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An Analysis of the Relationship between being Deaf and Sexual Offending

Abstract

Research demonstrates that deaf offenders are over represented within the Criminal Justice System. In addition, those deaf offenders who are incarcerated within prison estates or psychiatric units are predominantly incarcerated for sexual offences. This paper will evaluate the existing literature surrounding the reasons behind this bias. In particular this review will examine the characteristics of deaf offenders in relation to their personality, language and brain development and ability to communicate. This paper will consider proposed associations between mental illness and childhood sexual abuse amongst deaf individuals and later sexual offending. This paper attempts to evidence differences between deaf and hearing offenders in order to explain why more deaf offenders commit sexual crimes than hearing offenders. This paper will conclude that the research is scarce and inconclusive and that current assessments and treatment are potentially inadequate due to the profound difficulties associated with accurately understanding and communicating with the deaf offender.

Key Words: deaf, Sexual Offending, Hearing, Non-hearing, Offenders

Introduction

Deaf people are substantially over represented in the prison population, both in the UK and in America (Bramley, 2007; Klaber & Falek, 1963; Miller & Vernon, 2003; Mitchell & Braham, 2011; Monteiro & Ridgeway, 2000; Rourke & Grewer, 2005; Vernon & Greenberg, 1999; Vernon & Rich, 1997; Young et al., 2001). A recent survey of prisons and young offender institutions in England and Wales identified 135 deaf or hard of hearing prisoners (Gahir et al., 2011). Young et al. (2000) report the incarcerated deaf population in the USA to be five times higher than that of the general deaf population. The American Speech and Hearing Association (ASHA) estimates that 10-15% of prisoners in America have severe hearing loss in comparison with the ASHA's estimates of the general population at 5%. Within the high secure establishments in the UK, deaf individuals represent 12.3 per 1000 compared to 1 in 1000 in the general population (Young, Monteiro, Ridgeway, 2000). In 1996, there were 13 detained deaf prisoners at Rampton Hospital, within its National High Secure Deaf Service. Today, Rampton Hospital holds 339 patients, 10 of which are deaf offenders within its high secure unit. These 10 beds make up all the beds allocated to profoundly deaf patients needing psychiatric care in high security in England and Wales. These examples evidence the prevalence of deaf offenders in the Criminal Justice System. In addition to this, the majority of studies surrounding deaf offenders highlight a significant difference in the type of offences committed between hearing and deaf offenders, in that, there is an unusual prevalence for deaf offenders to offend sexually (Bramley, 2007; Connolly & Woollons, 2008; Denmark, 1985;

Denmark, 1994; Dhawan & Marshall, 1996; Glickman & Gulati, 2003; Greenberg, Bradford & Curry, 1993; Grinker, 1969 cited in Vernon & Greenberg, 1999; Hayes, 2009; Laws & O'Donohue, 2008:338; Mertens, 1996; Miller & Vernon, 2003; Miller, Vernon & Capella, 2005; Mitchell & Braham, 2011; Schneider, 1997; Vernon & Miller, 2002; Vernon & rich, 1997; Vernon & Raifman, 1997; Vernon & Willis, 2002; Young et al., 2001).

A number of studies highlight the predominance of sexual crimes amongst deaf offenders and current research evidences a trend. In an audit of 77 patient referrals to a national centre for mental health and deafness, Young et al. (2000) recorded 89 offences, 25 for violence and 39 for sexual offences. Denmark's (1985) study noted that out of 33 patients, 11 had offended sexually. These studies highlight the predominance of sexual crimes amongst deaf offenders and current research evidences a similar trend. Young et al. (2001) examined 431 patient referrals to three psychiatric specialist deaf services and noted a particularly high proportion of sexual and violent offences with sexual offending being the largest group at 38% (Young et al., 2001). Miller and Vernon in 2003 noted the rate of sexual offending by deaf prisoners to be 4 times the rate of hearing offenders; this was particularly the case with paedophilia where 27 out of the 41 deaf offenders had convictions for offences against children (Miller & Vernon, 2003). Miller et al. (2005) examined hearing and deaf offenders incarcerated in Texas. They found that 64% of deaf offenders had been convicted for violence compared with 49% of the hearing population. More interestingly, their most significant finding was the prevalence of sexual offending within the deaf offenders; 32% compared

with 12% of the hearing offenders (Miller, Vernon & Capella; 2005). These studies demonstrate the increased occurrence of sexual offending amongst deaf offenders.

