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Homicide and dementia: An investigation of legal, ethical, and clinical factors of Australian legal cases☆

Amee Baird[a], Jeanette Kennett[b,*], Elizabeth Schier[b]

[a] Department of Psychology, Macquarie University, Australia
[b] Department of Philosopy, Macquarie University, Australia

HIGHLIGHTS

- Increasing numbers of criminal cases where accused may have dementia.
- Need for expert witnesses with experience in diagnosing dementia in criminal courts.
- Current sentencing guidelines do not accommodate progressive cognitive impairment.
- Individuals with dementia are unfit for punishment but may be detained under punitive conditions.
- Need for more appropriate placements for offenders with dementia.

1. Introduction

Our population is ageing and there is a corresponding increasing prevalence of dementia. Dementia is an umbrella term for a group of neurological conditions that cause a gradual death of brain cells and associated decline in cognitive functions that lead to significant impairment in everyday functioning (American Psychiatric Association, 2013a). According to Australian statistics published online by Dementia Australia in April 2019 (Dementia Australia, 2019), almost one in ten people over 65 years of age, and three in ten people over 85 years of age have dementia. Dementia is the second leading cause of death of Australians, with a significant associated economic and social burden. It is estimated that there will be over 1 million people with dementia in Australia by 2056 (Dementia Australia, 2019).

People with dementia who commit a criminal offence represent a significant challenge for the justice system and correctional facilities. They raise a range of complex issues including assessment of competency to stand trial, determining culpability, appropriate sentencing, and what we will call 'fitness for punishment' (Dufner, 2013; Mendez, 2010; Sfera, Osorio, Gradini, & Price, 2014). Our current legal framework is geared more towards mental illnesses with available treatments, or neurological conditions with 'stable', or potential for improvement in cognition, such as intellectual disability or acquired brain injury respectively. In contrast, dementia is a neurodegenerative condition characterised by progressive cognitive decline. Currently available treatments only ameliorate symptoms and there is no cure.

In this paper we examine published Australian judgments in which dementia was raised as a possible diagnosis for an individual charged with homicide. We restricted this review to cases of homicide for two main reasons; (1) as they represent the most extreme of criminal charges, and (2) for practical reasons to ensure a manageable number of cases. We explore clinical factors such as type of dementia diagnosis and reference to neuroimaging results; legal factors such as types of expert witnesses; and, finally, ethical issues of moral culpability and moral agency, in particular, whether the purposes of punishment can be satisfied when those convicted of murder or manslaughter have dementia. We will suggest that offenders with dementia will be progressively unable to meet the minimum moral or rational agency requirement presumed by our legal system and are thus unable to comprehend or respond to the key retributive and communicative purposes for which punishment is imposed, and by which it is justified. They are, or will become, *unfit* for punishment. Yet, as we will show, they are regularly sentenced to forms of detention that are in fact and in intent, punitive.

We acknowledge that the use of judgments has limitations. Specifically, they do not provide comprehensive details of legal proceedings, rather, only the information deemed necessary to justify the decision made.[1] Nevertheless, for the purpose of our exploration of

☆ NB Author order is alphabetical to reflect equal contributions.

* Corresponding author at: Macquarie University, North Ryde, NSW, Australia.
E-mail address: jeanette.kennett@mq.edu.au (J. Kennett).

[1] It should also be noted that there is significant variation between Australian states in the way in which an individual who may be unfit to stand or not guilty because of mental illness moves through the justice system and whether information regarding this is made publicly available. An analysis of these differences is beyond the scope of this article but suffice it to say that the preponderance of cases from NSW is a reflection of the state's laws and publishing conventions.

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legal and clinical factors, in our opinion the information provided in the judgments sufficed.

1.1. Dementia diagnostic criteria

There are various causes and types of dementia, each with their own diagnostic criteria. The most common form is Alzheimer's Dementia (AD) which is caused by Alzheimer's Disease (Alzheimer's Association, 2018) with an estimated prevalence of 10% in people over 65 years in a US study (Hebert, Weuve, Scherr, & Evans, 2013). The hallmark symptom of AD is impaired memory function, and the formal diagnostic criteria require that there is impairment in at least one other cognitive domain (such as language skills) in addition to memory (McKhann et al., 2011). Frontotemporal dementia (FTD) is far less common than AD. There are two main variants of FTD, each with their own diagnostic criteria; (1) Behavioural variant FTD (Bv-FTD) causes prominent changes in social and emotional functions, such as disinhibition and executive dysfunction (Rascovsky et al., 2011) and (2) Primary Progressive Aphasia (PPA), which has three subtypes with different language features, namely Semantic Dementia, Non-Fluent/agrammatic PPA, and Lopogenic PPA (Gorno-Tempini et al., 2011). Bv-FTD is often misdiagnosed as a psychiatric disorder given the nature of the symptoms (Lanata & Miller, 2016). A definitive diagnosis of dementia can only be made through neuropathological examination of the brain at autopsy. Diagnoses of 'possible' or 'probable' dementia are made (indicating increasing certainty) based on clinical assessment, neuroimaging investigations and presence/absence of specific biomarkers.

1.2. Aggression and crime in people with dementia

Behavioural symptoms of agitation and aggression are common in all types of dementia and are highly predictive of caregiver burden (Feast, Moniz-Cook, Stoner, Charlesworth, & Orrell, 2016). Delusions, in particular 'delusional misidentification syndromes' (such as Capgras delusion, or the belief that a familiar person is an imposter) can also be a comorbid symptom of various types of dementia (Cipriani et al., 2013), and can be associated with disruptive and even violent behaviours, which in their most extreme form can result in physical assault (Kaufman et al., 2014; Klein & Hirachan, 2014). In a recent study of resident to resident aggression and deaths in Australian aged care facilities it was found that 90% had a diagnosis of dementia (Murphy, Bugeja, Pilgrim, & Ibrahim, 2017), and there have been several published cases of attempted homicide or homicides by people with a diagnosis of dementia (Rayel, Land, & Gutheil, 1999; Ticehurst, Gale, & Rosenberg, 1994; Tsai, Hwang, Yang, & Liu, 1997). Older homicide offenders (over 55 years of age) are more likely than younger offenders to have cognitive impairment (Reutens, Nielssen, & Large, 2015) or a diagnosis of dementia (Putkonen et al., 2010), and their victims are more likely to be female and in a domestic relationship with the offender (Reutens et al., 2015).

There is evidence that Bv-FTD is more commonly associated with physical aggression and criminal behaviour than other types of dementia such as AD (Diehl-Schmid, Perneczky, Koch, Nedopil, & Kurz, 2013; Liljegren et al., 2015, 2018). In their recent study of 281 post-mortem cases of neuropathologically confirmed diagnoses of dementia, Liljegren and colleagues (Liljegren et al., 2018) found that compared with those with AD, people with Bv-FTD had a higher physical aggression frequency score and manifested physical aggression earlier in the course of their dementia. Criminal behaviours such as theft, trespassing, sexual disinhibition and public urination can be the presenting symptom of behavioural change in people with Bv-FTD. In their retrospective review of the medical records of over 2000 patients seen at a Memory and Ageing Center in San Francisco, a history of criminal behaviour was reported in 8.5%, and Bv-FTD was the most common diagnosis in this group (37.4%, Liljegren, Landqvist Waldö, & Englund, 2018). Diel Schmid and colleagues (Diehl-Schmid et al., 2013) found that over half (54%) of their sample of 32 people with Bv-FTD had committed a criminal act. These statistics have resulted in calls for systematic neurological screening of symptoms of Bv-FTD in all new onset offenders who are over 55 years of age (Sfera et al., 2014).

