, or social factors.”

It was determined that Ms. Okonkwo was suffering from a serious mental illness at the time of the alleged instant offenses. This opinion was based on the following:

- Ms. Okonkwo was previously diagnosed with Schizophrenia Spectrum Disorder which is a mental condition consistent with the criteria for mental illness as defined by Kentucky statutes. That is, it causes significant impairment in behavior, emotional symptoms, and judgement. Moreover, the psychotic symptoms associated with the disorder can impair the individual’s capacity to use self-control, judgement, or discretion in one’s daily life.
- Ms. Okonkwo did not comply with discharge recommendations to seek outpatient treatment following her release from the hospital, and she was not taking any prescribed psychotropic medications at the time of the alleged offense.
- When interviewed by police, Ms. Okonkwo disclosed that she had a history of hearing “voices.” In fact, the police recognized that Ms. Okonkwo likely suffered from symptoms of mental illness and insured that she was placed on the mental health unit at the jail she was transported too.
- Ms. Okonkwo was admitted to the hospital six weeks after the alleged offense took place where she was described as “highly agitated” upon arrival. She was also observed to be responding to internal stimuli, mumbling to herself in a foreign language. Per hospital reports, Ms. Okonkwo seemed to be paranoid and disorganized.

It was determined that due to Ms. Okonkwo's mental illness at the time of the alleged offense, she lacked substantial capacity to either appreciate the criminality of her conduct and conform her conduct to the requirements of law. This opinion was based on the following:

- Ms. Okonkwo's account of the alleged offense was consistent with someone acting under the influence of an auditory hallucination.
- The nature of Ms. Okonkwo's offense was not rational. That is, she did not know the victim, nor did she obtain any instrumental gain (e.g., money, items) from her actions. Similarly, she did not harbor any malice against the alleged victim.
- Ms. Okonkwo acted under the influence of command hallucinations at the time of the alleged offense. She reported that this was the second time that auditory hallucinations in the form of "Mr. Howard" had commanded her to engage in dangerous and violent behavior, the first being when the voice reportedly told her to jump out of a window in an attempt to harm herself.
- Ms. Okonkwo did acknowledge that she "argued" with the voice for several minutes before acting on the hallucinations; however, her description did not impress as her rationally appreciating the criminality of her behavior. While she may have understood on some level that it was morally wrong to hurt another person, these thoughts were overcome by her psychotic symptoms.
- Ms. Okonkwo did not consider the consequences of her behavior at the time of the alleged offense. Instead, she was motivated by the concern that she would be hurt by the voice. That is, she felt that if she failed to follow the voice's instruction, she would be placing her own life in jeopardy. This concern along

with the emotional strength it conveyed, impeded her ability to conform her behavior to the requirements of the law.

- Ms. Okonkwo's actions at the time of the alleged offense appear to be directly influenced by her psychotic processes (e.g., auditory hallucinations and paranoid delusions). Individuals who experience intense symptoms of psychosis the Ms. Okonkwo can lack inhibition and display impulsive/aggressive behaviors.

Considerations from Table 6 (Stafford & Ben-Porath, 2002)

1. The relevant legal standard for Not Guilty by Reason of Insanity §504.020 is as follows: "A person is not responsible for criminal conduct if at the time of such conduct, as a result of mental illness or intellectual disability, he lacks substantial capacity either to appreciate the criminality of his conduct or to conform his conduct to the requirements of law."
2. The referral for this case was made by the defense, and the defendant was made aware of the limits to confidentiality prior to the evaluation. That is, Ms. Okonkwo was informed about the scope of the evaluation and that the results of this evaluation would not be confidential, since they would be summarized in a report to her attorney. She was also informed that the examiner may also be called into Court to testify about the results of the evaluation. At that time, Ms. Okonkwo was provided an opportunity to ask her attorney any questions about the extent of the evaluation and its potential use in Court, but she did not have any questions. Ms. Okonkwo provided verbal acknowledgement that she understood this lack of confidentiality and agreed to participate under these conditions.