Deaf individuals are over-represented within forensic settings and there are varying possible explanations for this occurrence. It could be considered that their minority affiliation negatively effects life opportunities resulting in them turning to anti-social methods to reach their goals. Some would suggest that deaf people are stigmatised by society resulting in an increase in convictions within this population. It should be considered that deaf people commit similar crimes to hearing individuals, but due to their deficit, they are less skilled at performing the crime quickly and efficiently and are consequently apprehended more frequently. Deaf offenders still remain a niche group within the Criminal Justice System and therefore the studies within this review share similar limitations in terms of being able to validate and generalise their results. Many of the existing studies utilise small samples and use samples from specialised, clinical and high secure establishments or psychiatric facilities (Miller & Vernon, 2003; Young et al., 2001). This suggests that they are not fully representative of the population of deaf offenders or accurately comparable with hearing offenders (Young et al., 2001). As highlighted earlier, some studies fail to differentiate between sexual and violent offences which may equally reduce the accuracy of results. Although sexual and violent offences are often linked, there is also a significant difference within the commission of such offences and, therefore, results combining the two may highlight variables that are not applicable to sexual offending alone; thus

confounding results. In addition to this, across forensic settings the prevalence of deaf offenders remains somewhat a dark figure due to inadequate record keeping, low response rates to questionnaires and due to an inability to highlight differences between culturally deaf individuals and those who sit within the category of 'hard of hearing' (Austin & Jeffery, 2007; DoH, 2002; Rourke & Grewer, 2005; Vernon & Greenberg, 1999).

This paper is primarily concerned with those individuals for whom deafness is a form of cultural identity and who have either been born deaf or have developed deafness during early childhood. After much deliberation, the authors decided to utilise the term 'deaf' throughout this paper as the applicable literature refers to those individuals with a complete inability to hear. The term 'hearing impaired' will not be used as this suggests that deafness is a disability; a concept the deaf community does not accept (Napier, Fitzgerald & Pacquette, 2008). This paper therefore examines those who do not communicate through the spoken language and who have come into contact with the criminal justice system (Young, Monteiro & Ridgeway, 2000). It should be highlighted that this paper considers and compares different methodologies across the UK and the USA comparing behaviors that may be defined or diagnosed differently. This paper accessed articles on 'sexual offending'; acts of a sexual nature against a person without their consent. However due to the scarcity of related articles surrounding deaf forensic populations, articles on 'sexual violence' were also reviewed. Sexual violence is similarly defined, however, specifically includes the use of actual or perceived physical coercion or force. Although grouping these articles

together has assisted the authors in highlighting various theories, the perpetrators and the antecedents of sexual violence can be very different to sexual offending alone suggesting that considering these together could confound results. However, as the FBI classifies “forcible rape” and “crimes against children” as violent behaviour (FBI, 2011) it is thought that considering sexual and violent crimes together may assist in accurately explaining the relationship between being deaf and sexual offending. Limitations regarding this methodology will be raised throughout this review.

Literature Search

Researchers searched PSYCINFO, SCIENCEDIRECT, GOOGLESCHOLAR and SCOPUS using a combination of key words and thesaurus terms as linked to the research question. These were: deaf, deafness, hearing impaired, hard of hearing, non-hearing, sexual offending, paedophile/ paedophilia, pedophile, offend, offender, sex, violent, treatment, delinquency, incarcerated, Rampton Hospital, high- secure, prison, population and deaf population. Boolean operators were utilised, for example, AND, OR and ‘*’**,** for example ‘offend*’ thus combining the terms offend, offender and offending into one search task, thus widening our search power. The researchers also manually searched the references in identified articles, reviews and books. In addition, a known expert in the field was consulted; Craig MacDonald a Chartered Clinical Psychologist within the National High Secure Deaf service at Rampton Hospital. The researcher educated themselves within the field of

