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Exploring the Intersection of Dementia and Violence Risk Assessment

Jamie S. Klugiewicz

EXPLORING THE INTERSECTION OF DEMENTIA AND VIOLENCE RISK
ASSESSMENT

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This dissertation, by Jamie S. Klugiewicz, MS, has
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ABSTRACT

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This is a mixed-method study exploring Designated Forensic Psychologists' (DFPs) experiences

with the violence risk assessment (VRA) of individuals diagnosed with dementia. DFPs ($N = 23$,

69.6% female, 87% White) completed an online survey investigating the frequency of VRA and

dementia, potential change in VRA method in response to dementia, application of existing VRA

instruments, and perceived benefit of tailored guidelines and VRA instruments. Most in this

sample (84.2%) endorsed cases involving VRA and dementia that typically comprised 5% or less

of lifetime cases. The presence of dementia had a variable impact on the approach to VRA, and

thematic analysis revealed that changes in method were related to the clinical interview being

impacted, the need for objective cognitive assessment, and increased reliance on collateral

records or informants. Sixty-three percent reported using existing VRA instruments with

perceived applicability to the population. However, many participants reported being less

confident in their evaluations and an overwhelming majority reported perceiving benefit from the

development of tailored guidelines or VRA instruments. These results shed light on the

importance of future research to investigate the unique needs of this population concerning VRA.

This dissertation is available in open access at AURA (http://aura.antioch.edu/) and Ohio Link

ETD Center (https://etd.ohiolink.edu/etd).

Keywords: dementia, violence risk assessment, violence risk factors, violence risk assessment

instruments, forensic psychology

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CHAPTER I: INTRODUCTION

Dementia, an acquired neuropsychological syndrome that includes a range of neurocognitive deficits, as well as behavioral and psychological symptoms, has risen to become the seventh leading cause of death among all diseases worldwide (Alzheimer's Association, 2022; World Health Organization, 2019). It has a profound social, financial, and economic impact with an estimated 50 million people across the globe living with dementia in the absence of reliable disease-modifying treatments—a number that is expected to reach 78 million in 2030 and 139 million in 2050 (Alzheimer's Association, 2022).

Changes in cognition (i.e., thinking and memory), which are due to a compromise in the cerebral structures and neural networks that govern emotion and behavior, represent perhaps the most common and widely understood among dementia-related decline/impairments, and these alterations in functioning can result in antisocial, violent, and criminal behavior (Cipriani et al., 2013; Damasio et al., 1990; Liljegren et al., 2015). Dramatic changes to personality can also occur and have led to crime or violence. Indeed, serious crimes such as homicide, homicide suicide, physical assault, and sexual assault have been documented among those diagnosed with dementia (Cipriani et al., 2016). For example, acquired sociopathy, or impaired morality, has been explored among those diagnosed with frontotemporal dementia, including its impact on predisposition to criminal behavior despite relatively intact cognitive abilities and retroactive understanding of wrongdoing (Mendez, 2010; Mendez et al., 2005; Mendez & Shapira, 2009).

The increasing prevalence of dementia diagnoses within aging populations, along with the accompanying cognitive, behavioral, and personality changes that can result in violence and litigation, may have strong implications for those whose professional expertise involves characterizing future risk for violence in order to aid legal and mental health systems. Such

expertise often falls within the realm of forensic psychologists (FPs) who have specialized

training in the intersections of psychology and/in/of law (American Psychological Association

[APA], 2013). While there is research on the assessment of competency to stand trial, criminal

responsibility, and civil capacity of those with dementia (Demakis, 2018; Heck & Vauter, 2018;

Marson et al., 2012), violence risk assessment (VRA) has remained largely unexplored within

this population.

The frequency with which FPs encounter VRA cases involving dementia is unknown,

and it is unclear whether the presence of dementia requires modification to a FP's standard

approach to VRA. Although potential violence risk factors for those with dementia have been

proposed (e.g., Hindley & Gordon, 2000), guidelines for assessment and perceived benefit of

standardized VRA instruments for this population have not been formally researched with FPs

who perform these evaluations. Furthermore, although VRAs are commonly supplemented with

actuarial VRA instruments owing to a structured professional judgment approach (Melton et al.,

2018; Webster et al., 2002), the perceived applicability to those with dementia is unknown.

CHAPTER II: LITERATURE REVIEW

Forensic Psychology as an Area of Specialization

The American Psychological Association (2013) broadly defines forensic psychology as the "professional practice by any psychologist working within any subdiscipline of psychology (e.g., clinical, developmental, social, cognitive) when applying the scientific, technical, or specialized knowledge of psychology to the law to assist in addressing legal, contractual, and administrative matters" (p. 7). Further, it is noted that to be considered a FP, the professional "reasonably expects to, agrees to, or is legally mandated to provide expertise on an explicitly psycholegal issue" (p. 7). It is important to emphasize that this definition is broad and includes the practice of any psychology professional within this realm without special regard to whether their training is focused on clinical practice or research. Of specific interest to the present study were those involved in clinical practice who have completed a doctoral degree in clinical or counseling psychology, are licensed to practice as psychologists, and maintain a specialization within the field of forensic psychology to provide clinical services. More specifically, the present study explored the experience and views of those with the Designated Forensic Psychologists (DFPs) label as their professional title.

Designated Forensic Psychologists

DFPs are certified by the Division of Forensic Mental Health within the Commonwealth of Massachusetts' Department of Mental Health (DMH) to provide forensic evaluations of persons 18 years of age or older involved in civil and criminal courts (104 Code of Massachusetts Regulations [CMR] 33.00, 2018). The DFP credential is the product of a collaboration between the University of Massachusetts Medical School and DMH that ultimately has resulted in the development of the Designated Forensic Professional Program (DFPP; Packer

& Grisso, 2021). Originating in 1985, the goal of the DFPP has been to train qualified professionals who provide public-sector evaluations within Massachusetts.

DMH regulations mandate that DFP candidates be licensed psychologists and Health Service Providers (see M.G.L. c. 112, §§ 118 through 121) who have met professional standards regarding supervised training with adults diagnosed with mental illness. To begin the credentialing process, one must have two letters of recommendation from licensed mental health professionals, and be employed, or plan to be employed, in a setting appropriate for conducting forensic evaluations (according to M.G.L. c. 123, §§ 12(e), 15 through 19, and 35) or for related forensic mental health work as determined by the Assistant Commissioner of Forensic Mental Health Services. DFP candidates must complete one year of training under the supervision of a Forensic Mental Health Supervisor (DMH, 2018). During training, candidates must pass a written examination and provide two mid-training reports and two final reports for approval by the DFP Committee and Assistant Commissioner.

As noted above, DFPs perform mental health evaluations—a clinical activity that involves the assessment of individuals who have become involved with the legal system to assist the judge or jury (also referred to as the *trier of fact*) in legal decision making (Bartol & Bartol, 2006). Historically, DFPs primarily provide evaluations of competency to stand trial (i.e., assessment of the defendant's ability to understand the nature of the criminal proceedings and assist counsel in their defense) and criminal responsibility (i.e., assessment of the defendant's mental state before and during the offense; Melton et al., 2018; Packer & Grisso, 2021). VRA became a more recent focus of training in the history of the DFPP and is discussed in more detail in the sections that follow.

Violence Risk Assessment

A Brief History: From Prediction to Estimation

Scientists, including the renowned criminologist Cesare Lombroso, began assessing dangerousness as early as the 19th century with the larger purpose of predicting whether an individual would continue to present a danger to themselves or others in the future (Conroy & Murrie, 2007). In the many years that followed, these predictions were provided in a yes/no format (i.e., yes, this person will become violent, or no, this person will not become violent) and were eventually argued by those within the scientific-medical community to be unreasonably inaccurate (Melton et al., 2018). For example, Steadman and Cocozza (1974) found that only 20% of releasees predicted to be dangerous became assaultive across four years, and research by Kozol et al. (1972) yielded a false-positive rate that exceeded 65% among patients released from a high-security state hospital in Massachusetts. Despite the concerns raised by experts asked to complete these evaluations, as well as compelling research (Monahan, 1981) and seminal court cases attesting to the inaccuracy of violence prediction (see *Barefoot v. Estelle*, 1983 and *Schall v. Martin*, 1984 for examples), such professional opinions continued to be demanded by members of the court.

In response to continued demand and lack of reliability, researchers began investigating factors believed to correlate with future violence to standardize, process, and culminate reliable data (Lidz et al., 1993; Monahan et al., 2001). This long-term research began in the 1980s and, as it progressed, a paradigm shift occurred from dangerousness prediction to violence risk estimation within the field. Investigators became concerned with estimating degrees of risk and developing appropriate management strategies, rather than predicting outcomes—a process that is now broadly referred to as VRA (Melton et al., 2018).

Purpose and Methods of Violence Risk Assessment

VRA is defined by Kraemer and colleagues (1997) as "the process of using risk factors to estimate the likelihood of an outcome occurring in a population" (p. 340). This process involves the consideration of multiple data points and variables found through research to share a relationship with future violence; including context, nomothetic data, individual history, anticipated situations, and clinical symptoms (Melton et al., 2018). The evaluator seeks to explain the likelihood that violence will occur over a given period and what circumstances are likely to contribute to such an occurrence. Notably, the purpose of VRA goes beyond simply estimating future violence risk; ultimately, the goal is to help prevent future violence while providing insight into strategies that may help mitigate risk (Hart, 1998; Melton et al., 2018; Otto, 2000, Webster et al., 2002).