2. Methods

Full details of the methodology can be found in the accompanying Data in Brief paper (Schier et al., 2020). We searched Australian case law in the Australasian Legal Information Institute (AustLii) database using the keywords "killing" or "murder" or "death" and "dementia" or "Alzheimer's". It was noted that 'Alzheimer's' was sometimes spelt 'Alzheimers' and so the searches were also done using 'Alzheimers'. Across all permutations thousands of results were returned (see Schier et al., 2020). All proceedings were examined to see if the crime was a form of homicide (murder, manslaughter or dangerous driving causing death) and whether dementia was considered as a diagnosis for the accused. For all proceedings meeting these criteria, AustLii and the Court records were further searched to find other proceedings concerning the same case of homicide. The proceedings were then examined in detail and a range of pre-determined information was obtained. We recorded demographic data (gender of victim and accused, age of accused and the nature of the relationship between the accused and victim); legal information (nature of the proceeding, the charges and plea, the outcome); clinical information (any cognitive assessment performed, number and speciality of expert witnesses, type of dementia, other comorbid diagnoses) and the reasoning in the judgment around the accused's mental state and their culpability (how the Court decided appropriate diagnosis when there was expert disagreement; comments about the relation between dementia and capacity to stand trial or if the accused had the requisite mens rea to commit murder; and comments regarding sentencing factors). When more than one possible type of dementia was proposed as a diagnosis and the Court did not resolve the expert disagreement, all possible diagnoses were recorded. Evidence provided by a psychiatrist was categorised as "psychiatric" unless explicit mention was made of the use of cognitive tasks. When mention was made of results on cognitive tasks, then the assessment was categorised as 'cognitive'.

3. Summaries of findings

A total of 30 homicides in which a diagnosis of dementia was considered in the accused were found and a total of 51 proceedings relating to these cases were examined (*Attorney-General of Queensland v B*, 2002; *Director of Public Prosecutions v AB (No 2)*, 2014; *Director of Public Prosecutions v AB*, 2013; *DPP v Gibson*, 2019; Goodridge v R, No. 37 (Supreme Court of New South Wales - Court of Criminal Appeal March 26, 2014), 2014b; *Kiesewalter, Re*, 2006; *Ma'a, Re*, 2010a; *R v AB*, 2015; *R v Albert James PADDOCK*, 2009; R v BERLINGO No. SCCRM-01-296, No. 109 (Supreme Court of South Australia April 11, 2003), 2003b; R v BERLINGO No. SCCRM-01-296, No. 195 (Supreme Court of South Australia June 27, 2003), 2003; *R v Blackman (No 2)*, 2018; R v Blackman (No 3), No. 405 (Supreme Court of New South Wales April 4, 2018), 2018b; *R v Blackman*, R v Blackman, No. 395 (Supreme Court of New South Wales March 29, 2018), 2018; *R v Blackman*, 2016; *R v Chong*, 2012; *R v Coleman*, 2009; *R v Cosseddo*, 2000; *R v Costa (No 1)*, 2015; *R v Costa (No 2)*, 2015a; *R v Dunne*, 2002; *R v Dunne*, 2001; *R v Elie ZEILAA*, 2009a; *R v FVT*, 2012; R v Gabriel, No. 13 (Supreme Court of New South Wales February 4, 2010), 2010b; R v Goodridge (No 2), No. 1180 (Supreme Court of New South Wales October 3, 2012), 2012b; R v Goodridge, No. 378 (Supreme Court of New South Wales April 20, 2012), 2012b; *R v Griffith*, 2008; *R v Griffith*, R v Griffith, No. 84 (Supreme Court of the ACT October 1, 2008), 2008; *R v Griffith*, 2009; *R v Hunt*, 2002; *R v Ivanoff*, 2018a; *R v Ivanoff*, 2017; *R v Patricia Anne GALLAGHER*, 2012; R v Patricia Anne Gallagher, No. 1102 (Supreme Court of New South Wales August 19, 2013), 2013b; R v Scotty, No. 43

(Supreme Court of the Northern Territory August 23, 2007), 2007b; *R v Singh*, 2010;R v SINGH, No. 638 (Supreme Court of New South Wales June 29, 2010), 2010b; *R v Szabo*, 2000; *R v Terrence David KAIN*, 2013; *R v Wilson (No 2)*, 2017; *R v Wilson (No 3)*, 2017; *R v Wilson (No 4)*, 2017; *R v Wilson (No 5)*, 2018; *R v Wilson (no 6)*, 2019; *R v Wilson*, 2015; *REGINA v COLEMAN*, 2010; *Regina v Moore*, 2006; Talbingo, 2015a; *THE STATE OF WESTERN AUSTRALIA -v- HUGGINS*, 2017; *Van Dijk, Re*, 2005).

The majority (18/30 or 60%) of homicides occurred in New South Wales (NSW), so for the sake of simplicity we will often use the *terminology* of the NSW legal system. Note in the subsequent discussion when we use the term 'case' we are referring to the 30 homicides, and when we use the term 'proceeding' we are referring to the 51 published decisions from Court or Tribunal hearings (referred to as Court) regarding the 30 homicides.

The following sections provide a summary of the demographic, legal and clinical factors of the cases and proceedings. Themes and points of concern regarding dementia and culpability are discussed below. A full list of the issues identified can be found in Schier et al., (2020).

3.1. Demographics

The majority of accused were male (26/30 or 87%). The accused's ages ranged from 31 to 87 years, with the majority (5/30) aged between 70 and 79 years, followed by 80–89 years (4/30), two each in the 40–49 and 50–59 age range, and 1 in the 30–39 age range.

There were a total of 34 victims, with two individuals accused of multiple homicides (2 victims in *Attorney-General of Queensland v B*, 2002; 3 victims in *R v Dunne*, 2002). The majority (25/30) of the victims were female, 5 were male, and the gender of 4 of the victims was not specified. The majority (16/30) of the victims were the accused's current or former intimate partner, 12 were a friend or relative, 3 were strangers and the relationship between the victim and accused was not specified in 3 cases.

3.2. Clinical factors

A difficulty that arises when classifying the type of dementia of the accused is that the Court often need not resolve expert disagreement as to the precise diagnosis. Rather, they only need to establish the level of impairment, which to some extent can be independent of a neurological or psychological classification. For example in *R v Blackman,* in determining fitness, the Court 'find(s) on the evidence I have discussed, that Mr. Blackman has suffered damage to his brain … as the result at least, in part, of his long term alcohol abuse.' (*R v Blackman*, 2016, para. 30) without resolving which of the various diagnoses different experts offered is appropriate (see also *Director of Public Prosecutions v AB*, 2013; *R v Patricia Anne GALLAGHER*, 2012; *R v Wilson*, 2015). In order to capture the richness in the proceedings we have listed the type of dementia in terms of the range of diagnoses offered when the Court did not determine which was appropriate. In cases such as *DPP v Gibson*, 2019, where the Court needed to resolve the expert disagreement, then the final decision of the Court was coded.

The most common diagnosis in the accused was frontotemporal dementia (FTD) (5/30 or 17%, subtype not specified) or alcohol related brain damage[2] (5/30). Four were diagnosed with dementia with no specification of the type. The remainder had diagnoses of vascular dementia (2/30) or AD (2/30). In one case (*R v Szabo*, 2000), one of the three experts diagnosed a dementia (type unspecified), but the Court rejected this diagnosis.

In 12/30 cases multiple diagnoses were considered; three were diagnosed with AD/vascular, 3 with vascular dementia or alcohol related brain damage, 2 with AD or FTD (none mentioned the subtype), 2 with alcohol related brain damage or FTD (none mentioned the subtype), 1 with alcohol related brain damage, vascular dementia or AD, and 1 with alcohol related brain damage, vascular dementia, AD or FTD.

Experts called to give evidence regarding the accused's mental state came from a range of specialties. In total 144 experts were called across the 51 proceedings. A psychiatrist gave evidence in all cases. In total 84 psychiatrists were called, of these 21 were forensic psychiatrists and one was a psychogeriatrician ('old age' psychiatrist). All cases had at least two experts give evidence. Thirty psychologists gave evidence including 13 neuropsychologists, 6 clinical psychologists, 4 forensic psychologists and 1 psychogeriatrician. Other medical professionals comprised general practitioners (5), geriatricians (5), neurologists (5), radiologists (7) and one nurse. Seven experts were reported simply as 'Doctor'.