British Sign Language (BSL) in order to develop their deaf awareness and understanding of this culture through 'do-it-yourself' books and accessing a certified BSL taught programme. Appropriate news articles and legal case law was consulted. In addition, official institutional websites were accessed, for example the National Health Service (NHS), the Department Of Health (DoH) and English and American Judicial Systems were consulted online. There was no time frame specified for the literature search due to their being a considerably limited amount of literature within this area therefore accepting literature from any year. Articles with topic content relating to deaf offending/offenders were reviewed as were direct comparison articles surrounding hearing offenders, for example those articles who examined sexual offending amongst deaf and hearing offenders. Inclusion criteria was any articles which discussed and/ or offered explanation for general and/or deviant psychologies/ behaviour amongst the deaf community independent of the articles source or strength. The studies did indeed vary in quality and as noted above some were not cited from peer-reviewed journals, for example speaking to professionals in the field or accessing online case law accounts. All articles, however, were included in the paper due to the scarcity of literature available and those studies of lower quality were clearly highlighted. Indeed, the lack of quality in many of the studies assisted the researcher in highlighting the gaps in the literature and the need for further research. (See appendix Literature Summary Table). Each article was read and specific themes were pulled out to address the research question. Information identified within this review highlights the prevalence of sexual offending

amongst deaf offenders and theories that attempt to provide explanations for this occurrence.

This paper will now examine the theories surrounding the reasons why deaf people sexually offend, however the reader should keep the above limitations in mind as they may reduce the strength of such claims. The literature available highlights various factors thought to influence deaf offenders who offend sexually. The paper will highlight sexual abuse as a precursor to later adult sexual offending amongst deaf individuals. Frustrations established from poor communicative ability and daily interaction difficulties are proposed as an explanation for sexual offending. Some evidence is explored surrounding a deaf personality suggesting that deaf individuals have a propensity towards violence. Proposed links between brain damage and deafness and sexual offending will be examined as will mental illness and developmental disorders; all risk factors to offending.

Childhood Sexual Abuse

It is thought that childhood sexual abuse is causally related to adult sexual offending (Becker, 1994; Connolly & Woollons, 2008; Dhawan & Marshall, 1996; Finkelhor, 1994; Greenberg, Bradford & Curry, 1993; Hayes, 2009; Laws & O'Donohue, 2008:338; Miller, Vernon & Capella, 2005) and that this is particularly the case with deaf individuals (Mertens, 1996; Miller & Vernon, 2003; Vernon & Willis, 2002; Vernon & Rich, 1997; Vernon & Miller, 2002). One-third of hearing sex offenders reported having experienced childhood

sexual abuse (Popkin & Cook, 1994). There is a higher rate of childhood sexual abuse in deaf children compared to hearing children, for example 1 in 10 males are abused compared to 1 in 2 deaf males (Mertens, 1996; Miller & Vernon; 2003). Vernon and Willis (2002) studied 58 deaf children and adolescents at Tampa Bay residential treatment unit, and 168 hearing children and adolescents. Their results were surprising; 100% of the children within their deaf sample admitted to treatment at age 12 or younger were thought to have been sexually abused. Their hearing counterparts had indications of sexual abuse 20% less frequently (Vernon & Willis, 2002). These examples suggest that deaf children encounter more sexual abuse than hearing children (Miller, Vernon & Capella, 2005; Miller & Vernon, 2003).

The literature suggests that deaf children may be vulnerable to abuse. Miller et al. (2005) considered deaf children to be more vulnerable to abuse than hearing children and examined the elevated amount of deaf children in residential homes and noted the increase of sexual abuse experienced by these children (Miller, Vernon & Capella, 2005). They suggested this was due to the increase in “sexual predators” amongst the staff within such homes (Miller, Vernon & Capella, 2005: 423) and deaf children’s suggestibility and naivety (Mertens, 1996). In the past deaf children have received limited or poor sex education either due to their inability to communicate or prevalence of untrained staff. This may have resulted in deaf children relying on other deaf or other hearing children for sex education leading to inappropriate or misguided knowledge of sexual behaviours; thus potentially allowing sexual assaults to occur unchallenged (Mertens, 1996; Miller, Vernon & Capella,

2005; Vernon & Miller, 2002). Early deafness has been associated with low self esteem, low confidence and immaturity (Denmark, 1985; Miller, Vernon & Capella, 2005; Vernon & Rich, 1997) and is considered to be in some way a causal factor for sexual offending (Rainer et al., 1963 cited in Bramley, 2007). The social isolation created through lack of confidence and poor childhood relationships may leave the child vulnerable to abuse. Schneider (1997) noted a lack of 'social closeness' to friends or family to create a social 'need' which paedophiles may take advantage of resulting in a child being more vulnerable to attacks (Schneider, 1997; Vernon & Miller, 2002) and perhaps provides an explanation as to why deaf children in particular are more vulnerable.