Heilbrun et al. (2020) describe three methods of VRA: actuarial, anamnestic, and structured professional judgement. Actuarial methods of VRA have long been thought to contribute greater value to the estimation of risk over other methods given its influence on empirically validated predictor variables and statistical approach to classifying risk (Dawes et al., 1989; Dvoskin & Heilbrun, 2001; Grove & Meehl, 1996). There are two types of actuarial VRA methods. The first involves the strict use of actuarial instruments which yield an overall risk score derived from an algorithm to estimate risk (e.g., mild, moderate, severe) (Dawes et al., 1989; Grove & Meehl, 1996). One commonly used actuarial risk assessment instrument is the Violence Risk Appraisal Guide (VRAG; Quinsey et al., 2006). The second, and most controversial, is the adjusted actuarial approach, which was developed with the intention of combining clinical and actuarial techniques (Melton et al., 2018). Examiners use one or more actuarial instruments to provide an estimate of violence risk, which is then adjusted based on the

clinical judgment and consideration of other factors using their clinical knowledge of behavior and violence risk. While this method may make sense intuitively, proponents of strict actuarial assessment argue that the result is nothing better than unstructured clinical assessment with no statistical basis. Research has also shown that estimations resulting from an adjusted actuarial method are often more inaccurate than strict actuarial assessment (Quinsey et al., 2006).

Anamnestic assessment is a clinical method that involves a detailed investigation which seeks to identify the unique factors or themes associated with an individual's violence history using clinical interviews, collateral information, record review, and psychological testing (Heilbrun et al., 2020; Melton et al., 2018). Importantly, the goal of this method is not to estimate violence risk, rather this procedure is used to unearth idiographic risk and protective factors that reoccur across violent acts. Finally, structured professional judgment (SPJ) is a method of VRA that is guided by a process or structure involving a core set of empirically supported risk (and protective) factors and the method for collecting information pertaining to those risk factors (Melton et al., 2018; Webster et al., 2002). According to Heilbrun et al. (2020), risk and protective factors used in the SPJ method are typically derived from a broad literature review, rather than a specific data set, such as that used in the actuarial assessment method, although the SPJ method may include use of an actuarial risk assessment instrument. The final risk conceptualization highlights the presence of risk and protective factors, formulation of why violence occurred, scenarios in which violence is likely to reoccur, and the related needs regarding management, treatment, and supervision (Heilbrun et al., 2020). The most common and widely used SPJ tool is the Historical, Clinical, Risk-20 (HCR-20; Douglas & Shaffer, 2021). Overall, a SPJ method based on empirical data, with or without actuarial data, has been recommended as the best approach to VRA (Melton et al., 2018).

Regardless of method, evaluators are encouraged to consider five elements when assessing violence risk, including: (a) the nature of the harm, (b) how likely it is that harm will occur, (c) the acuteness or chronicity of the harm, (d) the severity of harm, and (e) the imminence of harm (Conroy & Murrie, 2007; Fogel, 2009). To gather a full picture of any violence risk profile, the evaluator must review third-party information attained via documentation (e.g., medical records, police reports) and interviews with collateral sources (e.g., relatives, victims, friends). It is also strongly recommended that the subject of the evaluation be interviewed. Although this may not be possible due to a variety of factors (e.g., mental status, uncooperativeness), evaluators are ethically mandated to make a genuine effort to obtain the point of view of the examinee regarding their case (American Psychological Association, 2013).

Violence Risk Factors

The literature pertaining to the VRA of those in the general population (i.e., those not diagnosed with dementia) organizes violence risk factors into two types: static and dynamic (Wong et al., 2009). Factors that are historical and unchanging (e.g., sex, age at the time of first offense) are classified as static, while those that are capable of change (e.g., treatment progress, symptoms, mental status) are classified as dynamic. Static and dynamic risk factors have been established for juveniles, adults, and sex offenders (see Melton et al., 2018, Table 9.4, for a comprehensive review).

Key violence risk factors that have been empirically validated (i.e., correlated with an increased risk of violent behavior in a manner that exceeds chance; Andrews & Bonta, 2006) as predictive of violence in adults include (a) past violent or criminal behavior, (b) age at first serious offense or arrest (particularly those who engage in delinquent behavior or violence before age 12), (c) age at the time of assessment, (d) sex, (e) psychopathy, (f) substance abuse, (g)

mental illness (most significant if symptoms include delusions and hallucinations), and (h) the combination of a major mental disorder and substance abuse (Fogel, 2009; Melton et al., 2018). Douglas and Skeem (2005) identified several dynamic risk factors of interest in terms of predicting future violence, including (a) impulsiveness, (b) negative affect, (c) psychosis, (d) antisocial attitudes, (e) problems in interpersonal relationships, and (f) poor treatment compliance. While these dynamic risk factors were initially regarded as empirically unreliable, later research suggested that change in these factors was more predictive than static factors alone (Wilson et al., 2013).

Dementia

Dementia is a broad term used to describe a syndrome that includes a range of neurocognitive and neuropsychiatric (i.e., behavioral and psychological) symptoms that result in functional declines in activities of daily living (Alzheimer's Association, 2022; APA, 2013). Due in part to the repeated use of "Alzheimer's disease" when referring to two separate constructs (James & Bennett, 2019), the dementia syndrome is often thought of as the disease when it is the manifestation of one or more underlying etiologies and pathologies (e.g., inflammation, stroke, chronic microvascular disease, substance abuse, Alzheimer's disease, frontotemporal lobar degeneration, Parkinson's disease; Dickerson & Atri, 2014). Pathologies resulting in a dementia syndrome may be reversible, static, or neurodegenerative (e.g., causing progressive neuronal death).

Neurocognitive deficits associated with dementia can result in global impairment of cognition or more focal difficulties in areas such as attention, processing speed, executive functioning, memory and learning, language, or visuospatial ability depending on the underlying cause(s) (see Dickerson & Atri, 2014 and Peterson & Graff-Radford, 2016 for a review). Motor

functioning and coordination may also be impacted and result in Parkinsonism, or REM sleep behavior disorder (Postuma et al., 2012). Neuropsychiatric symptoms of dementia are related to disordered perception, thought content, mood, and/or behavior, including delusions, hallucinations, agitation (i.e., easily upset, repeating questions, arguing or complaining, hoarding, pacing, inappropriate screaming, crying out, or disruptive sounds, rejection of care, and leaving home), physical or verbal aggression, depression or dysphoria, anxiety, apathy or indifference, disinhibition, irritability or lability, and appetite or eating problems (see Cerejeira et al., 2012 for a review).

Diagnosing Dementia: A Major Neurocognitive Disorder

Diagnosing dementia and determining the underlying etiology can be challenging as many pathologies have similar symptomatic presentations and some can, and often do, co-occur (e.g., a combination of Alzheimer's and cerebrovascular pathologies; James & Bennett, 2019). Although challenging, accurate diagnosis and characterization of underlying pathology are important for treatment, safety, and future planning. For example, those suffering from Alzheimer's disease (AD) have pharmacological options to slow the progression of the disease, while those with frontotemporal lobar degeneration (FTLD) do not (Seeley, 2019).

Accurate diagnosis by physicians and mental health professionals is intended to be supported by the development of diagnostic criteria. Unfortunately, diagnostic criteria are often research-oriented and are found wanting in a clinical setting (Clark et al., 2017). Two primary diagnostic manuals (or classical categorical systems) for mental disorders are the *International Statistical Classification of Diseases and Related Health Problems* (11th ed.; ICD-11; World Health Organization, 2019) and the *Diagnostic and Statistical Manual of Mental Disorders* (5th ed.; DSM-5; American Psychiatric Association, 2013). There are several issues associated with

the use of a research-oriented classical categorial system, such as the DSM-5, in clinical practice, including the reduction of complex and multifaceted symptoms of mental disorders into distinct and separate entities (Clark et al., 2017). Nonetheless, the DSM-5 (American Psychiatric Association, 2013) criteria for dementia, or what is referred to as a major neurocognitive disorder, are widely used in the United States and warrant discussion.

The criteria for diagnosis of a major neurocognitive disorder in the DSM-5 include objective impairment in two cognitive domains, as well as a decline in functioning represented by changes in one's ability to independently complete activities of daily living (e.g., financial management, driving, grooming, and hygiene), work-related tasks, or engage socially (American Psychiatric Association, 2013). As previously discussed, dementia or major neurocognitive disorder is a broad umbrella term with various underlying pathologies. To offer increased specificity concerning possible or probable underlying pathologies, the DSM-5 recognizes several specific classifications of major neurocognitive disorder due to (a) Alzheimer's disease, (b) frontotemporal lobar degeneration, (c) Lewy body disease, (d) vascular disease, (e) traumatic brain injury, (f) HIV infection, (g) prion disease, (h) Parkinson's disease, (i) Huntington's disease, (j) another medical condition, and (k) multiple etiologies. These are based on consensus criteria developed by consortiums of experts (e.g., neurologists, neuropsychologists) and research organizations in the field of dementia, such as the American Stroke Association, Consortium on Dementia with Lewy Bodies, International Behavioral Variant Frontotemporal Dementia Criteria Consortium, and National Institute of Aging-Alzheimer's Association (NIA AA; Kendler & Solomon, 2016).

Brief Review of Underlying Disease Pathologies

As previously noted, dementia is a syndrome that can result from a range of causes, including brain injury (e.g., stroke, trauma, chronic microvascular ischemic changes) and infectious or metabolic diseases (e.g., HIV, Creutzfeldt-Jacob), but it is most often the result of neurodegenerative disease (Peterson & Graff-Radford, 2016). Although the following review provides a brief, independent synopsis of the common neurodegenerative pathologies, it is important to remember that the brains of individuals with dementia often evidence multiple pathologies at the time of autopsy (Barker et al., 2002; Schneider et al., 2007).