3. Ms. Okonkwo appeared to understand her legal situation. Therefore, no reservations about her competence to stand trial were noticed. She had been previously evaluated by the state and determined to be competent to proceed to trial.
4. Records revealing the facts of the case were obtained by this evaluator and thoroughly examined prior to providing an opinion. Those included police reports, surveillance footage, medical records, body camera footage, previous competency to stand trial evaluations, photographs of the alleged crime scene, and interrogation reports.
5. During the interview, Ms. Okonkwo's account of the alleged offense was clearly that of someone acting under the influence of serious mental illness. That is, Ms. Okonkwo was experiencing threatening command hallucinations which disabled her to consider the consequences of her behavior at the time of the alleged offense. Ultimately, she was fearful for her own life and was motivated to act on that fear due to her psychotic processes.
6. Ms. Okonkwo's level of functioning prior to the alleged offense was marginal. She was extremely isolated from others, lacked any social or familial support, and was homeless on several occasions. Ms. Okonkwo was in-and-out of psychiatric hospitals frequently with discharge diagnoses of schizophrenia spectrum and other psychotic disorders. Additionally, Ms. Okonkwo had previously attempted suicide reportedly due to her command hallucinations.
7. The sources of collateral information that were important to explore to corroborate Ms. Okonkwo's self-report were the medical records, psychiatric

records, and police reports of her behavior around the day of the alleged instant offense. Ms. Okonkwo's past and present symptoms were not attributable to a psychoactive substance-induced disorder.

8. Ms. Okonkwo did not have a history significant for substance use or abuse. She was not using any alcohol or drugs at the time of the alleged offense or during the evaluation.
9. Due to cultural barriers and considerations, the examiner decided not to administer any objective psychological testing other than a measure of malingering. Such testing did not appear to be useful considering that the normative samples Ms. Okonkwo's testing would have been compared to was vastly culturally different. Specifically, comparing an Ethiopian woman's testing results to that of an American normative sample would have been unethical.
10. Ms. Okonkwo was administered the M-FAST to determine whether there were concerns about malingered psychosis. She received a score of four on this measure indicating that she was not attempting to feign mental illness.
11. The examiner diagnosed Ms. Okonkwo with schizophrenia spectrum disorder. This specific diagnosis is of sufficient severity to affect the capacity to know the wrongfulness of a criminal act, form the requisite intent, and/or refrain from committing the offense.
12. The information obtained through record reviews and interviews with the defendant strongly indicated a relationship between several mental illness (schizophrenia spectrum disorder) and Ms. Okonkwo's alleged behaviors on the day of the alleged offense. This data was also suggestive that the severity of

psychotic symptoms directly impaired Ms. Okonkwo's capacity to meet the Kentucky standard for criminal responsibility.

To conclude, both the defense and prosecution experts agreed that Ms. Okonkwo met the standard for criminal responsibility. However, to avoid taking the case to trial, Ms. Okonkwo accepted a plea bargain for Criminal Mischief. Nonetheless, this case example serves as an example of how we can begin to systematically assess for criminal responsibility in the context of a schizophrenia diagnosis, aiming for a more evidenced-based practice and better reliability estimates. Using empirically supported tools such as the M-FAST and conducting a thorough investigation of all data, are the first steps in achieving evidenced-based and reliable criminal responsibility evaluations.

Section V: Discussion & Future Directions

Schizophrenia spectrum disorder is one of the most debilitating, treatment resistant, and costly psychiatric conditions to date. Despite pushing for outpatient/community-oriented based treatment, a quarter of all inpatient psychiatric beds are occupied by individuals with schizophrenia spectrum diagnoses. Since these individuals require significant assistance to meet their daily needs, family members, hospitals, and residential facilities are often relied upon. Sadly, those who are not aided by the social service system often end up in the legal system or become homeless. Severe psychotic symptoms associated with schizophrenia spectrum disorder such as hallucinations (auditory and visual), delusions, and paranoia are often main contributors to the prevalence of crimes committed by this population. Although there is a discrepancy in the research regarding the prevalence of crime in individuals diagnosed with

schizophrenia, much of the literature indicates only a minority of individuals with schizophrenia commit violent crimes. Nonetheless, in criminal forensic issues such as the criminal responsibility or “insanity” defense, diagnosis of schizophrenia spectrum disorder is amongst one of the most common. The criminal responsibility defense deems a person not responsible for criminal conduct if they suffer from a “mental disease” or “defect” that affects their ability to appreciate the criminality of their conduct or to conform their conduct to the requirements of law. As previously discussed, forensic assessment of this nature is controversial and challenging. Therefore, mental health professionals are asked to contribute expert knowledge to the court system, assisting in their final legal decisions.