Incidences of deaf children reporting sexual abuse have been considered (Sullivan et al.,1987 as cited in Mertens, 1996). Studies suggest that staff members might have limited understanding of sexual sign-language signs or the children themselves may have limited knowledge of signs for certain body parts or sexual actions (Vernon & Miller, 2002:30). In addition, there may be some fear of disclosure linked to being blamed for the assault or not being believed or being punished themselves. This was further considered by Mertens (1996) who interviewed and observed staff and students within deaf residential homes. Worryingly, some staff appeared to see it as 'typical stuff' or 'passed the buck' stating 'it's not my job' to deal with it (Mertens, 1996:356). This would suggest that sexual abuse is going unreported or getting 'pushed under the carpet' thus leaving the child to cope with this trauma alone (Mertens, 1996; Miller, Vernon & Capella, 2005; Vernon & Miller, 2002). It is purported that this 'coping alone' may result in victims of abusers becoming

later perpetrators of sexual abuse (Miller, Vernon & Capella, 2005; Schneider, 1997; Vernon & Miller, 2002).

Much of the literature highlights a link between childhood sexual abuse and later adult sexual offending. Greenberg et al. (1993) studied pedophiles and hebephiles (adults who molest children 13-16yrs) who reported being sexually abused during their childhoods. Interestingly both groups appeared to choose victims who were the same age as they were when they were abused (Greenberg, Bradford & Curry, 1993). This proposes a link between childhood sexual abuse and later sexual offending and could imply that the logistics of an individuals' abuse are directly transferred to their own victim(s). This finding also suggests that sexual abuse is an imitation behaviour, one which is learnt and later rein-acted. Connolly and Woollons (2008) recently reported that in their study, groups of paedophiles and rapists had higher levels of sexual abuse in their early childhood than their non-offending control group thus supporting the notion that children who are exposed to abuse may be at risk to sexually abuse as adults. It is pertinent to note, however, that reliability issues should be confronted when using self-reports from offenders. For example offenders may play up their own victimisation or in contrast, not wish to reveal intimate details about their own childhoods (Connolly & Woollons, 2008). Such limitations should be considered when examining such studies as this reduces their capacity to truly uncover any causal factors at play. This in turn, decreases understanding of offending behaviour further reducing the effectiveness of linked treatment interventions.

The literature is highly supportive of the links between childhood sexual abuse and adult sexual offending amongst the hearing community (Becker, 1994; Connolly & Woollons, 2008; Dhawan & Marshall, 1996; Finkelhor, 1994; Greenberg, Bradford & Curry, 1993; Hayes, 2009; Laws & O'Donohue, 2008:338; Miller, Vernon & Capella, 2005). Due to the increased prevalence of sexual abuse highlighted amongst the deaf community, there is evidence towards this theory potentially explaining the prevalence of sexual offending amongst deaf offenders (Mertens, 1996; Miller & Vernon, 2003; Vernon & Willis, 2002; Vernon & Rich, 1997; Vernon & Miller, 2002). However, without significant empirical data directly indicating that abuse is a causal factor, there is a need for further empirical work to confirm or refute this relationship. In addition, we know that not all individuals, hearing or deaf, who have been sexually abused as children go on to abuse others as adults. This might suggest that it is only when children are abused and then go on to experience further unfortunate circumstances that they later become perpetrators of such abuse. For example, as discussed above, risk factors such as social isolation, having few friends or positive interactions with others, limited sexual education, coping alone with the trauma or not being believed could all be additional events following childhood abuse that lead to psychological complications ultimately resulting in a propensity to sexually offend in later life. From the evidence reviewed, it appears that deaf individuals are more vulnerable to encountering sexual abuse as children and indeed, are more likely to be exposed to later additional unfortunate circumstances on top of their abuse than their hearing counterparts. This may therefore explain why

deaf offenders tend to have committed significantly more offences of a sexual nature than hearing offenders.