Alzheimer's Disease

Among the neurodegenerative dementias, AD is the most common. It is estimated that AD contributes to approximately 60-70% of dementia cases (World Health Organization, 2022). AD is characterized by neuronal and synaptic loss that is the result of tau accumulation and progressive amyloid deposition. There are multiple modifiable and non-modifiable risk factors for AD, including age, gender, diabetes, hypertension, traumatic brain injury, cerebral amyloidosis, and the presence of the ApoE-e4 allele (Atri, 2014). AD is understood as a heterogenous disorder with a continuum of neuropathological subtypes that are broadly referred to as Alzheimer's clinical syndrome (Jack et al, 2019). Fifty-three percent of individuals diagnosed with AD are between the ages of 75 and 84 years old and, in addition to cognitive decline, 80% experience behavioral and psychological manifestations (American Psychiatric Association, 2013).

The most recent NIA-AA research criteria for AD are not well-suited for clinical diagnosis given that it relies heavily on biomarker data. However, the American Psychiatric Association's (2013) Neurocognitive Disorders Work Group updated the DSM-5 with criteria

specifically related to AD and these include insidious onset and gradual progression of impairment in one or more cognitive domains, as well as early and prominent memory impairment. Early memory impairment is typically characterized by difficulties with recalling the time and place when a memory formed (i.e., episodic memory), word-finding (i.e., anomia), loss of interest in hobbies, and impaired activities of daily living; meanwhile, later stages of the disease may be accompanied by aphasia, executive dysfunction, agitation, complete loss of independence, and sleep disturbance (Feldman & Woodward, 2005).

Vascular Dementia

Although the consensus criteria also encompass possible co-occurring AD pathology, vascular disease is believed to be the sole cause of vascular dementia (VaD) (Gorelick et al., 2011). Probable VaD is supported by positive neuroimaging of cerebrovascular disease and a clear temporal relationship between a vascular event (e.g., stroke) and cognitive deficits, or a clear relationship between cognitive impairment and the presence of diffuse, subcortical cerebrovascular disease pathology. Subsequent vascular events or worsening of cerebrovascular disease typically account for progressive decline in VaD (DeCarli, 2014).

In effect, the occurrence of stroke followed by the subsequent decline in two or more cognitive domains provides the most certain diagnosis of VaD. Individuals who suffer from VaD due to stroke can present with a range of cognitive deficits depending on lesion location and cortical/subcortical networks affected in the brain (DeCarli, 2014). However, those with VaD secondary to extensive subcortical cerebrovascular disease most often present with deficits in executive functioning, verbal fluency, and memory with benefit from cueing.

Lewy Body Dementia

Dementia with Lewy bodies (DLB) belongs to a class of neurodegenerative diseases referred to as synucleinopathies or Parkinsonian dementias given the clinical presence of parkinsonism (Peterson & Graff-Radford, 2016). Of note, Parkinson's disease dementia, which will not be discussed in detail as part of this review, is also in this category and the two are considered to be on the same disease spectrum with considerable overlap, primarily distinguishable by the temporal course of symptoms. Other Parkinsonian dementias also worth mentioning include progressive supranuclear palsy, corticobasal syndrome, and multiple system atrophy.

DLB is the second most common form of dementia, accounting for 15% to 30% of clinical cases at autopsy (Barker et al., 2002; Hulette et al., 1995; Lim et al., 1999; Okazaki et al., 1961). Core features include fluctuating cognition, visual hallucinations, and parkinsonian motor signs, while suggestive features include REM sleep behavior disorder, neuroleptic sensitivity, and decreased tracer uptake in the basal ganglia on neuroimaging (McKeith et al., 2004). Delusions are also common, particularly misidentification syndromes (e.g., mistaking TV images for being real, believing loved ones are imposters, mistaking mirror image for another person), along with paranoia, and phantom boarder (e.g., the belief that someone uninvited is residing in their home) (Ballard et al., 1999). Performances on cognitive testing typically include deficits in executive functioning, visuospatial ability, and attention with memory impairments appearing later in the disease course (Ferman et al., 2006; Mori et al., 2000).

Frontotemporal Dementia

Frontotemporal dementia (FTD) is the result of a spectrum of pathologies associated with degeneration of the frontal and temporal lobes, also referred to as FTLD (Peterson & Graff-Radford, 2016). FTLD is estimated to account for approximately 5% to 15% of dementias and is the third most common behind AD and DLB (Dickerson & Atri, 2014). Contrary to other dementias with an onset later in life, FTLD typically manifests between the age of 45-66 years. Consensus criteria recognize three clinical variants of FTLD including behavioral variant FTD (bvFTD), primary progressive aphasia, and semantic dementia (Neary et al., 1998; Rascovsky et al., 2011).

The disease course of bvFTD is of particular interest in the present study as it is associated with behavioral disinhibition, apathy or inertia, and loss of sympathy or empathy. Other clinical features include hyperorality and dietary changes (e.g., binge eating, oral exploration of non-food items, altered food preference; Rascovsky et al., 2011). Although early language impairment may be present, the neuropsychological profile of bvFTD typically includes executive dysfunction, along with relative sparing of episodic memory and visuospatial ability. Given the impact on frontal lobe structures in particular, behavioral and personality changes are common and can be devastating to the individual, as well as their family members. For example, acquired sociopathy and altered emotional morality associated with FTLD have been a particular focus in the literature, especially as it relates to criminal manifestations (Mendez, 2010; Mendez et al., 2005; Mendez & Shapira, 2009).

Other Dementias

Other underlying neurodegenerative pathologies worth noting but beyond the scope of this review include Huntington's disease, normal pressure hydrocephalus, chronic traumatic

encephalopathy (CTE), and atypical AD (e.g., posterior cortical atrophy, logopenic aphasia, frontal variant AD; Peterson & Graff-Radford, 2016). Of note, CTE is thought to result from repeated injury to the brain, such as that which is often experienced by professional athletes involved in contact sports (Mez et al., 2017). In one well-known CTE case of Aaron Hernandez, a former professional football player, was convicted of murdering a man, Odin Lloyd, and then later died himself by apparent suicide (Haislop, 2020). Although some research suggests that CTE is a progressive neurodegenerative disease, this remains a topic of debate (Asken et al., 2017).

Multiple non-degenerative disease processes can result in dementia and are encompassed by the following domains: (a) immune/inflammatory (e.g., limbic encephalitis, multiple sclerosis), (b) toxic/metabolic (e.g., liver disease, thiamine deficiency), (c) vascular (e.g., vasculitis, chronic subdural hematoma), (d) infectious disease (e.g., syphilis, HIV, Creutzfeldt-Jakob disease), (e) psychiatric (e.g., depression), (f) neoplastic (e.g., radiation effects, lymphoma), and (g) inherited disorders (e.g., Krabbe disease, leukodystrophies; Peterson & Graff-Radford, 2016, p. 1420).

Dementia: Aggression and Violence

Prevalence

It should be noted that a longstanding problem with estimating the prevalence of aggression and violence has been tied to the variable definitions of these terms (Cipriani et al., 2020). Cipriani et al. (2020) note that "most agree" that violence is a "life-threatening form of aggression that has serious physical damage as the goal" (p. 695). In other words, aggression and violence have been thought of as being on a continuum with the former characterizing minor acts

(e.g., spitting, punching) and the latter being used to describe major acts as referenced above (Allen & Anderson, 2017).

According to one review, a diagnosis of dementia has been cited as one of two main scenarios resulting in aggressive or violent acts by older adults; however, the authors noted that estimates ranged from 18% to 64% depending on several factors, including the nature of the study, population of focus, and definition of violence (Rosen et al., 2019). One longitudinal study followed patients with dementia for approximately 10 years and revealed that as many as 96% engaged in some form of aggressive behavior (i.e., an overt act, involving the delivery of noxious stimuli to (but not necessarily aimed at) another object, organism or self, which is clearly not accidental) over the course of their illness (Keene et al., 1999). Another study from that same era revealed that a diagnosis of dementia preceded attempted or completed homicide in nearly half of 14 elderly patients (Ticehurst et al., 1992).

The findings by Kunik et al. (2010) were comparable to the figures reported by Rosen and colleagues (2019). They followed 215 military Veterans newly diagnosed with dementia for 24 months and found that 89 (41%) developed aggression (i.e., a verbal or physical action intended to cause harm). Of those 89 Veterans, 60% had aggression causing moderate or severe distress, and 61% had aggression occurring at moderate or severe frequency using the Cohen-Mansfield Agitation Inventory (CMAI), which contains multiple items related to physical aggression or violence (e.g., punching, kicking, spitting; Cohen-Mansfield, 1986). Overall, Rosen and colleagues (2019) suggested that the average incidence of other-directed aggression or violence was around 24% following their meta-analytic review.

In addition to aggressive acts such as cursing, spitting, and/or pushing, a plethora of studies document major, and even lethal, acts of serious violence, including homicide and sexual

assault (Cipriani et al., 2017; Cohen, 2004; Hindley & Gordon, 2000; Kim et al., 2011; Rayel et al., 1999; Richard-Devantoy et al., 2010). Although the exact prevalence of violence among this population is unknown, the seriousness of the acts has prompted repeated calls for in-depth investigations regarding the validation of factors that increase the future risk for violence, as well as effective models for risk assessment (e.g., Hindley & Gordon, 2000). Despite this, there have been no known published comprehensive guidelines regarding the VRA of individuals with dementia; however, there is no shortage of research highlighting potential risk factors for violence (Cipriani et al., 2016; Cohen, 2004; Hamel et al., 1990; Hindley & Gordon, 2000; Kunik et al., 2010; Paveza et al., 1992; Wharton et al., 2018).