A range of assessments were mentioned in the cases. It should be noted that scarce information was available in the proceedings regarding the nature of these assessments. All 30 accused had a psychiatric assessment as at least one psychiatrist gave evidence in every case. Any further details regarding the nature of the assessments depended on what the Court or Tribunal deemed necessary to justify the decision. The majority of cases (22/30) explicitly mentioned 'cognitive assessment'. The majority of accused (17/30) had at least one neuroimaging investigation performed and the majority of scans were structural neuroimaging brain scans (Computed Tomography, CT or Magnetic Resonance Imaging, MRI brain scans). 'Functional' brain scans (Positron Emission Tomography, PET and Single Photon Emission Computed Tomography, SPECT) were less commonly performed (2 cases). Cognitive assessments were undertaken in 16 of the 17 cases in which neuroimaging investigations were performed.

3.3. Legal factors

Fitness to plea or stand trial was considered in 17/30 cases. Of these only "B" was found fit to stand (*Attorney-General of Queensland v B*, 2002) where the proceeding concerned whether the Mental Health Tribunal finding regarding fitness can supersede a jury's finding. Further decisions regarding this case could not be found. Of the remaining 16 cases, 4 were found to have full capacity at the time of the offence and were found provisionally guilty of murder, 4 were found to be of diminished responsibility and were provisionally guilty of manslaughter, 4 were found to be lacking in capacity and were provisionally found 'not guilty by reason of mental impairment/of unsound mind' and 3 were acquitted.

Of the 13 accused for whom fitness to plea was not considered, 2 plead guilty to murder, 2 had a plea of not guilty due to diminished capacity (not guilty by reason of mental impairment) accepted, 1 was found guilty of manslaughter due to provocation by a jury, 1 had a plea of guilty of manslaughter due to provocation accepted, 1 was acquitted, 1 was found guilty of manslaughter by a jury (because they did not have the intent to kill) and 4 were found guilty of murder by a jury.

We had aimed to examine whether there were different legal outcomes regarding capacity and culpability for different types of dementia. Unfortunately, given the uncertainties regarding the appropriate diagnosis for the accused (including many cases where multiple differential diagnoses were raised), this analysis was not possible. For those interested in these issues we suggest you look at the analysis of the individual cases found in the accompanying data paper (Schier et al., 2020).

[2] Note that for a case of 'alcohol-related brain damage' to be identified by our search, at least one expert needed to use the term 'dementia' in relation to the case. This makes distinguishing between alcohol related brain damage and dementia difficult given our methodology. Two of the alcohol related brain damage cases were also referred to as 'Korsakoff's' syndrome/dementia (see below). Only one of the "mixed" diagnoses cases referred *only* to alcohol related brain damage, with a separate diagnosis of vascular dementia (*R v Goodridge*, 2012a).

3.4. General observations

Due to the small number of cases and the diversity of legal outcomes, our study is not sufficiently powered to draw any general conclusions regarding issues such as the relationship between types of dementia and legal outcomes. Nevertheless, there are several qualitative observations we wish to highlight.

First, our data supports Reutens and colleagues' finding that victims are more likely to be female and in a domestic relationship with the accused (Reutens et al., 2015). The majority of victims (25/30, 83.3%) whose gender was specified were female. We found that 16 of the 31 victims (53.3%) whose relation to the accused was specified were the accused's current or former intimate partner and that all of the intimate partner victims were women.

Second, we want to highlight the possibility of false confessions in individuals with memory impairment due to dementia. In three of the cases involving alcohol related brain damage, the potential for confabulation in response to memory loss (Borsutzky, Fujiwara, Brand, & Markowitsch, 2008) was raised in relation to confessions (*R v Blackman (No 3)*, 2018b; *R v Patricia Anne Gallagher*, 2013b; *R v Scotty*, 2007b). In two of these cases the confessions were ruled inadmissible because the risk they were false was too high (*R v Blackman (No 3)*, 2018b; *R v Patricia Anne Gallagher*, 2013b) and the accused were therefore acquitted. In the third case the confession was ruled inadmissible, not because of confabulation due to memory loss, but in part because the accused's mental state meant that she may not have understood that she need not answer the questions, even with the aid of an interpreter (*R v Scotty*, 2007b). Further proceedings regarding this case were not published, but news reports indicate that the accused was subsequently acquitted of all charges (ABC News, 2008).

Finally, we want to point to a case concerning the different decisions of a jury and the Mental Health Review Tribunal regarding an accused's fitness to stand trial (*Attorney-General of Queensland v B*, 2001). While the appeal court judges all agreed that the decision of the jury stands, this case raises the question of the relative merits of having a jury or Mental Health Tribunal decide fitness (*Attorney-General of Queensland v B*, 2001, para. 18).

4. Clinical factors of the homicide cases

We examined a range of clinical factors in the 30 homicides, including the type of dementia of offenders, issues related to cognitive assessment, references to neuroimaging investigation results and formal diagnostic criteria of dementia, and types of expert witnesses. Prior to considering each of these factors in turn, we highlight that there is currently no standard procedure regarding assessment requirements (or who conducts those assessments) for an alleged offender with suspected dementia.

4.1. Type of dementia

Given the accumulating evidence of more frequent physical aggression and criminal behaviour in people with Bv-FTD compared with other types of dementia, we predicted that this type of dementia would be the most common in our cases. While none of the proceedings specified the subtype of FTD, we found that this was the most common diagnosis (17%), equal with alcohol related brain damage. FTD appears to be overrepresented in this sample in comparison with the overall prevalence rates of this type of dementia in the population. It should be noted that frontal executive dysfunction, identified by cognitive assessment or frontal lobe pathology on neuroimaging investigations was common and reported in 10/30 cases. It is also noteworthy that all the cases had multiple medical comorbidities such as various psychiatric conditions including psychosis or mood disorders, neurological conditions such as epilepsy, longstanding intellectual disability, in addition to alcohol use, all of which can contribute to frontal executive dysfunction (see Schier et al., 2020).

Alcohol related brain damage was the most common diagnosis, equal with FTD. It was the only diagnosis reported in five of the 30 (17%) cases and was considered as one of a number of possible diagnoses in another 6 cases. Therefore, this diagnosis featured in 11/30 cases (37%). There are two main syndromes of alcohol related cognitive impairment, namely 'alcohol related dementia' and 'Wernicke-Korsakoff Syndrome' (alcohol induced persisting amnestic syndrome), although the umbrella term 'alcohol related brain damage' is often used given the heterogeneity of these disorders (Ridley, Draper, & Withall, 2013). There is ongoing debate and controversy regarding the mechanisms underlying alcohol related cognitive impairment. The evidence that maintained abstinence can lead to recovery also questions the use of the term 'dementia' in such cases, implying an irreversible and progressive cognitive decline. Of all the cases where alcohol related brain damage was mentioned, only two of the cases mention Korsakoff's syndrome (*R v Griffith*, 2008); *R v Singh*, 2010. Note that in *R v Griffith* it is referred to as 'Korsakoff's dementia').

4.2. Reference to cognitive assessment results

It should be noted that the judgments only provide information about what the Judge determines is necessary in justifying their decisions, and typically there was very limited reference to the nature of assessments conducted and the cognitive tasks used. Nevertheless, some interesting patterns emerged in our review of the reference to cognitive assessment results in the judgments. It appears that the Judges/tribunal members who write the judgments place more importance on the results of neuroimaging in comparison to cognitive testing, as the majority (71% or 12/17 cases which mentioned neuroimaging) contained a direct quote from the radiologist's report. In contrast, only 27% (6/22) cases named at least one of the cognitive tests used, and only a few of those included any specific details of the results of the cognitive assessment. It is not possible to determine if this pattern is reflective of the quality of the assessment done by the experts, or merely the information that is deemed important to record in the Court's decision. As stated above, a limitation of using judgments rather than Court transcripts is that information that was presented during legal proceedings may not be reported due to the summary nature of judgments.