Language Development/ Communication

Language barriers that deaf children experience can cause them problems in terms of their development socially and psychologically (Glickman & Gulati, 2003; Miller & Vernon, 2003). Deaf children face significant communication difficulties in terms of their development of language and barriers such as this can make it more difficult for them to function in society, think rationally and understand the consequences of their actions (Miller, Vernon & Capella, 2005). This finding has been confirmed by other researchers; Vernon & Rich (1997) for example, found the deaf offenders in their study to have poor communication skills. They noted that 18 out of 20 could not speak and 6 had minimal use of sign language reducing their ability to communicate effectively with others (Vernon & Rich, 1997). This restricted communication can lead to misperceptions, for example deaf individuals may misunderstand social situations, may not be able to recognise potential consequences and have reduced ability to perspective take or reason (Bramley, 2007; Schneider & Sales, 2004; Young, Monteiro & Ridgeway, 2000).

Language deprivation is common within the deaf population (Glickman & Gulati, 2003). Those born deaf or who lose their hearing in the first year or two face the problem of how to acquire language in the first place. As purported by Noam Chomsky in the 1960s and other more modern day linguists, babies

have an innate ability to acquire language, however, research demonstrates that there is a critical time period within which language needs to be acquired (Chomsky, 1957, 2002; Glickman & Gulati, 2003; Humphries et al., 2012; Mayberry, 2002, 2010). Once this critical time period has elapsed and no language base has been formed there will be permanent damage and irreversible communication barriers are established (Glickman & Gulati, 2003). Glickman and Gulati (2003:43) discuss Aristotle's concept of deaf people with profound language deprivation being "senseless and incapable of reason" and although a narrow-minded and severe statement, communication barriers such as this can potentially be a serious deficit. Individuals might not understand certain social constructs particularly around sexual behaviour in relation to what is right or wrong. Educating such individuals in appropriate sexual relations is extremely difficult potentially leaving the individual open to being preyed upon by sexual predators or becoming the predators themselves. These studies demonstrate some association between language development and considerable social and psychological problems that can lead individuals to sexually offend. However it is thought that these studies do not provide conclusive evidence of a causal relationship in this area.

Deaf personality

Early literature, from the 1960's, theorised that deaf people have a certain personality type meaning they are more likely to commit violent or sexual crimes (Miller, Vernon & Capella, 2005; Vernon & Miller, 2005; Vernon &

Raifman, 1997; Vernon & Rich, 1997; Young, Monteiro & Ridgeway, 2000). This personality type is characterised by general deviant conduct in terms of selfish, impulsive and aggressive behaviour (Miller, Vernon & Capella, 2005; Young, Monteiro & Ridgeway, 2000). This notion has been rejected to date, however, theories remain surrounding a deviant personality disorder noted to be common amongst deaf offenders which is referred to as "Primitive Personality Disorder" (PPD) (Vernon & Miller, 2005; Vernon & Raifman, 1997; Vernon & Rich, 1997). Vernon and Raifman (1997) noted individuals with PPD to be "cognitively deprived, psychologically naïve and immature" (Vernon & Raifman, 1997:376). In addition, someone with these traits might be impulsive, fail to recognise social norms and have characteristics similar to that of feral children (Grinker, 1969 cited in Vernon & Greenberg, 1999; Vernon & Raifman, 1997).

There are studies that provide evidence of PPD amongst deaf offenders. Vernon and Rich (1997) studied 22 deaf individuals who had offended against children and compared them with a group of hearing equivalents. Although Vernon did not use a random sample of offenders he accessed a broad range of deaf sex offenders stemming the length of his career as a psychologist. Vernon and Rich (1997) noted increased evidence of PPD within their deaf offender groups at 8 out of 20 thereby suggesting a link between PPD and deaf sex offenders (Vernon & Rich, 1997). Indeed, Vernon and Raifman (1997), amongst others, suggest that the prevalence of PPD and deaf offenders is between 5 and 15% (Vernon & Raifman, 1997; Vernon & Greenberg, 1999) further evidencing the frequency of this disorder amongst

the deaf community. PPD is equally linked to violent offending as Vernon and Greenberg (1999) noted that individuals with PPD generally have a "propensity towards violence" (Vernon & Greenberg; 1999:265). Vernon and Raifman (1997) examined 26 deaf murderers and noted 12 of which to have PPD, and a further 7 to have borderline PPD (Vernon & Raifman, 1997). Similarly, Vernon and Rich (1997) noted that 13 out of 20 deaf paedophiles were violent in their assaults and 3 were sexual sadists; a sexual sadist being someone who "experiences sexual pleasure produced through acts of cruelty and/or bodily punishment" (Laws & O'Donohue, 2008:213). This highlights the link between PPD and violent offending.