Proposed Risk Factors for Violence in Dementia

Hindley and Gordon (2000), following a literature review and case study involving an elderly male with dementia of mixed etiology (e.g., vascular disease, Alzheimer's disease, alcoholism) who allegedly killed a fellow patient via manual strangulation, proposed the following as potentially increasing the risk of violence among those diagnosed with dementia: (a) evidence of frontal lobe dysfunction, including personality change and a tendency toward disinhibited, antisocial behavior, (b) the presence of alcohol abuse, medication toxicity, or significant comorbid illness (physical or psychiatric), (c) the presence of psychosis, especially paranoid symptoms or depression, (d) possibly language impairment or evidence of temporal lobe dysfunction, (e) evidence of conflict with others, (f) sudden changes in the patient's environment, and (g) a previous episode of serious aggression within the context of an irreversible dementing process (p. 257).

Research proposing risk factors for violence among those diagnosed with dementia is largely based on anecdotal data (e.g., case studies typically involving serious acts of violence,

such as homicide) and thus has limited generalizability, particularly for those who may become aggressive but not seriously violent (Cipriani et al., 2011). In testimony before the Senate Special Committee on Aging, Cohen (2004) noted that, although precipitating factors are difficult to identify, the following antecedent factors could increase the risk for homicidal behavior: (a) a history of previous violence, (b) a history of alcohol abuse, (c) active paranoia and other psychotic symptoms, (d) psychotic depression, (e) vascular dementia, (f) history of catastrophic reactions, (g) traits such as low frustration tolerance and aggressivity, and (h) military, law enforcement, and/or firefighter history (p. 85).

In a previously referenced study involving the longitudinal assessment of aggressive behavior among veterans, Kunik and colleagues (2010) found that features not identified by risk level nonetheless included reports of pain, depression, psychosis, increased caregiver burden, and low mutuality (or lower quality of relationship) were related to the development of aggressive behavior (p. 1149–1150), and those with dementia who developed aggressive behavior were more cognitively impaired than those who did not. These findings are further supported by a meta-analysis and systematic review of research evaluating factors associated with dementia and homicide (Sundakov-Krumins et al., 2022). Researchers found commonalities across studies involving homicide and dementia, including (a) the type of dementia (with the prominent presence of dysexecutive syndrome, or the impairment of frontal system networks governing executive functioning), (b) psychosis, (c) alcohol use, (d) personality pathology, (e) victim vulnerability (e.g., proximity to the offender), and (f) delirium (p. 3). Regarding type of dementia as a risk factor, Liljegren and colleagues (2018) conducted a post-mortem review of 281 patients diagnosed with dementia and found that 35% engaged in physical aggression during their disease course. More specifically, a review of underlying neuropathology revealed that

incidences of physical aggression occurred most frequently in those with AD and FTD. They also found higher incidences of physical aggression within the AD population; however, they observed that those with FTD that became physically aggressive did so more frequently. Also of note, physical aggression tended to occur earlier in the disease course for FTD patients (Liljegren et al., 2018).

Cipriani et al. (2020) noted the following as triggers for violence in relation to dementia: (a) situations involving personal care, (b) quality of the relationship between the caregiver and the patient, (c) decline in orientation, (d) psychoses, (e) depression, (f) history of alcohol abuse, (g) pain and physical illness, (h) visual and hearing impairment, (i) influence of gender, (j) changes in the environment, (k) military veterans, (l) premorbid aggressiveness, and (m) dementia severity (p. 699). More specific to homicidal behavior in persons with dementia, this research (Cipriani et al., 2020) also highlighted the following antecedent risk factors: (a) previous violent behavior, (b) alcohol abuse, (c) paranoid symptoms, (d) psychotic depression, (e) catastrophic reactions, (f) low frustration tolerance and aggressiveness, and (g) military/law enforcement/firefighter history (p. 704).

Overall, qualitative comparisons between violence risk factors in the general population and among those with dementia have yielded several similarities (e.g., history of violence or aggressive behavior, psychotic symptoms, and substance abuse), along with notable differences (e.g., type and severity of dementia, occupational history, frontal or temporal lobe dysfunction).

Assessment of Violence Risk in Dementia

As previously mentioned, there are no known, published comprehensive guidelines regarding the VRA of those with dementia in the field of forensic psychology. Moreover, multiple forensic actuarial and SPJ instruments, such as the VRAG (Quinsey et al., 2006) and the

HCR-20 (Douglas & Shaffer, 2021), have been developed to assess the risk for various types of violence in adults and juveniles absent dementia (for a more comprehensive list of assessment instruments, see Conroy & Murrie, 2007); however, none have been developed for those with dementia despite several available normed instruments for measuring current risk of aggression or violence, including the CMAI (Cohen-Mansfield, 1986) and the Ryden Aggression Scale (Ryden, 1988).

A study conducted by Almvik and colleagues (2007) examined the predictive value of a VRA instrument in a geriatric population, and used the Brøset Violence Checklist (BVC; Linaker & Busch-Iversen, 1995) to predict imminent (as opposed to future) violence risk among patients in two psychogeriatric wards and two special care units for patients with dementia. The BVC consists of six items pertaining to confusion, irritability, boisterousness, physical threats, verbal threats, and attacks on objects. While the measure was successful in distinguishing those at risk for imminent violence, the measure had little value for making long-term risk estimations.

Although many of the available VRA instruments are used primarily to measure violence risk factors for a general population (e.g., history of violence, substance use, severe mental illness, and negative affect), factors specific to a population with dementia have not been considered despite developing research regarding the types of pathologies that result in dementia (e.g., vascular disease, FTLD) (Hindley & Gordon, 2000; Sundakov-Krumins et al., 2022). Existing instruments normed with non-symptomatic adults have considered mitigating factors that may not easily apply to someone with dementia, such as advanced age and a history of violent behavior. For example, many individuals with dementia may have not engaged in violent behavior before the onset of illness and would not have a historical pattern of violence to provide insight into the future risk of violence as a result. Given that advanced age has consistently been

found to mitigate risk for violence among adults without dementia (Barbaree et al., 2003; Hanson, 2002; Lynch, 1988), many actuarial VRA instruments contain an age-related item (Conroy & Murrie, 2007; Douglas et al., 2020). However, this factor may not be as reliable in individuals diagnosed with dementia because advanced age is the primary risk factor for developing dementia. Aside from FTLD and certain young-onset dementias, most people diagnosed with dementia are older adults (Galvin & Sadowsky, 2012; Seeley, 2019).

In the case of those diagnosed with dementia due to a neurodegenerative etiology, disease progression coincides with age-related causes that increase impairment. It has been shown that physical aggression, when it manifests as a neuropsychiatric symptom of dementia, often persists and, at times, worsens throughout the disease course (Wharton & Ford, 2014). For example, Hindley and Gordon's (2000) single case study found that their subject's aggressive behavior increased in the years leading up to his death, while another case study (Rayel et al., 1999) involving an individual who fatally shot his ex-wife secondary to factors associated with delusional ideation resulting from dementia and was 86-year-old at the time of the event.

In applying the gold standard VRA approach to psycho-legal situations described in the previous sections, specifically regarding the levels of impairment of examinees of advanced age or with dementia, examiners are expected to utilize collateral records and sources, as well as attempt to conduct examinee interviews regarding their charges, history, and current mental status. This can present a problem for several reasons as examinees with dementia may have had limited collateral records due to the absence of prior contact with the mental health or legal systems. Furthermore, evaluators endeavor to determine if the examinee is able to meaningfully participate in a clinical interview as neurocognitive deficits associated with dementia, such as poor attention and concentration, impaired memory, and difficulties with language and

communication. Despite previous research on violence risk factors for those with dementia (e.g., Hindley & Gordon, 2000), proposed guidelines for assessment and exploration of the perceived benefit of standardized VRA instruments for this population have not been formally researched with those who perform these evaluations.

Research Questions

In line with the review of available literature presented above, the study purpose was to explore the following research questions:

1. How frequently do DFPs encounter cases where they are asked to estimate the violence risk of someone diagnosed with dementia?

2. Does the presence of dementia impact a DFP's method for conducting a VRA and, if so, how?

3. Have DFPs applied existing VRA instruments to someone with dementia as a part of a comprehensive VRA?

4. Among DFPs, is there a perceived benefit for a VRA instrument, or an established method, tailored to those diagnosed with dementia who exhibit violent behavior?

CHAPTER III: METHOD

Design and Procedure

The present study used a mixed-method, exploratory design to evaluate the views of DFPs regarding the intersection of VRA and dementia. To ensure access to meaningful and informative data, purposive sampling (i.e., a form of non-probability sampling that is commonly used in qualitative research because it allows the researcher to choose participants based on their potential to contribute to the study; Guest et al., 2013) was used to select participants with the potential to meet criteria for participation. In effect, study participants were required to 1) be a DFP in Massachusetts and 2) conduct VRAs as part of their clinical practice. It was anticipated that a convenience sample of DFPs, who are required by the Massachusetts DMH to meet specific training and education requirements in the field of mental health and forensic psychology, would provide greater continuity around standards of practice, in addition to possible shared conceptualizations of violence and of VRA.

With approval by and facilitation from the Office of the Assistant Commissioner of Forensic Mental Health Services in Massachusetts, DFPs were contacted via public directories and mass email blasts. Each DFP was provided with a recruitment flyer (see Appendix A) which included a description of the study, risks and benefits of participation, and a link to the online survey (see Appendix C). If the DFP elected to participate, the process began with a thorough informed consent (see Appendix B) and was followed by the survey proper. Each DFP was debriefed following survey completion (see Appendix D) and offered the opportunity to enter a drawing for a $50 Amazon gift card.