In some cases, the cognitive assessments were conducted by generalist psychologists or clinical psychologists without specific neuropsychological training or expertise. The interpretation of the cognitive assessment results of these cases is complex and these clinicians are essentially acting outside of their area of expertise. This could result in invalid interpretation of results. In some cases, there appeared to be a lack of consideration of cultural and language factors, which can cause challenges in assessment and diagnosis of dementia (Sagbakken, Spilker, & Nielsen, 2018). For example, in Case (*R v BERLINGO No. SCCRM-01-296*, 2003) there was reference to the fact that one of the experts spoke the native language of the offender, who had limited English, but there was no reference to the use of an interpreter during the cognitive assessments carried out by the other experts. This is likely to have contributed to his low performances on cognitive tasks administered in English, his non-native language. In fact, there is specific reference to the offender being *unable to comprehend* the nature of a specific 'frontal' executive task (Brixton test), yet his poor performance on this and other executive tasks was considered valid. Other factors that can contribute to low performances on cognitive tasks are intellectual disability and learning disorders, which are often not carefully considered in the interpretation of results. In addition, there was scarce reference to assessment of motivation and effort (or malingering) in these cases. It is unclear if this information was simply not stated in the judgment or if this reflects a lack of assessment of this issue. Given that over 50% of criminal offenders show 'malingered neurocognitive dysfunction' (Ardolf, Denney, & Houston, 2007), it is crucial that cognitive assessments of offenders include tasks that assess effort/

motivation to determine if the results can be reliably interpreted.

4.3. Neuroimaging investigations and diagnostic criteria

The most common type of neuroimaging investigation referred to was MRI brain scan results (13/30 cases). In several cases where the diagnosis of FTD was raised, there were conflicting opinions of expert witnesses in regard to the MRI brain scan findings, with some considering them inconsistent with a diagnosis of FTD (*Ma'a, Re*, 2010b; *R v BERLINGO No. SCCRM-01-296*, 2003b; *R v Gabriel*, 2010b). Importantly, in the formal diagnostic criteria for Bv-FTD (Rascovsky et al., 2011), specific neuroimaging findings, namely frontal and/or anterior temporal atrophy on MRI brain scan, or hypoperfusion of these brain regions on PET or SPECT, is only one of three criteria required for a diagnosis of *probable* Bv-FTD. In (*R v BERLINGO No. SCCRM-01-296*, 2003) the judge makes specific reference to the undue emphasis on MRI brain scan results, which he considers to be of least importance;

> "As the great debate concerning the proper interpretation of the MRI scan pictures developed, that topic had a tendency to become all consuming. The intense focus on it eventually threatened to overshadow and subsume all else. It is important to remember that, in the context of the present case, it was probably the least important basis for arriving at a proper assessment of the accused. It was never disputed that, in descending order of importance, the scan results came last." (para 211).

Other types of neuroimaging investigations were rarely referenced, but in (*Ma'a, Re*, 2010b) the results of SPECT scans were heavily weighed on by expert witnesses. These investigation results were explicitly referred to as supporting the diagnosis of FTD, without reference to other diagnostic criteria. Of note, this offender was also noted to have bipolar disorder, which can also contribute to SPECT changes (Gonul, Coburn, & Kula, 2009). A recent Cochrane Database Systematic Review has addressed the issue of the use of SPECT in FTD diagnosis and concluded that there is insufficient evidence to support its use in clinical practice (Archer et al., 2015).

Our review of these 30 cases suggest that the results of neuroimaging investigations appear to hold more weight in Court than the specific behavioural/cognitive symptoms that are required for a formal diagnosis (Rascovsky et al., 2011). The scarce reference to formal dementia diagnostic criteria in the case judgments is also notable. This may be a reflection of the specific area of expertise of most expert witnesses in these cases, namely psychiatry (see further discussion below). It may also be a reflection of the fact that determining the specific diagnosis is considered of little importance to the Court/tribunal, as their priority is understanding how the particular symptoms undermined the individual's ability to reason (Ferguson & Ogloff, 2011). Alternatively, it may be that this information was discussed during the proceedings but is not reported in the judgments. Nevertheless, we suggest that referring to specific types of dementia is of utmost importance given that it has implications for the symptoms (cognitive and behavioural) the person will have, and the corresponding impact on the person's ability to reason about their actions. For example, AD has the hallmark symptoms of impaired memory, while the main symptom of Bv-FTD is personality and behaviour change, affecting social and emotional functions. It has been claimed that people with Bv-FTD who have committed crimes can retain the knowledge of right from wrong, but this is accompanied by an acknowledged "loss of moral rationality" (Mendez, 2010).[3] In his review of four cases of people with FTD who had committed various criminal offences, such as theft and 'hit and run', Mendez, (2010, p. 322) stated that Bv-FTD is associated with a 'brain based impairment in moral reasoning'. He outlines their deficits in 'the normal internal restraint of intuitive moral emotions and empathy' and asserts that 'FTD patients have impaired moral rationality from impaired moral cognition'. Although someone with Bv-FTD may show relatively intact intellectual abilities, their executive control, that is, their ability to act in accordance with their knowledge, is undermined (Berryessa, 2016; Liljegren et al., 2015; Mendez, 2010). In many of the cases we reviewed FTD was raised as a diagnosis with no specific referral to a type of FTD (see *Ma'a, Re*, 2010b; *R v BERLINGO No. SCCRM-01-296*, 2003; *R v Dunne*, 2001; *R v Gabriel*, 2010b), which is concerning given that certain types predominately affect language functions, not behaviour, as discussed above. In summary, there are specific behavioural deficits that can occur in the context of Bv-FTD, such as reduced impulse control (ability to appropriately analyse events before acting), theory of mind (ability to understand another's point of view) and empathy (ability to understand the feelings of others), that can predispose people with this condition to criminal acts.

4.4. Type of expert witnesses

Psychiatrists were the dominant type of expert witness in these cases, accounting for 58% of all expert witnesses. The second biggest group of experts was Psychologists, accounting for 21% of experts called. Psychiatrists primarily refer to the *Diagnostic and Statistical Manual of Mental Disorders*, now in its fifth version (DSM-V) (American Psychiatric Association, 2013b), in their diagnostic formulations. In the DSM-V, a diagnosis of dementia is featured under the category of 'mild or major neurocognitive disorder', with the classification of 'mild' or 'major' based on the presence or absence of 'independence in everyday activities', and different dementia types are specified as subtype codes. Outside the courtroom, psychiatrists are not typically considered experts in diagnosis of dementia, unless they are specifically experienced or trained in 'old age' psychiatry. Rather, the diagnosis of dementia is typically the domain of geriatricians or neurologists. There are clear historical explanations for why Australian Courts prefer testimony from psychiatrists over other types of expert witnesses (Borrello, 2010; Coles, 2000; Ferguson & Ogloff, 2011; Huckabee, 2016; Skeem & Golding, 1998; Veiel & Coles, 1999), which is appropriate in the consideration of psychiatric and mental health conditions. In the case of neurodegenerative disorders, however, there appears to be a disconnection between the clinical and legal domain in respect to who is typically diagnosing dementia (geriatrician/neurologist versus psychiatrist) and the criteria used (formal diagnostic criteria for specific types of dementia versus DSM-V). We suggest that in cases where dementia is raised as a possible diagnosis of an offender, there should be more reliance on the expertise of clinicians in the field of neurodegenerative disorders, rather than deferring to the traditional domination of psychiatrists in the courtroom.

5. Ethical and sentencing factors

We found a number of different ways in which a diagnosis of dementia in someone charged with murder was relevant to the defence. First of all, in some cases it was argued that the dementia rendered the accused unfit to stand trial. Second, in some cases it was argued that they lacked the requisite mental state at the time of the offence ('not guilty by reason of mental illness' in NSW). Third, in some cases it was argued that the dementia provided a partial defence that reduced the charge of murder to manslaughter because it was a mental state that diminished, without removing their responsibility ('substantial impairment by abnormality of mind' in NSW). Fourth, because those suffering memory deficits may confabulate in order to cover for their memory impairment, there were cases where it was argued that the confessions of the accused with dementia were unreliable and should be excluded as evidence.