Although the relationship between schizophrenia spectrum disorder and the criminal responsibility defense is quite common in practice, there is limited literature educating mental health professionals about the nuances of this work. This empirically based literature review and case example aims to initiate closing the gap, providing a cohesive starting point for professionals interested in doing this type of clinical, forensic work.

Some recommendations to the field have ensued through this investigation of literature. First, it would be beneficial to further explore the discrepancy in research regarding the prevalence of crime in individuals diagnosed with schizophrenia spectrum disorder. While much of the literature described above suggests that crimes committed by individuals with severe mental illness is low, some indicate contrasting conclusions. Empirically answering the question regarding crime rates is important to fully understand why many individuals with severe mental illness end up in the criminal justice system.

Further exploring this phenomenon will also aid in determining which of the multitude of identified risk factors best account for this relationship. Second, the literature examining the relationship between command hallucinations and violent behavior is scarce and inconsistent. While some studies discussed previously have suggested an association between auditory command hallucinations and dangerous behaviors, the rate of compliance with these hallucinations is unknown. Future research endeavors may focus on better understanding the impact command hallucinations have on an individual's decision-making processes.

Third, current clinical tools such as the DSM-5 categorical model often leave clinicians with diagnostic ambiguity, conflicting psychological assessments, and unclear treatment directions. The provision of more dimensional based classification systems, assessments, and refinement of course specifiers would enable measurement-based treatment and more precise clinical description and/or assessment. Last, since schizophrenia spectrum disorder is such a common diagnostic question in criminal responsibility evaluations (Stafford & Ben-Porath, 2002), the forensic psychology community would benefit from conducting more empirical research involving their professional work regarding this topic. This would provide new and up-in-coming professionals in the field a reliable literature base to conduct their practice upon.

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Appendix A

Table 1. Specialty Guidelines for Forensic Psychology (American Psychological Association, 2012)

1. Responsibility
Guideline 1.01: Integrity
Guideline 1.02: Impartiality and Fairness
Guideline 1.03: Avoiding Conflicts of Interest
2. Competence
Guideline 2.01: Scope of Competence
Guideline 2.02: Gaining and Maintaining Competence
Guideline 2.03: Representing Competencies
Guideline 2.04: Knowledge of the Legal System and the Legal Rights of Individuals
Guideline 2.05: Knowledge of the Scientific Foundation for Opinions and Testimony
Guideline 2.06: Knowledge of the Scientific Foundation for Teaching and Research
Guideline 2.07: Considering the Impact of Personal Beliefs and Experience
Guideline 2.08: Appreciation of Individual and Group Differences
Guideline 2.09: Appropriate Use of Services and Products
3. Diligence
Guideline 3.01: Provision of Services
Guideline 3.02: Responsiveness
Guideline 3.03: Communication
Guideline 3.04: Termination of Services
4. Relationships
Guideline 4.01: Responsibilities to Retaining Parties
Guideline 4.02: Multiple Relationships
Guideline 4.02.01: Therapeutic–Forensic Role Conflicts
Guideline 4.02.02: Expert Testimony by Practitioners Providing Therapeutic Services
Guideline 4.02.03: Provision of Forensic Therapeutic Services
Guideline 4.03: Provision of Emergency Mental Health Services to Forensic Examinees
5. Fees
Guideline 5.01: Determining Fees
Guideline 5.02: Fee Arrangements
Guideline 5.03: Pro Bono Services
6. Informed Consent, Notification, and Assent
Guideline 6.01: Timing and Substance
Guideline 6.02: Communication With Those Seeking to Retain a Forensic Practitioner
Guideline 6.03: Communication With Forensic Examinees
Guideline 6.03.01: Persons Not Ordered or Mandated to Undergo Examination
Guideline 6.03.02: Persons Ordered or Mandated to Undergo Examination or Treatment
Guideline 6.03.03: Persons Lacking Capacity to Provide Informed Consent
Guideline 6.03.04: Evaluation of Persons Not Represented by Counsel