Materials

Demographic items were presented in both a multiple-choice and multiple-selection format, while items pertaining to the research questions were a combination of multiple choice, multiple selection, 7-point Likert scales, and open-ended format. Questions were derived based on their perceived ability to answer the research questions. Although the Massachusetts DFP population was chosen for sampling with the hope of achieving a greater probability of shared understanding regarding the concepts of violence and VRA, definitions were also provided to participants (i.e., "For the purpose of this study, VRA is defined as the process of using risk factors to estimate the likelihood of an outcome of violence occurring in a population. Violence in this context may include physical and/or sexual assault"). The definition of VRA was adapted from Kraemer and colleagues (1997).

Analysis

Descriptive statistics were used to analyze nominal and quantitative data. Braun and Clarke's (2006) six-stage approach to thematic analysis (TA) was selected as the structure for analyzing qualitative data from open-ended questions. TA is widely used in qualitative research (Sandelowski, 2004). Although there are many approaches to TA, this approach was chosen as it is conducive to a pragmatic interpretive framework which asserts that the researcher is not committed to any one reality, desires flexibility concerning methods and analysis, and is interested in the practical outcomes of research (Patton, 2014). Initial codes were generated via an iterative process that involved repeatedly coding and reviewing emerging concepts (Braun & Clarke, 2006). These emerging concepts were subsequently organized into higher-order semantic themes and defined based on how well each described an overarching concept.

Ethics, Trustworthiness, and Rigor

Ethics approval was obtained from Antioch University New England's Institutional Review Board (IRB). The office of the Assistant Commissioner of Forensic Mental Health Services in Massachusetts was consulted and informed of both the study purpose and sampling methods. In alignment with IRB ethical standards, all electronic data was securely stored on a password-protected computer which was secured in a locked cabinet behind a locked door Although a few DFPs became known to the researcher by their enrollment in a post-participation drawing, the method of data collection prevented them from being connected with their data. Thus, all data was kept confidential and anonymous.

Strategies pertaining to verification, validation, and validity were applied to increase trustworthiness and rigor in the present study (Meadows & Morse, 2001). An iterative process was used throughout TA to fulfill standards of verification. The progress of each step was routinely evaluated, including reviewing completed steps to ensure that the process and results were pertinent to answering the research questions. Validation was achieved through the process of generating a description of the participants and the setting so that readers are able to make independent decisions regarding the transferability of findings and by clarification and reflection on bias during the research process (Merriam & Tisdell, 2016). Finally, validity was achieved by focusing on previously discussed strategies for verification and validation; there was active engagement in the iterative process characteristic of qualitative research, adherence to the exploratory method, and efforts to limit the impact of any biases and oversights. As a result, the results of the present study can be considered reasonably valid and reliable.

CHAPTER IV: RESULTS

Sample Characteristics

A total of 91 DFPs were contacted by phone, mass email, or both, with 26 responses received. Three participants were eliminated from the final data set due to apparent misunderstanding of question content, or a failure to be screened out for participation (i.e., they did not conduct VRAs as part of their clinical practice). The final sample ($N = 23$, 69.6% female, 87% White/European American) was diverse in age with most respondents between 36 to 45 years old (26.1%) or 56 to 65 years old (26.1%). The sample was also variable concerning years of experience as a DFP, which ranged from 1 to 32 years, although most participants had 10 years or fewer of experience. An analysis of additional licenses or certifications revealed that seven DFPs were certified by the American Board of Professional Psychology ($n = 2$), Forensic Mental Health Supervisors ($n = 4$), and Qualified Examiners ($n = 1$). Regarding years of experience conducting VRAs, the sample ranged from 4 to 35 ($M = 17.2$, $SD = 9.6$). The number of total, career VRAs completed by DFPs spanned 20 to over 1,000.

Settings and Purpose of Violence Risk Assessment

DFPs endorsed conducting VRAs in a variety of settings, including (a) inpatient psychiatric hospitals (78.3%), (b) court clinics (69.6%), (c) jails/prisons (39.1%), (d) private/group practice (26%), and (e) other settings (i.e., "outpatient forensic clinic," "hospital-based forensic service"; 8.7%). VRAs were reportedly conducted for the following purposes: (a) aiding sentencing (60.9%), (b) assessing readiness for discharge/lesser restriction and reinstatement of privileges (82.6%), (c) developing a risk management plan (56.5%), and (d) determining competency for other purposes (i.e., "need for civil commitment (mental illness or

SA [substance abuse]),” “component of competency or criminal responsibility eval,” and/or “parole board hearings”; 26.1%).

General Methods of Violence Risk Assessment

Before being asked to indicate whether their typical method of VRA had changed, or would change, in response to a patient with dementia, participants were presented with several known components of VRA using the SPJ approach (Melton et al., 2018; Webster et al., 2002) which includes a (1) clinical interview with patient, (2) clinical interview with collateral informants (i.e., friends, relatives, victims), (3) review of collateral records, (4) discussion with treatment providers, and (5) actuarial or semi-structured risk assessment tool (e.g., HCR-20, Static-99, VRAG-R). As the current research study is concerned with individuals diagnosed with dementia and cognitive impairment, a sixth option was provided: *cognitive assessment or screening measure* (e.g., Wechsler Abbreviated Scale of Intelligence, Second Edition (WAIS-II), Wechsler Adult Intelligence Scale, Fourth Edition (WAIS-IV), Montreal Cognitive Assessment (MoCA)). Only two participants (8.7% of the sample) reported using each of these six components to conduct VRAs.

Many sample participants (60.9%) reported using each component except a cognitive assessment or screening measure. Overall, 100% conduct a clinical interview with the examinee, 95.7% review collateral records and have discussions with treatment providers, 87% interview a collateral informant, 69.6% use an actuarial or semi-structured risk assessment tool, and 13% reported routine use of a cognitive assessment or screening measure. DFPs were also given the opportunity to expound upon additional components they use, including one participant who indicated routine use of a personality assessment (e.g., Minnesota Multiphasic Personality Inventory, Second Edition (MMPI-2)).

Neuropsychology Experience

DFPs were asked both about specialized training in neuropsychology and/or knowledge and clinical understanding of dementia. Approximately half (*n* = 11, 47.8%) reported receiving some form of specialized training, with four DFPs endorsing two or more types of specialized training experiences. TA was used to sort descriptions of specialized training into the following categories: (a) Seminars/Continuing Education Credits (CEU)s (*n* = 3, 27.2%) (b) Internship training/rotations in neuropsychology (*n* = 5, 45.5%), (c) Neuropsychology practica (*n* = 4, 36.3%), (d) Graduate coursework in neuropsychology (*n* = 1, 9.1%), (e) Clinical experience (*n* = 2, 18.2%), (f) Postdoctoral training in neuropsychology (*n* = 2, 18.2%), and (g) Postdoctoral fellowship in neuropsychology (*n* = 2, 18.2%).

For greater specificity, DFPs were also asked to indicate if they had ever received VRA training pertaining to those with dementia. One participant endorsed such training and gave a neutral response concerning its usefulness.

Frequency of VRA and Dementia

DFPs indicated whether they have conducted a VRA of someone who had been diagnosed with dementia. The majority (82.6%) endorsed conducting such an evaluation. DFPs also estimated the number of cases conducted using a VRA of someone diagnosed with dementia, with 19 participants endorsing this experience. Most of the sample (84.2%) indicated that less than 5% of overall cases involved conducting VRAs where dementia was a feature. Two participants reported that these cases accounted for 6 to 10%, with only one respondent reporting that 21 to 30% of their cases involved VRA and dementia.

Change of Method Based on the Presence of Dementia

Next, DFPs indicated the degree to which their method of VRA changed with the presence of dementia. If the DFP had no encounters with this patient population, they were asked to indicate the degree to which they would anticipate their approach would change. Relevant items were presented on a 7-point Likert scale ranging from *Not at All* to *Very Much*. Although most DFPs indicated some degree of change from their typical method of VRA, the results were variable ($N = 23$, $M = 3.87$, $SD = 1.58$).

To gain a more insight into these methodological changes, DFPs were asked to provide reasoning for any alterations to their established approach. For those who indicated a method change, each then completed an additional open-ended question regarding the characteristics of the change(s). In Table 1.0, emergent themes and frequencies of endorsement can be reviewed.

Reasons for Method Change

For those who reported method change, the following themes and subthemes emerged concerning the reason for change (see Table 1.1):

1. Clinical interview is impacted. (*1a. Sub-theme: Patient unable to participate as usual; 1b. Sub-theme: Self-report is, or would be, less reliable).*

2. Additional information or data needed to understand cognitive impairment.

3. Increased reliance on collateral sources or consultation.

Theme 1: Clinical Interview is Impacted

Six DFPs made comments which clustered around the overarching theme that the clinical interview was impacted by the presence of dementia. Two subthemes emerged: *1a. patient unable to participate as usual* and *1b. self-report is less reliable* with several responses spanning both subthemes:

"Data from the clinical interview might be reduced and/or less informative if the person evaluated was impaired in their ability to answer questions designed to assess internal thoughts or awareness of personal [and] *psychological … motivations."*

Theme 2: Additional Data or Information Needed to Understand Cognitive Impairment

Fifteen DFPs spoke to the need for additional information to understand the extent of cognitive impairment. For example, *"Need to further investigate the nature and severity of the cognitive impairment," "More information regarding the degree and specific domains of impairments in cognition and functionality are needed…to fully assess violence risk,"* and *"Depending on the symptoms/behaviors associated with MCI* [mild cognitive impairment] *this could add significant additional risk."*

Theme 3: Increased Reliance on Collateral Sources or Consultation

Seven DFPs reported that their VRA method changed, or would change, because of an increased reliance on collateral sources or consultation (e.g., *"Greater number of collaterals to obtain info in different settings," "Requires more specific consultation"*).