Our interest in this section is not primarily in describing how and

[3] As we argue later, the sense in which the accused retains knowledge of right and wrong seems too thin to support moral reasoning.

why a diagnosis of dementia is relevant to these questions and the problems that exist in applying the law as it stands, for the simple reason that these issues have been examined in detail previously (NSW Law Reform Comission & Justice, 2015; *Pathways to Justice–Inquiry into the Incarceration Rate of Aboriginal and Torres Strait Islander Peoples (ALRC Report 133)*, 2018; (Victorian Law Reform Comission, 2014). Instead, we want to focus on the less examined issue of dementia and punishment. In the cases we examined, dementia was raised in sentencing as a factor which could reduce moral culpability, increase the burdensomeness of imprisonment, increase (if the accused was still physically fit) or decrease (if the accused was frail) the need for community protection and render general or specific deterrence less relevant. The majority of defendants with dementia, including those found unfit to plead, were sentenced to periods of detention or imprisonment for their offences. We now turn to an examination of the moral issues raised by the sentencing of people with dementia.

5.1. Justifications for punishment

The punitive powers exercised by the state through the Courts, in particular the deprivation of liberty through imprisonment, require strong moral justification. There are three main theoretical approaches to the justification of punishment which we briefly outline (Ten, 1987).

According to *retributive theories* the offender's moral wrongdoing *merits* punishment and condemnation. The amount of punishment that is justified will therefore depend upon the level of the offenders' moral culpability for the crime. Through the mechanism of punishment, the state seeks to *remediate* or *compensate* for the harm done by the offender. As Duff and Hoskins point out, one retributivist justification that has been advanced for punishment is that "crime involves taking an unfair advantage over law-abiding citizen and punishment removes that unfair advantage" ((2017), p. 10). Punishment may be seen as a way of repaying the moral debt that the offender has incurred to the victim and community.

Communicative theories of punishment focus upon calling the offender to account and communicating deserved and proportional *blame*. Communicative theories see communication of blame through punishment as respecting and engaging with the moral agency of the offender in treating them as capable of understanding and governing themselves in accordance with community values and the law. According to Duff 'it appeals to the other's reason and understanding – the response it seeks is one that is mediated by the other's rational grasp of its content' (Duff, 2001, pp. 79–80). Through punishment the offender is ideally engaged in a moral dialogue that enables them to see the error of their ways and to morally reform.

Utilitarian theories justify punishment in terms of serving important community ends, such as community protection, deterrence of crime, and the rehabilitation of the offender.

5.2. Punishment and moral agency

Stephen Morse has noted that the criminal law embodies the folk psychological presumption that "human action will at least be rationalizable by mental state explanations [beliefs, desires, intentions etc] or that it will be responsive to reasons, including incentives, under the right conditions" (Morse, 2011, p. 530). The presumption of basic rationality frames legal proceeding and requires rebuttal – so the demonstration of unfitness, mitigation or exemption is the burden of the defence. Likewise, the justifications of punishment offered by both retributive and communicative theories assume and require that the person to be punished is a minimally rational and morally responsive agent. Insofar as offenders can be said to owe a moral debt to the community, and insofar as punishment aims to morally engage with the offender, the justifications offered will fail when applied to an individual who cannot meet minimal moral agency requirements.

This raises the question of whether the moral purposes of punishment can be satisfied in cases where accused persons are affected by dementia at the time of the offence, or by the time they reach trial, conviction, and sentencing. We will consider sentencing practices in some actual cases in the light of retributive, communicative and utilitarian considerations and ask: What role *do* they play in sentencing offenders with dementia? What role *should* they play? And, in particular, are offenders with dementia actually *fit for* retributive punishment?

5.3. Principles of punishment and the sentencing of persons with dementia

The sentencing guidelines for Australian Courts contain a mix of the justificatory elements outlined above. In NSW, where most of our cases occurred, the purposes for which a Court may impose a sentence on an offender are: (a) to ensure that the offender is adequately punished for the offence, (b) to prevent crime by deterring the offender and other persons from committing similar offences, (c) to protect the community from the offender, (d) to promote the rehabilitation of the offender, (e) to make the offender accountable for his or her actions, (f) to denounce the conduct of the offender, (g) to recognise the harm done to the victim of the crime and the community (*Crimes (Sentencing Procedure) Act* 1999 *No 92 - NSW Legislation*, 2018).

Retribution rests on the idea that the offender's moral wrongdoing merits punishment and condemnation. Therefore, judges are required to assess the level of the offenders' moral culpability for the crime. Clearly, cognitive impairments due to dementia may affect moral culpability and therefore are relevant to purposes a) e) and f). They may also be relevant to the forward-looking consequentialist goals of b) and d). The recognition of harm to the victim and the community is probably best assimilated to the retributive purposes of punishment since it seeks to remediate or compensate for that harm through the sentencing of the offender. However, the role of denunciation of the offence and the offender and the emphasis on harm to the victim also have clear communicative intent. They aim to morally address the offender but also the victim. They also aim to communicate community standards and moral offence.

In the proceedings we examined, a possible diagnosis of dementia was relevant in two main ways: First it might permanently undermine the accused's fitness to stand trial. Second it might be considered a mental impairment that reduces their responsibility (resulting in, say, a conviction for manslaughter rather than murder), or removes responsibility altogether (resulting in a finding of not guilty due to their mental state e.g. not guilty by reason of mental illness in NSW). If someone's mental impairment leads them to be found guilty of manslaughter rather than murder, then punishment is of course a consideration in sentencing. Nevertheless, issues of punishment also arise for those who are found unfit to be tried.

According to the Presser critieria (Victorian Law Reform Commission, 2014) which are widely used in Australian courts, a person is unfit to be tried if their cognitive impairments render them unable to: understand the nature of the charges; understand the nature of the Court proceedings; challenge jurors; understand the evidence; decide what defence to offer; and/or explain his or her version of the facts to counsel and the Court.

The procedure for handling individuals who are found unfit to be tried in Australian jurisdictions varies both between states and within a state at various times. In the majority of states, if someone's cognitive impairment renders them permanently unfit to be tried, their case is then heard at a special hearing to determine, on the limited evidence available, whether they are guilty of the charge or a related one. If they are found guilty of an offence, then the judge must calculate a sentence or limiting term of detention that is equivalent to the sentence they would have received if they had been found guilty through the normal trial process. The avowed purpose of this is not to punish the individual, who is legally a forensic patient, but to ensure that they are not detained for longer than they would have been if found fit (Director of

Public Prosecutions vs AB (No 2), 2014, para. 3). While the intention of a limiting term is to remove the injustice of lengthy or indefinite detention, the usual sentencing guidelines are applied in the determination of the term. We suggest that this can lead to injustice when applied to offenders with progressive cognitive impairment such as dementia.

The application of the retributive and communicative elements of punishment to the sentencing of offenders with dementia seems ethically problematic.[4] The case of Talbingo (Talbingo, 2015b) who received a diagnosis of dementia which reportedly developed following a brain injury post-offence, nicely illustrates the issues. Talbingo was deemed unfit to be tried and was found provisionally guilty of murder at a special hearing. The charge was not reduced to manslaughter because he was judged to be competent at the time of the offence. He was given a limiting term of 15 years. At a review of sentence after 5 years and 4 months imprisonment, the director of the aged care unit in the jail "confirmed that it was rare for a sentenced prisoner with dementia to be released before their release date, even on compassionate grounds". When asked by the Tribunal panel whether Mr. Talbingo was capable of deriving any benefit from being punished, feeling remorse, and expiating his guilt, Dr. F (forensic and clinical psychologist) stated that "Mr Talbingo is *past being capable of having an appreciation of these matters*." and that in relation to Mr. Talbingo, we are "*dealing with a very different brain* than that which was involved in the index offence" (our emphasis). In deciding to release Mr. Talbingo, the tribunal acknowledged that Mr. Talbingo is "incapable of appreciating why he is incarcerated", such that 'considerations of punishment, denunciation and accountability for his offence do not have any meaningful resonance with him so far as he is subjectively aware", though they also accepted that "such considerations have some resonance, at least from the objective viewpoint of the community, and so does the recognition of the harm done to the victim of the crime and the community" (Talbingo, 2015b).