Guideline 6.04: Communication With Collateral Sources of Information
Guideline 6.05: Communication in Research Contexts
7. Conflicts in Practice
Guideline 7.01: Conflicts With Legal Authority
Guideline 7.02: Conflicts With Organizational Demands
Guideline 7.03: Resolving Ethical Issues With Fellow Professionals
8. Privacy, Confidentiality, and Privilege
Guideline 8.01: Release of Information
Guideline 8.02: Access to Information
Guideline 8.03: Acquiring Collateral and Third Party Information
Guideline 8.04: Use of Case Materials in Teaching, Continuing Education, and Other Scholarly Activities
9. Methods and Procedures
Guideline 9.01: Use of Appropriate Methods
Guideline 9.02: Use of Multiple Sources of Information
Guideline 9.03: Opinions Regarding Persons Not Examined
10. Assessment
Guideline 10.01: Focus on Legally Relevant Factors
Guideline 10.02: Selection and Use of Assessment Procedures
Guideline 10.03: Appreciation of Individual Differences
Guideline 10.04: Consideration of Assessment Settings
Guideline 10.05: Provision of Assessment Feedback
Guideline 10.06: Documentation and Compilation of Data Considered
Guideline 10.07: Provision of Documentation
Guideline 10.08: Record Keeping
11. Professional and Other Public Communications
Guideline 11.01: Accuracy, Fairness, and Avoidance of Deception
Guideline 11.02: Differentiating Observations, Inferences, and Conclusions
Guideline 11.03: Disclosing Sources of Information and Bases of Opinions
Guideline 11.04: Comprehensive and Accurate Presentation of Opinions in Reports and Testimony
Guideline 11.05: Commenting Upon Other Professionals and Participants in Legal Proceedings
Guideline 11.06: Out of Court Statements
Guideline 11.07: Commenting Upon Legal Proceedings

Appendix B

Table 2. Ethics Code: General Principles (American Psychological Association, 2017)

1.	Beneficence and Malfeasance. Psychologists should safeguard the rights and welfare of those whom they provide services and maintain vigilance to ensure that their influence is not misused. They should strive to benefit those with whom they work and avoid doing harm, and they should recognize any adverse effect of their own physical and mental health on the services they provide.
2.	Fidelity and Responsibility. Psychologists should establish trusting relationships with their clients, clarify their professional roles and obligations, and coordinate services with other professionals to each client's benefit. They should in addition attend to the ethical probity of colleagues and provide some measure of pro bono service.
3.	Integrity. Psychologists should promote truthfulness in research, teaching, and practice and avoid dishonesty, deception, subterfuge, and misrepresentation of fact. Should they deem any deception justifiable, they should consider carefully whether it is necessary, whether the benefits of the deception outweigh any adverse consequences it might have, and what steps should be taken to minimize or repair any resulting harmful effects of the deception.
4.	Justice. Psychologists should allow equal access to their services by all people, whether advantaged or disadvantaged and whether their background, and they should provide services of equal quality to all. Psychologists should

	take reasonable care to prevent any biases or limitations of their competence from leading to improper or inadequate practices on their part.
5.	Respect for People's Rights and Dignity. Psychologists should respect the dignity and worth of all people and their rights to privacy and autonomy. This respect should extend to persons with diverse backgrounds, including diversity related to age, gender, gender identity, race, ethnicity, national origin, religion, sexual orientation, disability, and socioeconomic status. Psychologists should neither condone nor participate in discriminatory practices based on such individual differences.

Appendix C

Table 3. Procedures for Forensic Evaluations (Knoll and Resnick, 2008).

1. Obtain initial fact pattern from consulting agent
2. Determine if case falls within area of expertise
3. Obtain correct legal standard
<p>4. Review collateral data (Review all relevant sources of information)</p> <ul style="list-style-type: none"> • Police reports, narratives, interrogations • Audio or videotape of defendant immediately before, during, or after offense • Victim and witness statements • Other relevant observations of the defendant made at the time of the offense • Crime scene photos and/or visual inspection of crime scene if necessary • Autopsy report and photos • Defendant's medical records • Defendant's psychiatric records • Other expert evaluations, testimony • School records • Military records • Work records • Financial records • Correctional records • Personal communications (journals, letters, Emails, etc.) • Collateral interviews if necessary
<p>5. Forensic Interview</p> <ul style="list-style-type: none"> • Inform defendant of limits of confidentiality • Conduct forensic psychiatric evaluation of defendant
6. Apply relevant legal standards to the facts of the case
7. Formulate opinion on insanity
8. Prepare clear, concise report
9. Give objective testimony

Appendix D

Table 4. Practice Guideline for Forensic Psychiatric Evaluation of Defendants Raising the Insanity Defense (AAPL, 2002).