Characteristics of Method Change

DFPs who reported VRA method change in the presence of dementia elaborated on those changes. The following themes emerged (see Table 1.2):

4. Adjustment of the clinical interview.

5. Addition of objective measures of cognition/adaptive functioning.

6. Gathering of additional information (*6a. Sub-theme: Review of medical records; 6b. Sub-theme: interview collaterals; 6c. Sub-theme: consult with neurologists/medical providers*).

Theme 4: Adjustment of the Clinical Interview

Five DFPs reported on patients' inability to contribute to the interviews for various reasons (e.g., difficulties with cognition, behavioral issues, problems with psychological awareness) and, as a result, the "style" or questions asked would require adjustment. In addition, one DFP described permitting a trusted care provider to be present during an interview with an examinee with dementia/MCI *"to support* [the patient's] *emotion regulation."*

Theme 5: Addition of Objective Measures of Cognition or Adaptive Functioning

In a compliment to Theme 2—the need for additional information/data to understand cognitive impairment—16 DFPs reported use of objective measurements to evaluate patient cognition and adaptive functioning (e.g., *"Possibly more cognitive testing than a typical evaluation," "I would make sure that proper cognitive and adaptive functioning measures were completed," "I add in assessments by neurologists and neuropsychologists which I normally would not use"*).

Theme 6: Gathering of Additional Information

Ten DFPs reported gathering additional information when evaluating examinees with dementia/MCI. Three sub-themes emerged, including *6a. reviewing medical records, 6b. interviewing collaterals,* and *6c. consult with neurologists/medical providers*. Comments pertaining to 6a. sub-theme, include examples such as *"More review of neurological and medical information,"* and *"Incorporation of…neuroimaging and consideration of neurological data."* Another DFP noted, *"Speaking with relatives…speaking with staff, and reviewing records."*

Specific to 6b. sub-theme of interviewing collaterals, a DFP indicated, *"perhaps greater reliance on data from collaterals who have regular contact with the individual,"* and in line with

the 6c. sub-theme of consulting with neurologist/medical providers, one DFP noted that they would *"potentially obtain medical consultation re: diagnosis and prognosis."*

Reasons for No Method Change

Of those DFPs who indicated no method change in response to VRAs on examinees with dementia, two provided additional information that was organized into one overarching theme:

7. Changes were not beyond those of a typical evaluation.

One DFP wrote, *"the same approach would be used and adjusted as needed,"* while the other reported, *"Risk factors don't change—the diagnosis is taken into consideration in all cases."*

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Confidence in VRA of Dementia

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DFPs with prior experience conducting VRAs in the presence of dementia ($n = 19$) were asked to consider levels of confidence in these results as compared to cases that did not involve dementia/MCI. While the majority ($n = 12$, 63.2%) indicated that they were generally "Confident" in the results, 31.6% ($n = 6$) indicated that they were "Less Confident," and a single respondent (5.3%) indicated that they were "Very Confident" in their results.

<div align="center">

Use of Risk Assessment Instruments in Dementia

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Of these DFPs ($n = 19$), 63.2% reported using an existing structured or actuarial risk assessment instrument. Most ($n = 11$, 91.7%) endorsed the use of the Historical, Clinical, Risk-20 (HCR-20), while the remaining ($n = 1$, 8.3%) used the Violence Risk Appraisal Guide (VRAG). DFPs rated the perceived degree of effectiveness (or applicability) of said instrument using a

7-point Likert scale from 1 (*Not at All*) to 7 (*Very Much*) ($n = 12$, $M = 5.25$, $SD = 1.14$).

Perceived Benefit of Published Guideless and Tailored VRA Instrument

DFPs then rated the degree to which they believed examinees with dementia would benefit from published guidelines for VRA, or a normed and validated risk assessment instrument, again using a 7-point Likert scale from 1 (*Not at All*) to 7 (*Very Much)* (*M* = 5.83, *SD* = 1.47). Of note, most DFPs (*n* = 20, 87%) gave ratings of 5 or above on this item, with 43.5% indicating a strong perceived benefit (i.e., *Very Much*).

CHAPTER V: DISCUSSION

The purpose of this study was to broadly explore experiences with VRA and dementia within a population of forensic psychologists, who met specific requirements regarding training and education, to conduct public-sector evaluations (i.e., DFPs). Despite ample research highlighting aggression, violence, and violence risk factors among individuals diagnosed with dementia (e.g., Cipriani et al., 2020; Cohen, 2004; Hindley & Gordon, 2000; Kunik et al., 2010; Sundakov-Krumins et al., 2022), this is the first study of its kind to investigate this issue in the context of forensic VRA and from the perspective of experts trained to conduct such evaluations. The research methodology, specifically the exploratory approach used, underscores the novelty of the research questions and offers insights into a unique population presenting at clinical forensic psychological practices due, in part, to the potential risks for seriously violent behaviors. In the present study, DFPs completed an online survey designed to explore their experiences assessing the violence risk of examinees with dementia, their method for VRA and whether this method changed or would change when considering dementia disease courses, their use of existing VRA instruments, and their sense of a perceived benefit in tailoring VRA instruments or methods to those with dementia.

With only anecdotal evidence of individuals with dementia encountering the legal and mental health systems, this study sought to gauge how frequently DFPs encounter cases involving VRA of examinees diagnosed with dementia. Descriptive analyses showed that the majority of DFPs surveyed had completed at least one VRA involving someone diagnosed with dementia and that prevalence typically accounted for less than 5% of this sample of DFPs' total cases. It is worth noting, however, that two participants reported that these cases accounted for 6 to 10%, and one respondent reported that 21 to 30% of their cases involved VRA and dementia.

While it was considered that those reporting more frequent encounters were more likely to have formal training in neuropsychology (e.g., postdoctoral fellowship) and incur more referrals as a result of this training, this was true for only one participant reporting a 6 to 10% frequency. Although the exact prevalence remains unknown, it can be deduced that professionals in forensic psychology do encounter people with dementia in their clinical practices and are assessing levels of risk for future violence.

Most DFPs were consistent in their typical approach to VRA of non-dementia examinees (e.g., use of clinical interview with examinee and collateral informants, reviewing collateral records, discussion with treatment providers, and use of an actuarial or semi-structured risk assessment instrument). Yet, the degree to which the presence of dementia prompted a change in their typical approach to VRA was variable, with nearly one-half of the sample falling on either side of the spectrum of method change. While some degrees of change were noted on average, only one DFP reported no change. The variability in responses to this question is interesting and worth noting. While the absence of formal guidelines related to the VRA of those diagnosed with dementia may be a significant factor, it could also reflect the subjective nature of the rating scale on which it was measured. For example, two DFPs may have made the same changes to their approaches while retaining disparate views regarding the significance of those changes. However, thematic analysis of open-ended questions yielded greater consistency, which might suggest that method changes made (or anticipated) by DFPs could be quite similar across a pool of similarly-trained, designated examiners.

Seven overarching themes and five sub-themes emerged from the data set which were related both to reasons and characteristics of change in method. Those who reported a method change pointed to one or more of the following reasons: clinical interview impacted by the

examinee's reduced ability to contribute reliably or provide needed information; additional information or data required to understand level of cognitive impairment(s); and an increased reliance on collateral sources or consultation. Responses to a follow-up question regarding the characteristics of method change to their typical approaches were closely aligned. DFPs broadly endorsed adjustments to the clinical interview, the addition of objective measures of cognition or adaptive functioning (with several referring specifically to neuropsychological testing), or the gathering of additional information (e.g., reviewing medical records, interviewing collaterals, consulting with neurologists or medical providers). With the method changes completed by DFPs who had performed these evaluations with individuals diagnosed with dementia, most respondents (63.2%) indicated their confidence in the VRA results, although a notable minority (31.6%) were less confident. Although the two DFPs with no method change were less descriptive about their reasoning, the overarching theme was that changes were made that would have occurred during their typical evaluations.

Among DFPs reporting methods change, the most salient theme related to the need for a better understanding of and measurement for cognitive impairment to improve DFP performances of comprehensive VRAs of examinees with dementia. This finding supports recent research arguing the importance of systematically evaluating cognition in older homicide offenders to determine violence risk and need for risk management (Sundakov-Krumins et al., 2022). Moreover, multiple studies have also identified the type of underlying disease pathology resulting in dementia, the cognitive profile or domains of dysfunction, and the severity of dementia as each playing a role in violence risk (Cipriani et al., 2020; Cohen, 2004; Hindley & Gorden, 2000; Kunik et al., 2010; Liljegren et al., 2018; Sundakov-Krumins et al., 2022). This

finding may represent a significant area of consideration for forensic psychologists in the VRA of persons with dementia.

While all clinical psychologists, including those specializing in forensic practice must establish basic competencies in cognitive and personality assessment (Kaslow et al., 2004), characterizing cognitive impairment associated with varying disease pathologies (e.g., dementia due to AD or FTLD) is more aligned with the expertise of neuropsychologists (i.e., clinical psychologists specializing in the understanding of brain-behavior relationships; American Academy of Clinical Neuropsychology, 2007; Hannay, 1998). Indeed, several DFPs reported seeking specific expertise in neuropsychological testing related to the range of cognitive impairment (with those who had completed fellowships in both forensic psychology and neuropsychology likely completing the evaluations themselves). It is unclear how others would intend to pursue objective cognitive assessment. Broad, less descriptive reports involving cognitive testing may refer to a comprehensive evaluation inclusive of multiple cognitive domains or a neurocognitive screener (e.g., Mini Mental Status Exam (MMSE), MoCA) with the latter likely being insufficient for characterizing underlying pathology and areas of impairment in ways useful for risk assessment. Overall, this area warrants additional investigation so that forensic psychologists may make the most of their assessment of risk factors associated with types and severity of dementia, as well as areas of cognitive impairment(s).