The tribunal's judgment in this case appears to implicitly recognise what we might call the issue of *fitness for punishment*, which can come apart from the issue of culpability for the original offence. First, Mr. Talbingo did not have sufficient moral understanding or cognitive competence to be the kind of agent who could any longer merit punishment or benefit from it. Second, in the light of his progressive cognitive impairment, it is not clear that he could be considered sufficiently connected to the offence to continue to be accountable for it.

The severe and progressive cognitive decline that occurs in any type of dementia means that offenders who have this condition at the time they commit some form of homicide, or who develop it after the offence, reach a point where they cannot be deterred by punishment, they cannot be called to account for their actions, they cannot experience remorse through gaining an understanding of the impacts of their actions, or be reformed. Two considerations that might still carry weight in such cases are incapacitation of the offender and satisfaction for the families of victims that the harm done has been adequately acknowledged and redressed via the sentencing process. With respect to incapacitation, for offenders in the mid to later stages of dementia, the risk of reoffending is low in appropriate care settings. In sentencing, the judge in the case of Zeilaa directly addresses the issue of victim satisfaction as follows:

> Those that mourn the loss of the deceased in this matter should understand that this is a very unusual case and the sentence that will be imposed on the offender cannot in any way reflect the loss of that life to them. It is of little comfort to them and I would understand that they would think that the sentence imposed does not compensate for the loss of that life generally and the loss of the deceased to them. They must try to understand that sentencing is a difficult task when it is so serious as involving the taking of a human life. *It is not simply a case of attempting to value the loss of the deceased's life and to punish the offender accordingly as if this were a civil proceeding. This is a matter of some complexity, not only because this is an offence of manslaughter, but also because of the unusual situation of the offender, his mental difficulties and the prognosis he has for the remainder of his life which has been diminished by his mental disorder.* This is a very peculiar sentence imposed in circumstances of a very unusual case. (R v Elie ZEILAA, No. 532 (Supreme Court of New South Wales June 12, 2009), 2009a, para. 22 italics added).

This judgment, like Goodridge (*Goodridge v R*, 2014b; *R v Goodridge (No 2)*, 2012b see below), makes implicit reference to the notion that one of the functions of punishment is to redress the harm done to the victim by imposing some equivalent burden on the offender, but in this instance communicates to the victim's family why such considerations cannot play a decisive role given the serious and progressive cognitive impairment of the offender.

5.4. Moral competence, moral understanding and mental impairment

Ordinarily, as we have noted, defendants are presumed to have reached a threshold of moral competence and rationality and it is this that grounds their fitness to be held accountable and punished for their offending acts. What are the requirements of moral understanding in the law as it stands, and to what extent can defendants with dementia meet them and so merit punishment for their offences? There are a variety of 'mental impairment' tests used in Australian states. In NSW where most of our cases were found the M'Naghten test is used. The Commonwealth criminal code also uses a test similar to M'Naghten. According to the code a defence of mental impairment excuses a person from criminal responsibility if at the time of the offence:

> [T]he person was suffering from a mental impairment that had the effect that … the person did not know that the conduct was wrong (that is the person could not reason with a moderate degree of sense and composure about whether the conduct, as perceived by reasonable people, was wrong) … (Criminal Code Act 1995, 1995, p. sect. 7.3).

What is meant by 'wrong' in the various codes? A person might know that an act was contrary to law and not know that it was wrong. As discussed by (McSherry, 1997) the Australian High Court has held[5] (*Stapleton v R*, 1952) that the critical factor is the capacity to distinguish right and wrong in more than a simply legal sense.[6] An individual might be able to assent to the bare proposition that an act is wrong without appreciating what makes it so or being able to reason from that proposition to action. The law requires a deeper understanding of the moral significance of one's act. It requires that the person be able to reason with a moderate degree of sense and composure about whether the conduct (as perceived by reasonable people), was wrong. It is this second stronger sense that philosophers have focused on in discussions of moral responsibility and the law (e.g. Fine & Kennett, 2004). R Jay Wallace (Wallace, 1994) argues that in order to be morally and legally responsible, agents must possess the powers of 'reflective self-control'. Reflective self-control requires first, the possession of moral concepts (moral understanding) and the capacity (whether exercised or not) to apply them in deliberation about what to do (moral rationality) and

[4] The courts in general give little weight to deterrence in sentencing of offenders with dementia. The consequentialist elements of sentencing are not particularly controversial so our focus here is on the retributive elements of punishment in dementia.

[5] Decisions of the Australian High Court are binding on all Courts throughout Australia. The Stapleton ruling is referred to as setting the interpretation of the M'Naghten rules in NSW Courts (Judicial Commission of New South Wales, 2019, secs. 6–280).

[6] Thus, in the case of Hadfield, he tried to kill the King (knowing it was legally wrong) in order to be hung because he had the delusional belief that his execution would save the world.

second, the capacity to control one's behaviour in line with one's deliberative conclusions.

Some of our cases are particularly suggestive of a deterioration in moral understanding as described above. Consider for example R v Singh (*R v SINGH*, 2010b), in which the accused murdered the ten month old child of his flatmate. One expert noted that Singh's "affect was rather bizarre and incongruous to the situation", and another noted that "he appeared to lack insight into the severity of the crime but was aware it was wrong. He demonstrated 'nil' emotional response to this" (*R v SINGH*, 2010b, para. 23). While writing a number of letters admitting to the crime and asking to be punished, he remained unable to give an explanation for the offending beyond "feeling compelled" (*R v SINGH*, 2010b, para. 35). Here we can see an abstract understanding that his actions were wrong but a disconnect between this knowledge and appreciation of the consequences of his actions. The result of the complete lack of any rational explanation for both the killing and the method by which it was achieved (para 42) is that he was found not guilty by reason of mental illness (*R v SINGH*, 2010b, para. 44).

Similarly, the loss of moral rationality in Berlingo (*R v BERLINGO No. SCCRM-01-296*, 2003b) seems to have played a role in determining the outcome of his trial. In the transcript the post-offence treating psychiatrist was quoted as saying:

> What I did find most striking about Mr. Berlingo was the fact that he did not appear depressed, in fact his affect was rather detached particularly when describing the murder of his wife. He appeared to have a fairly concrete style of explanation for the offence and a very concrete appreciation of the consequences thereof. Although his thought processes in regards to the offence did not appear to be delusional there was an aspect to them that appeared to be irrational to some point. *Also striking was the fact that Mr Berlingo's reaction to the offence was one of complete lack of remorse as if he had no choice but to carry out the murder and on one occasion even stated that it had been a choice between suicide or murder."* (para 14, italics in original).

Mr. Berlingo was also unable to provide any rational explanation of the homicide. As with Singh he was found not guilty by reason of mental illness with the prosecution granting that if the judge found he had Bv-FTD at the time of the killing then it must be found he had no control of his actions (*R v BERLINGO No. SCCRM-01-296*, 2003b, para. 242). The judge noted that:

> the only logical inference to be drawn is that the accused's dementia so undermined his judgment - in the sense of his ability to plan and execute an appropriate strategy to deal with the situation with which he perceived himself to be confronted - as to lead to the disinhibited behaviour that actually occurred. It is patent that the accused must have appreciated the nature and quality of his acts and that they were wrong. However, he obviously suffered a loss of reflective capacity to find some other way to deal with the situation. (*R v BERLINGO No. SCCRM-01-296*, 2003b, para. 247).

On the account we have offered here, it appears both that moral understanding in any robust sense, and moral rationality - the ability to reason from moral concepts with a moderate degree of sense and composure – is lacking in many defendants with dementia. This is not surprising given the nature of the cognitive impairment accompanying dementia. The courts have found that these moral impairments, *if present at the time of the offence*, remove or substantially reduce the moral culpability of the offender. In our view, even in cases where such impairments develop post offence, as was the case with Talbingo, they must also remove or reduce the offender's 'fitness to be punished' for the past offence, because the retributive and communicative purposes of, and justifications for, punishment cannot be met. We now turn to this issue.