I. Introduction and History of the Insanity Defense
A. Pre-M’Naughten History
B. The M’Naughten Rule
C. The Product Test or Durham Rule
D. The Irresistible Impulse Test
E. The Model Penal Code, American Law Institute Test
F. The Trial of John W. Hinckley, Jr. and Its Aftermath
G. Post-Hinckley Insanity Reform: The Insanity Defense Reform Act
H. Review of State Statutes and Federal and Military Law
II. Substance Abuse and the Insanity Defense
A. Voluntary Intoxication
B. Involuntary Intoxication
III. Non-traditional Mental Conditions Considered in Insanity Defense Cases
A. Posttraumatic Stress Disorder
B. Automatism
C. Dissociative Identity Disorder
D. Impulse-Control Disorders
E. Intermittent Explosive Disorder
F. Pyromania
G. Gambling Disorder
H. Paraphilic Disorders
I. Battered Woman Syndrome
IV. Agency Relationships
V. Ethics
A. Scope of Participation
B. Honesty and Objectivity
C. Confidentiality
D. Consent and Assent
E. Conducting the Evaluations
F. Fees
G. Conflicts
VI. The Forensic Interview
VII. Collateral Data
A. Obtaining Collateral Information
B. Managing Collateral Information
C. Common Types of Collateral Information
VIII. The Forensic Report
IX. The Forensic Opinion
A. Establishing Mental Disease or Defect

B. Establishing the Relationship Between Mental Disease or Defect and Criminal Behavior
C. Relationship Between Mental Disease or Disorder, Criminal Behavior, and the Legal Standard
X. Summary

Appendix E

Table 5. Questions for the Clinician Conducting a Criminal Responsibility Evaluation (Stafford & Ben-Porath, 2002)

1.	What is the relevant legal standard for Not Guilty by Reason of Insanity, Guilty but Mentally Ill, and/or diminished capacity in the jurisdiction in which this case is being heard?
2.	Is the referral being made by the defense, the prosecution, or through court appointment? If a defense referral, what level of confidentiality applies to the evaluation results?
3.	Does the defendant appear to understand his or her legal situation and the particular defense strategy suggested by the referral question? Does he or she appear to be competent to agree to participate in this evaluation? Do I have any reservations about his or her competence to stand trial?
4.	What are the facts of the case against the defendant? Have it obtained law enforcement reports of the investigation of the alleged offense(s), witness statements, transcripts from preliminary hearings, lab reports, and any other available documents pertaining to the alleged offense(s)?
5.	What is the defendants account of the alleged offense(s)? (His or her thoughts, feelings, mood, and behavior before, during, and after the crime, his or her reported motive, and his or her perception of external events and the behaviors of others at that time, are particularly relevant.)
6.	What is the defendant's level of functioning prior to and following the alleged offense(s)? Has he or she received mental health treatment in the past?

7.	What sources of collateral information can be tapped to verify and expand upon the self-report data obtained from the defendant? (School, military, employment, arrest, probation, and treatment records are common sources of third-party information. Family members, witnesses, and significant others may have relevant observations about mental state near the time of the offense.)
8.	What is the defendant's experience with the use and abuse of psychoactive substances? Is the defendant currently using alcohol or drugs? Was the defendant intoxicated at the time of the alleged offense? Are past or present symptoms attributable to a psychoactive substance-induced disorder?
9.	What psychological tests can be administered to clarify diagnostic and psychological capacity issues and to assess the defendant's response set toward the evaluation?
10.	Are there indications that the defendant may be malingering, or conversely, denying or minimizing psychopathology?
11.	What, if any, diagnoses of mental disorders apply to the defendant? Are these mental disorders of sufficient severity to potentially affect the capacity to know the wrongfulness of a criminal act, or if applicable, to form the requisite intent, or to refrain from committing the offense?
12.	Is there any indication of a relation between the severe mental disorder and the offense? If so, is there any information to suggest that symptoms of a severe mental disorder directly impaired the defendant's capacity to meet the relevant standard for criminal responsibility?