Given the complexity resulting from the interplay of psychiatric and cognitive factors, some researchers have argued that VRA of individuals diagnosed with dementia would be best supported by a specialist or a forensic geriatric service (Nguyen et al., 2022; Sundakov-Krumins et al., 2022). Given their dual specialty, forensic neuropsychologists may be the strongest candidates for cases involving the intersection of VRA and dementia (Cheng et al., 2018).

Interestingly, the results of this study would suggest that additional training may be needed in the understanding of dementia and violence risk among even those with requisite advanced training. The frequency of these cases among the current sample has highlighted that limiting VRA to professionals with rare, highly-selective training experiences would likely be a disservice to potential examinees. The development of guidelines and standardized approaches to VRA of persons with dementia was overwhelmingly supported by the participants of this study, who perceived a strong benefit of guidelines and empirically validated VRA instruments for those with dementia who become violent.

Limitations

There are several limitations relevant to the present study that are worth noting. Foremost, while this sample comprised nearly one-third of the DFP population in Massachusetts (and may be considered modestly generalizable), it is inadequate for comparison to the larger, national population of FPs. Though many FPs who practice in Massachusetts do not carry the DFP credential, they were not recruited for this study. Despite the intention to reduce variability that might result from different training and educational experiences among participants and increase internal validity, the use of a limited, specific subset of FPs with a common credential (i.e., DFPs) may have inadvertently reduced the diversity of the sample and lowered external validity. Also of note, many DFPs who participated in the present study reported previous experience in neuropsychology, possibly leading to a skew in results, as these respondents may view cases involving dementia differently secondary to their prior training.

The format of the present study, namely an online survey with open-ended questions to gather qualitative data, left certain research questions lacking in clarity. Although the format allowed for efficiency, an interview format with room for follow-up questions could have

provided a richer data set. For example, inquiries into precipitating factors and the settings in which VRAs were performed with individuals diagnosed with dementia would have clarified the nature of the violence risks, although the results of the present study suggest that inpatient psychiatric hospital and court clinics may be prominent sites, at least within Massachusetts. Similarly, although many DFPs preferred to access objective data related to cognition or adaptive functioning, it is unclear how standard their approaches have been to obtaining information (e.g., referral to neuropsychology, self-administration and interpretation). The degrees of confidence in VRAs with those diagnosed with dementia would also have benefitted from the ability to ask follow-up questions. A lack of clarity about what factors played a role in DFPs assessments of levels of confidence, particularly those who reported being less confident in their results, is reason to revisit the study methodology.

Future Directions

Future research would benefit from investigating the intersection of VRA and dementia in a larger, national sample of FPs. A larger sample would provide greater external validity as well as insight into the different contexts in which those with dementia may be evaluated given that the present study focused exclusively on a subset of FPs who conduct public-sector evaluations. Special consideration of this topic among forensic neuropsychologists would also be informative regarding the usefulness of advanced neuropsychological training (e.g., post-doctoral fellowship) in characterizing the violence risk of individuals with dementia. Further exploration of the use of cognitive assessment data involving the VRA of persons with dementia is also warranted. Of potential benefit could be the development of a standardized battery validated for predicting violence risk in the dementia population. Such a battery may include measures of inhibition and other executive functions given the proposed relationship of impairment in this

domain and violent behavior in dementia (Hindley & Gordon, 2000; Sundakov-Krumins et al., 2022). Culmination of literature proposing violence risk factors and mitigating strategies (Cipriani et al., 2020) would be useful in the development of guidelines or toward a standard approach to the VRA and dementia, as well as the development of an actuarial or semi-structured instrument for assessing violence risk. Given that DFPs in the present study reported good applicability of an SPJ instrument (e.g., HCR-20), future research might also investigate which existing VRA instruments would be best suited to this population. Finally, although the current study is primarily concerned with individuals with dementia who become violent, those who are violent and later develop dementia, such as could be the case in an aging prison or psychiatric population (Brooke et al., 2020), would also be worthy of further investigation.

CHAPTER VI: CONCLUSION

This study was conducted in the spirit of advancing and refining standards of practice. The social justice implications of providing better support to a growing population of individuals whose lives, along with the lives of family members, caregivers, and victims, have been impacted by violence informed by dementia disease courses must not be overlooked. The results of this study support the VRA of examinees with dementia as an area in need of spotlight and further investigation in the field of forensic psychology, and perhaps forensic neuropsychology as well. Some experts in the field of forensic psychology, in this case DFPs, are encountering these cases and, more importantly, changing their methods in the absence of standardized guidelines and potentially without ready knowledge of research highlighting specific violence risk factors (e.g., evidence of frontal lobe dysfunction, type of dementia, military or firefighter history) among this population. More importantly, the participants in this study reported strong perceived benefit of additional guidelines or VRA instruments in the context of incidences of reduced confidence in evaluation outcomes. There is a plethora of research on which such efforts may find a stable foundation and hopefully contribute to further understanding of the intersection of VRA and dementia, including violence prevention and mitigation strategies.

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Appendix A: Recruitment Flyer

Dear Designated Forensic Psychologist,

You are being asked to participate in a survey designed to explore the intersection between dementia/major cognitive impairment (MCI) and violence risk assessment (VRA).

If you decide to participate, you will be asked to complete non-identifiable demographic information and questions regarding your practice as a DFP in Massachusetts and your experience with VRA and those diagnosed with dementia/MCI. You DO NOT need to have completed a VRA of someone with dementia/MCI in order to be a valuable participant. This should require approximately 20 minutes of your time. Your participation is completely voluntary. You may decline to participate or discontinue participation at any time. None of the information you provide can be tied back to you. If you participate, I ask that you please answer all questions so as to assure the most accurate and thorough results.

There are no foreseeable risks, discomforts, hazards, or explicit benefits to participating in the current survey. You may choose to enter a drawing for a $50 Amazon gift card. However, please be aware that you will no longer be anonymous to me if you choose to take advantage of this incentive. Regardless, you will not be tied to your results, which will remain confidential.

This research has been reviewed and approved by the Antioch University New England Institutional Review Board. You may contact Dr. Kevin Lyness, Chair of the Antioch University New England Institutional Review Board at [EMAIL] or [PHONE] or Antioch University New England Provost, Dr. Shawn Fitzgerald, [PHONE] if you have questions about your rights as a research participant. If you have any questions, concerns or complaints about this study, or you would like to inquire about the survey results, you can contact Jamie Klugiewicz, M.S., LPA-I at [EMAIL]. I appreciate your time and participation!

To access the complete informed consent and survey, please click the link below or copy the link into your web browser:

Please accept my deep appreciation and gratitude for your willingness to volunteer time to participate in this study. It is no small sacrifice, and this study will be improved by the full engagement of forensic professionals like yourself.

Regards,

Jamie Klugiewicz, M.S., LPA-I
Doctoral Candidate in Clinical Psychology Antioch University New England
41 Avon St.
Keene, NH 03431

Appendix B: Informed Consent

Exploring the Intersection of Dementia and Violence Risk Assessment

I am a doctoral student from the clinical psychology department at Antioch University New England. I would like to invite Designated Forensic Psychologists (DFPs) in Massachusetts to take part in a research study examining the intersection of dementia and violence risk assessment (VRA).

The purpose of the present study is multifaceted and exploratory in nature. Through online surveys with DFPs in Massachusetts who regularly conduct VRAs, I hope to explore the presence of dementia/major cognitive impairment (MCI) and any relationship or impact it could have on the assessment of violence risk. I will also investigate the perceived applicability of existing structured or actuarial VRA instruments, whether or not DFPs have applied such instruments to any cases involving dementia/MCI, and the perceived need for the development of guidelines and/or actuarial or structured VRA instruments tailored to this population.

If you agree to take part, you will be asked to complete an online survey that will take approximately 20 minutes of your time and you will remain anonymous to me. While participating in this study does not directly benefit you, the information you provide will help add to the literature on dementia/MCI and VRA. Additionally, you will be helping to discover if there is benefit to pursuing longitudinal research related to the development of guidelines and instruments pertaining to the VRA of individuals diagnosed with dementia/MCI.

After participating in this study, you have the option to send me an email at [EMAIL] to enter a random drawing for a $50 Visa Gift card. You may also request that you receive the results from this project when the data are available. However, please note that once you choose to email me, you are no longer an anonymous participant in this study. Your email address will be kept in a locked file on a password protected computer and cannot be associate with your data through any procedure.

There is a small possibility that you may experience discomfort in responding to items that may result in discussion and recollection of cases involving violence against the self and others. Other than possible discomfort in thinking about these cases, I do not anticipate any risk to you that is outside what you may encounter in your everyday practice. Please be sure to avoid disclosing information that would potentially violate your current or past examinees' right to confidentiality.

In the case that the online survey becomes too stressful, you are welcome to skip any question or stop participating at any time.

Your participation will remain anonymous and confidential.

You will never be asked to reveal your name unless you choose to enter the drawing or receive results. You will never be associated with the data you provide. If you choose to send me an email to enter the drawing or receive a summary of the analyzed data, your email will be temporarily saved in a password protected computer and kept in a locked file cabinet. It will be

deleted following distribution of the data. No reports about this study will contain identifying information.

Taking part is voluntary.

If you have any questions about the study, you may contact Jamie Klugiewicz via email at [EMAIL]. Please put "VRA Study" in the subject line of any email you send. Please note that once you do this, you are no longer anonymous to me.

If you have any questions about your rights as a research participant, you may contact Dr. Kevin Lyness, Chair of the Antioch University New England Institutional Review Board at [EMAIL] or [PHONE] or Antioch University New England Provost, Dr. Shawn Fitzgerald, [PHONE].