5.5. Memory and 'Fitness for punishment'

In certain cases of cognitive impairment associated with dementia we might wonder if the individual before the courts retains enough connection to the offence to be justly held accountable for it. If they have a "very different brain" due to the progression of dementia, then perhaps in a morally relevant sense they are also a very different person. Many theories of diachronic personal identity have some form of continuity of memory as a criterion for personal identity (Olson, 2017) or self-continuity, that is; "knowing and experiencing that we are, in a fundamental way, the same person over time" (Bluck & Alea, 2008). The profound memory impairments seen in certain types of dementia, in particular AD, must raise doubts that such offenders are relevantly connected to their past self.[7] If so, there is a clear sense in which the person who committed the crime is no longer *available* to be called to account.[8]

Of course, there is numerical identity between the person at different times. We are concerned here with the forensic notion of identity, namely qualitative identity. Khoury and Matheson (2018) have recently argued that the fact that you may be blameworthy at the time of the act does not mean that you remain blameworthy forever. They say: "Synchronic blameworthiness is the extent to which an agent at the time of the action is blameworthy for the action. Diachronic blameworthiness is the extent to which an agent at some later time is blameworthy for an earlier action" (Khoury & Matheson, 2018, p. 207). Our claim here is that features of dementia can remove *diachronic* blameworthiness even in cases where the person *was* blameworthy at the time the crime was committed (e.g., Talbingo). As Khoury and Matheson say: "a person at t1 can be appropriately held responsible for a past act only if she is a moral agent at t. If Brian at t2 has the psychological capacities of a two-year-old, then he is not, and cannot, be blameworthy. Blameworthiness, whether synchronic or diachronic, requires that the subject be a moral agent" (Khoury & Matheson, 2018, p. 215).

Consider for example Goodridge (*Goodridge v R*, 2014b; *R v Goodridge (No 2)*, 2012b; *R v Goodridge*, 2012b), with a diagnosis of alcohol related brain damage and vascular related dementia, who was deemed unfit to plead, and was then found provisionally guilty of murder and given a limiting term of 18 years, a decision that was upheld on appeal. The morning after committing the fatal assault he went to both the local pub and the bank with his entire face and the right side of his upper body covered in dried blood, which seems to demonstrate a contemporaneous lack of insight into his actions (*R v Goodridge*, 2012b, para. 24). By the time of sentencing he had no memory of the period surrounding the offence (of which he was never able to recall), was unable to recognise his own face in the mirror, and had a life expectancy of six years. When sentencing her Honour found that specific and general deterrence were not relevant because of his mental condition, that there was no intent to kill (although she found there was intent to cause grievous bodily harm), that his intoxication impaired his

[7] The Crimes Act 1900, (Crimes Act 1900 No 40—NSW Legislation, 1900) states that "A person is not unfit to plead only because the person is suffering from memory loss." Nor is memory loss on its own a mitigating factor in sentencing. It is reasonable to claim that a head injury that occurred immediately after an offence which resulted in a retrograde amnesia, or loss of memories for a period of time prior to the head injury, would not prevent an individual from being held responsible for the offending act. A more pervasive amnesia, particularly anterograde amnesia, or inability to learn or acquire new memories after an injury, may undermine an individual's fitness to stand (for example, by undermining their ability to instruct counsel and follow the course of a trial). If present at the time of the offence, anterograde amnesia would mean that the offender cannot engage in the kind of deliberation required to satisfy *mens rea* and should be found not guilty by reason of mental impairment.

[8] In *Madison* vs *Alabama* the US Supreme Court ruled against the death penalty for a prisoner who had developed dementia post offence on the grounds that where the prisoner has 'no rational understanding' of the reasons for their execution the retributive purposes of the penalty could not be served. Dresser (2019, p.7) argues that the retributive aim of imprisonment is more generally undermined "when offenders develop dementia and other disorders leaving them incapable of understanding the reasons for their punishment".

judgment and that he was remorseful. Nevertheless, because of the objective seriousness of the offence (para 48) he was given a limiting term of 18 years. It was noted that "it is overwhelmingly likely that the Forensic Patient will die before the expiry of the limiting term. It does not follow that I ought reduce the limiting term, since the appropriate sentence for murder is not proportional to life expectancy of the offender." (*R v Goodridge (No 2)*, 2012b, para. 47). Despite the appeal court's decision to uphold the sentence, one must question whether such a punitive sentence imposed on someone with grave and progressive cognitive impairments serves any legitimate moral purpose.

The judgment in Goodridge presents an interesting contrast to the case of AB (*Director of Public Prosecutions v AB (No 2)*, 2014; *Director of Public Prosecutions v AB*, 2013; *R v AB*, 2015) who was found guilty at a special hearing of manslaughter. In this case the Judge found that *despite impairments in reasoning, self-control and judgment,* the defendant was well aware that his actions were criminal. Thus, the Judge held that the defendant's *moral culpability* would have warranted the imposition of a substantial term of imprisonment *had he been fit to plead* (our emphases). However, in this case, the defendant's diminished understanding of his actions at the time of sentencing, and the fact that his understanding would continue to diminish over the years, reduced the length of the limiting term. The judge remarked that: "A limiting term that is likely to end after an offender's understanding of where he or she is and why serves no useful public purpose and is, therefore, pointless." (*Director of Public Prosecutions v AB (No 2)*, 2014, para. 22). The judge in this case thus directly engages with the issue of what we have called 'fitness for punishment' and makes a decision consonant with our suggestion that those who lack any understanding of why they are being punished, or any capacity to respond to the moral address and denunciation implied by punishment, are no longer fit for punishment.

5.6. Forensic patients and punishment

In NSW when an individual is found unfit to stand trial or not guilty by reason of mental impairment they are nevertheless often detained as a 'forensic patient'. At this point it must be acknowledged that in legal terms, individuals who are detained in this way are not being punished (*R v Graham Edward Mailes*, 2004). The reasons given to justify the detention of forensic patients vary somewhat from state to state, but tend to focus upon the need for treatment of the individual as well as protection of the community or forensic patient. Regular reviews of the status of the forensic patient are held (in NSW every 6 months) and when they are deemed to be (amongst other things) no longer a threat to themselves or the community, they are eligible to be released. Questions as to whether an unfit forensic patient should be released, however, tend not be raised until the end of their limiting term (Talbingo, 2015b), such that persons detained in this way may need to wait out the full length of their "sentence" and demonstrate that they are no longer a threat. We believe that there are strong grounds for regarding such detention as punishment, and therefore as depending for its justification on the moral agency of the offender.

First, as we have pointed out, the usual sentencing considerations are applied to the determination of the limiting term, including retributive considerations. This was particularly notable in the case of Goodridge (above). In the case of many offenders with dementia this is inappropriate, since the retributive and communicative elements of sentencing rely for their justification on the possession of threshold moral and rational capacities of the offender.

Second, though the prisoner is under the supervision of the relevant Mental Health Review Tribunal, in many cases part or all of the term may be served in jail alongside other prisoners (though this varies between jurisdictions).[9] A recent judgment noted that the accused held on remand (with moderate to advanced dementia) was locked in his room for 18 hours per day in Long Bay Aged Care Unit, and this is reportedly not unusual for this unit (R v Ivanoff, No. 1225 (Supreme Court of New South Wales August 7, 2018), 2018a, para. 70). Moreover, as noted above, many offenders are *not* released before the end of the limiting term. Therefore, detention as a forensic patient is punitive *in effect* if not in intent.