Thank you for helping us understand how the field of VRA may better serve this unique population.

By clicking continue below, I agree to take part in the Antioch University New England study exploring the intersection of dementia/MCI and VRA.

Appendix C: Online Survey

Please answer the following questions:

1. Age: _____

18-25
26-35
36-45
46-55
56-65
65+

2. Please describe your gender: _____

Male
Female
Transgender
Non-Binary/ third gender
Prefer not to say
Other:

3. Please describe your Race/Ethnicity: _____

White/European American
Black/African American/Caribbean Islander
Black Hispanic/Black European
Latina/Latino
Mexican/Mexican American
Asian/Asian American/Pacific Islander
Other (Please describe):_____

4. Are you currently a Designated Forensic Psychologist (DFP) in Massachusetts?

Yes   No

5. Please describe any additional professional licenses or certifications you have earned within the field of psychology (e.g., ABPP)?

6. Approximately how many years have you practiced forensic psychology as a DFP in Massachusetts?

7. Approximately how many years have you been involved in conducting violence risk assessments (VRAs) for adults? *Note: For the purpose of this study, VRA is defined as the process of using risk factors to estimate the likelihood of an outcome of violence occurring in a population. Violence in this context may include physical and/or sexual assault.*

8. In what setting(s) have you conducted adult VRAs?

       Inpatient Psychiatric Hospital
       Court Clinics
       Private/Group Practice
       Jails/Prisons
       Other (please describe):

9. For what purpose(s) do you typically conduct VRAs?

       To aid in sentencing
       Assessment of readiness for privileges/discharge/lesser restriction
       Developing a risk management plan
       Other (please describe):

10. Approximately how many adult VRAs have you conducted as a DFP in Massachusetts?

11. *In your practice as a DFP in Massachusetts*, have you ever conducted a VRA involving a patient diagnosed with ***dementia/major cognitive impairment (MCI)***?

       Yes   No

12. What percentage of your VRA cases in Massachusetts have involved the presence of ***dementia/MCI***? *If you answered NO to the previous question, please skip this question.*

<5%
6-10%
11-20%
21-30%
31-40%
41-50%
51-60%
61-70%
71-80%

81-90%
91-100%

13. Please select all of the following elements/procedures that you typically include when conducting a VRA that does ***NOT*** involve the presence of ***dementia/MCI***:

Clinical Interview with Patient
Clinical Interview with Collateral Informants (e.g., friends, relatives, victims)
Review of Collateral Records (e.g., police/incident reports, medical record, professional evaluations)
Discussion with treatment providers
Actuarial or Semi-Structured Risk Assessment Tool (e.g., HCR-20, Static-99, VRAG-R)
Cognitive assessment or screening measure (e.g., WASI-II, WAIS-IV, MoCA)
Other (please explain):

14. If you ***HAVE*** conducted a VRA involving the presence of ***dementia/MCI***, please rate the degree to which your typical approach/method changed:

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

15. If you ***HAVE NOT*** conducted a VRA involving the presence of ***dementia/MCI***, please rate the degree to which you would anticipate changing your typical approach/method:

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

16. If you reported that your approach/method ***changed or would change*** in response to the presence of ***dementia/MCI***, please explain *why*:

17. If you reported that your approach/method ***changed or would change*** in response to the presence of ***dementia/MCI***, please explain *how* your approach changed or would change:

18. If you reported that your approach/method ***did not or would not*** change in response to the presence of ***dementia/MCI***, please explain why:

19. If you ***HAVE*** conducted a VRA of someone diagnosed with ***dementia/MCI***, how confident were you in the results of your evaluation compared to those that *did not* involve ***dementia/MCI***?

Very Confident
Confident
Less Confident
Not at all Confident

20. Have you received any specialized training in neuropsychology or the understanding of **_dementia/MCI_**?

      Yes   No

21. If you answered *yes* to #20, please provide a brief description of this training:

22. Have you received any specific training with regard to assessing violence risk in the context of **_dementia/MCI_**?

      Yes   No

23. If you answered *yes* to #22, please provide a brief description of this training:

24. If you answered *yes* to #22 **AND** you have conducted a violence risk assessment of a patient/client with **_dementia/MCI_**, please indicate the degree to which you believe this training assisted you in your conceptualization and assessment of violence risk:

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

25. In assessing the violence risk of patients/clients diagnosed with **_dementia/MCI_**, have you ever used an existing structured or actuarial instrument, such as the HCR-20 or VRAG, as part of your assessment approach?

      Yes   No   I have never assessed the violence risk of someone with dementia.

26. If you answered *yes* to #25, please indicate which instrument(s) you have used in assessing the violence risk of patients/clients diagnosed with **_dementia/MCI_**:

Historical, Clinical, Risk-20 (HCR-20)

Violence Risk Appraisal Guide (VRAG)
Static-99
Sex Offender Risk Appraisal Guide (SORAG)
Hare's Psychopathy Checklist-Revised (PCL-R)
Other (please describe):

27. If you answered *yes* to #25, what is your belief with regard to how effective/applicable the instrument was to this population?

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

28. To what degree do you believe the VRA of a patient/client with ***dementia/MCI*** would be benefitted by published guidelines and/or a risk assessment instrument normed and validated for this population?

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

29. I welcome any feedback or additional comments you would like to provide in the space below. Thank you so much for your time!

Appendix D: Debriefing

Exploring the Intersection of Dementia and Violence Risk Assessment

The purpose of this study is to explore the intersection of dementia dementia/MCI and violence risk assessment (VRA). More specifically, I am seeking to understand how frequently DFPs in Massachusetts are encountering people with dementia/MCI and asked to assess their violence risk. I also wish to understand if or how a DFPs method/approach to VRA is impacted by the presence of dementia/MCI and if they perceive a need for additional guidelines and/or risk assessment instruments tailored to this population.

You participated in an online survey to help me investigate these research questions. I asked you a number of questions related to demographics (e.g., age, gender, ethnicity), practice, and training, and requested that you rate your views/beliefs and provide your thoughts/experience in relation to various aspects of how dementia/MCI may or may not impact your typical VRA process.

Please do not tell other professionals about the research questions I am investigating in this study—for that might influence their responses and it is people's natural responses that I am interested in studying. Thank you. If you are interested in entering the drawing for a $50 Amazon gift card, please email me at [EMAIL].

Thank you very much for your invaluable contribution to this research study. I deeply appreciate your generosity, especially with the demands of life and work being what they are at this time.

If you have any concerns or comments, please contact me.

Jamie Klugiewicz, M.S.
Principal Investigator
Department of Clinical Psychology
Antioch University New England

Table 1.0

Emergent Themes and Rate of Endorsement

Emergent Themes	Endorsement
Reasons for Method Change	
Theme 1. Clinical interview is impacted	6
Sub-theme 1a. Patient unable to participate as usual	6
Sub-theme 1b. Self-report is less reliable	2
Theme 2. Additional information or data need to understand cognitive impairment	15
Theme 3. Increased reliance on collateral sources or consultation	7
Characteristics of Method Change	
Theme 4. Adjustment of the clinical interview	5
Theme 5. Addition of objective measures of cognition or adaptive functioning	16
Theme 6. Gathering of additional information	10
Sub-theme 6a. Review of medical records	5
Sub-theme 6b. Interview collaterals	7
Sub-theme 6c. Consult with neurologists or medical providers	3
Reasons for No Method Change	
Theme 7. Changes were no beyond those of the typical evaluation	2

Table 1.1

Reasons for Method Change

Theme		Sample
Theme 1: Clinical interview is impacted	***Sub-theme 1a:*** Patient is unable to participate as usual	*"Data from the clinical interview might be reduced and/or less informative if the person evaluated was impaired in their ability to answer questions designed to assess internal thoughts or awareness of personal psychological and motivations."*
	Sub-theme 1b: Self-report is less reliable	*"It would be a matter of weighing self-reported interview less if the client/patient was unable to participate as much as those without dementia."*
Theme 2: Additional information or data needed to understand cognitive impairment		*"Need to further investigate the nature and severity of the cognitive impairment"* *"More information regarding the degree and specific domains of impairments in cognition and functionality are needed…to fully assess violence risk"* *"Depending on the symptoms/behaviors associated with MCI this could add significant additional risk"*
Theme 3: Increased reliance on collateral sources or consultation		*"Greater number of collaterals to obtain info in different settings"* *"Requires more specific consultation"*

Table 1.2

Characteristics of Method Change

Theme		Sample
Theme 4: Adjustment of the clinical interview		*"but on one case, the examinee's clinician was present for the meeting to support his emotion regulation. It did not appear possible to conduct the interview otherwise and I typically would not have interviewed a patient in this way"*
		"Need to adapt the interview style and techniques to obtain data"
		"Possibly adjusting interview process in light of evident memory impairment"
Theme 5: Addition of objective measures of cognition or adaptive functioning		*"Possibly more cognitive testing than a typical evaluation"*
		"I would make sure that proper cognitive and adaptive functioning measures were completed"
		"I add in assessments by neurologists and neuropsychologists which I normally would not use"
Theme 6: Gathering of additional information	***Sub-theme 6a:*** Review medical records	*"More review of neurological and medical information"*
		"Incorporation of...neuroimaging and consideration of neurological data"
	Sub-theme 6b: Interview collaterals	*"perhaps greater reliance on data from collaterals who have regular contact with the individual"*
		"Speaking with relatives would occur"
	Sub-theme 6c: Consult with neurologists or medical providers	*"potentially obtain medical consultation re: diagnosis and prognosis"*
		"Greater focus on neuropsychological/cognitive/educational/vocational records and potentially obtain medical consultation re: diagnosis and prognosis"