Third we argue that there is evidence that such detention may also be punitive *in intent*. In NSW a decision to release a forensic patient needs to give consideration to whether they have spent "sufficient time in custody". To quote Howard and Westmore;

> "although the [limiting] term is not a penalty as such, imposed by the Court, s 23 itself appears to treat it as a 'penalty' because, where imprisonment is not deemed appropriate, the Court is authorised to impose 'such other penalty' as it might have done on conviction for a criminal offence: s 23(2). Further, s 10(4) of the Mental Health (Criminal Procedure) Act also tends to imply that the fixing of a limiting term and the consequent detention, following a special hearing, may involve the infliction of a 'punishment'. Similarly, where the Mental Health Review Tribunal recommends the release of a person who has been held in detention following the nomination of a limiting term, the Attorney-General may object to the person's release on the ground that 'the person has served insufficient time in custody or under detention': Mental Health Act 1990 (NSW), s 84(1). That is the view which has been adopted by the Court of Appeal and this Court: see DPP v Mills [2000] NSWCA 236 at [39] (Handley JA, Sheller JA agreeing) and Smith v Regina [2007] NSWCCA 39 at [63] (Hall J, Sully and Howie JJ agreeing); cf Regina v AN (No. 2) [2006] NSWCCA 218 at [32]" Courtney v Regina [2007] NSWCCA 19.
>
> (Howard & Westmore, 2018)

It should be noted that while there is case law which suggests that the sufficient time in custody should not be understood in a punitive way, the fact that the court can apply other penalties besides detention as a forensic patient makes it hard to see how the detention is not also a penalty. As Handley JA puts it, if the nomination of a limiting term is not a penalty then the phrase "'any other penalty' in those provisions would have been quite inappropriate" (*DPP v Mills*, 2000, para. 39 emphasis in original). Moreover, the 2013 NSW Law Reform Commission report stated that all stakeholders who submitted on this issue said that the "sufficient time in custody" requirement should be abrogated because it was "inappropriately punitive".

It therefore appears that when individuals who are putatively not fit for punishment are being detained to enable their treatment and protection, they are also in effect and perhaps in intent being punished. We hope that making explicit the notion of 'fitness for punishment' may prompt reflection on the application of retributive and communicative considerations to the detention of cognitively impaired offenders.

[9] In Queensland there are dedicated facilities for forensic patients. According to the 2017–8 NSW MHRT report 16% of forensic patients were in a correctional facility (as opposed to on community release 36%, or in mental health facilities, 48%) and there is often a wait of 18 months to 2 years for a forensic patient to be moved from a correctional to a mental health facility (NSW Mental Health Review Tribunal, 2017, pp. 5–7).

In New South Wales there was recently a brief outcry in the popular press (Goodman & Seymour, 2019) when it was discovered that in two of the cases we have referred to (Goodridge and Talbingo) the offenders (who had late stage dementia) had been relocated from prison to a secure dementia unit in an aged care facility. Relatives of the victims, of other aged care residents, and politicians were outraged that such "dangerous offenders" were living alongside innocent people with dementia. In the popular mind it seems that, to use Khoury and Matheson's (2018) phrase, "blame is forever".

6. Conclusion

Australia's population is ageing, and the prevalence of dementia is increasing. This review of Australian cases where a diagnosis of dementia was raised in cases of homicide has highlighted a number of challenges the criminal justice system urgently needs to address.

First, a lack of details in the judgments raises concerns regarding the accuracy of the diagnoses of dementia (see also McCay & Ryan, 2019). In particular, if what is reported in the judgments is reflective of the clinical evaluations performed, then there is a clear need for more careful consideration of the diagnostic criteria for dementia and for more appropriate expert witnesses (e.g. neurologist, geriatrician) to be consulted. The courts often prefer the evidence of forensic psychologists/psychiatrists because they are practiced at translating their findings into the language required to address specific legal questions (such as the fitness to stand criteria) (Borrello, 2010; Coles, 2000; Skeem & Golding, 1998; Veiel & Coles, 1999), but such a translation is of little use if the original assessments or diagnoses are potentially not valid. We suggest that in cases in which a diagnosis of dementia is raised, appropriate expert witnesses who can provide a reliable diagnosis based on current diagnostic criteria referring to specific types of dementia need to be heard, in order to complement the evidence of forensic experts (Viljoen, Roesch, Ogloff, & Zapf, 2003).

A number of recent reports have highlighted a range of problems for people with cognitive impairments in the criminal justice system (NSW Law Reform Comission & Justice, 2015; *Pathways to Justice–Inquiry into the Incarceration Rate of Aboriginal and Torres Strait Islander Peoples (ALRC Report 133)*, 2018). Our analysis here suggests that beyond the general issues facing people with cognitive impairment, there are some specific challenges presented by people with dementia whose condition will predictably deteriorate over time. One issue is the lack of appropriate places to accommodate them, with the result that many end up in jail. Particularly in jurisdictions such as WA, where there is no provision for conditional release orders for those found unfit to stand trial, changes in the law are required in order to ensure consistent and just outcomes. This was highlighted in a recent case of an offender with AD (*THE STATE OF WESTERN AUSTRALIA -v- HUGGINS*, 2017), where the judge was faced with two unsuitable alternatives in making a custody order (1) to release the man unconditionally into the community, or (2) order that he be held in custody, either in a psychiatric facility or prison, both of which were described as “wholly inappropriate” due to his vulnerability and ongoing decline.[10]

The progressive nature of the cognitive deficits associated with dementia also raises questions around the appropriateness of the current sentencing guidelines, especially when applied to those found unfit to plead. The broader philosophical and ethical issue of whether a person continues to be accountable and blameworthy for past offences regardless of cognitive change and deterioration is brought into especially sharp focus in the case of dementia. While some of the proceedings we have examined demonstrate an awareness of the inappropriateness of applying retributive considerations when sentencing an individual with dementia, others seem unduly punitive. We have argued that the moral purposes of, and justifications for, punishment cannot be met when an offender lacks the capacity to remember and/or understand what they have done, and to respond to the moral address implicit in punishment. Offenders must be fit for punishment. Sometimes they are not. While this fact may cause understandable distress to victims and their families, the justice system and the state should seek better ways of acknowledging and responding to the harm done to victims rather than punishing those who no longer meet a minimal threshold of rational agency.

One major limitation of the current research methodology is that we are limited to proceedings in which the transcript for the decision was published. Further research with a broader methodology which enabled us to follow the accused through the justice system in more detail is desirable. For a number of cases we were unable to find information about what happened to accused prior to or subsequent to the judgment, which left many unanswered questions. For some accused there remained a question regarding their diagnosis of dementia. Consider R v Costa (No 2), No. 375 (Supreme Court of the ACT December 3, 2015), 2015a), in which it was unclear whether the accused had dementia (his scores on diagnostic tests were above the cut-off point and he had not deteriorated significantly in the three years he was incarcerated before sentencing). Other unanswered questions can be addressed using the same methodology but expanding the range of offences considered. Thankfully it is relatively rare for someone who is suspected of having dementia to be charged with murder. Expanding the range of offences considered should greatly increase the sample size and thereby provide further evidence regarding issues such as the relative proportion of criminal offenders with a possible diagnosis of dementia. It would also enable us to examine the appropriateness of viewing the intoxication of those with alcohol related brain damage as voluntary (as happened in the case of Goodridge). Future studies could also investigate the nature of the cognitive assessments conducted in such cases, for example the specific tasks used. This information was not available in the proceedings reviewed for this study, but could be potentially be accessed via court transcripts.

The clinical, ethical and legal issues we have highlighted in these cases will only become more pressing as the population continues to age and more people with dementia face the criminal justice system. The treatment of people with dementia in the legal system cannot be fully accommodated within existing frameworks for dealing with individuals with other forms of cognitive impairment. There is a clear need for more specific guidelines for individuals with dementia to ensure consistency and fairness in the justice system. Given the likelihood of increasing cases of this kind, further research into how individuals with dementia traverse the criminal justice system is urgently required.

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Note

The authors are listed in alphabetical order to indicate their equal contributions to this work.

[10] This is highlighted by a judge's comments in a recent case in Western Australia (Menagh, 2017). In his sentencing remarks in the case of an 88 year old man with dementia who murdered his wife and was deemed unfit to stand trial, Justice Hall stated the case “brings into sharp focus a deficiency in the law” which deals with mentally impaired accused people. Justice Hall argued that the law should allow for him to make a ‘conditional release order’, to specify that he be kept at a specialised dementia facility (this issue is also raised in *THE STATE OF WESTERN AUSTRALIA -v- CHOKOLICH, 2018*; *THE STATE OF WESTERN AUSTRALIA -v- LOWICK, 2016*; *THE STATE OF WESTERN AUSTRALIA -v- TAX, 2010*; *THE STATE OF WESTERN AUSTRALIA -v- TRUONG, 2017*).

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