On further examining the literature surrounding PPD, various limitations are highlighted. The main studies that propose a link between PPD and sexual offending within the deaf community are mostly by one author (Vernon) and are mainly conducted within a three year period (1997-1999). It should be noted that there has been no literature in the last decade to further support the PPD theory. This would imply therefore that other authors do no support PPD as an explanation for deaf offending behaviour thus reducing its robustness as a theory. Indeed, within Vernon's articles he makes no reference to any equivalent studies of PPD within hearing offender populations; equally when searching for such comparisons for the purpose of this paper, none were located. This may suggest that the hearing population are just not assessed for such a disorder, however this also means there is no direct comparison group therefore making it difficult to conclude it as a deaf phenomenon and as an explanation for sexual offending within this group.

The mere diagnosis of personality disorder should be considered in terms of reliability of assessment methods. Personality Disorder (PD) is dynamic in nature and therefore ultimately difficult to assess accurately. Other mental health problems such as anxiety and depression can contaminate accurate assessment of current mental states. Indeed, the manifestation of PD in any individual is highly variable further hampering accurate assessment.

Personality Disorder is suggested to be extensive amongst the deaf offending population, for example Vernon and Rich (1997) found that all 20 of the deaf pedophiles in their study had anti-social PD. Indeed, some suggest that deaf people are more likely to be diagnosed with PD (Gahir, 2007; Troubled Inside, 2005). This might suggest that there may be some link between PD and deaf offending.

Accurately assessing someone who is deaf for a personality disorder, however, brings with it further complications. Deaf people are often wrongly diagnosed through misinterpretations of facial movements or poor communication and deaf characteristics can be mistaken for PD. Certainly diagnosis of mental disorder and particularly PD in deaf people is particularly difficult because of the widely used diagnostic systems- DSM-IV and the ICD-10 which are culturally based and do not take into account differences in symptomology or presentation in deaf people.

In conclusion, although Vernon attempts to bring PPD to the forefront as an explanation for violent/ sexual offending amongst deaf offenders, he is alone within the literature in doing so. Indeed, there is currently little scope for making comparisons with hearing counterparts. It is felt that should this area be allotted more research time and increase the validity of its research methods it may open up more thought provoking issues.

Brain Damage

One of the main causes of deafness is brain damage, which is thought to be directly linked to sexual offending in some cases (Bramley, 2007; Vernon & Greenberg, 1999; Vernon & Raifman, 1997; Vernon & Rich, 1997; Vernon & Willis, 2002; Young, Monteiro & Ridgeway, 2000). Indeed, although a complex relationship, brain abnormalities and sexual deviance in the hearing population has long been recognised particularly highlighting dysfunctions in the frontal and temporal lobes to be explanations for sexual offending (Cohen et al., 2002; Fazel et al., 2002; Joyal, Black & Dassylva, 2007; Stone & Thompson, 2001).

Rubella, meningitis and other causes of brain damage are known to cause deafness and are common amongst deaf offenders (NHS, 2011). Rubella is particularly common amongst the studies examined within this literature review, a common symptom of which is a reduction in impulse control (Young, Monteiro & Ridgeway, 2000). Rubella is known to cause various mental disabilities and psychological problems and can damage the cerebrum part of

the brain which is responsible for communication skills and the ability to learn (NHS, 2011; Vernon & Richs, 1997). Vernon and Rich's (1997) study on deaf and hearing paedophiles found a high rate of brain damage amongst its deaf participants. They established that 35% of the deaf paedophiles in their study had some form of brain damage and noted that this damage appeared to manifest itself in the frontal lobe or limbic system which is responsible for impulse control (Vernon & Rich 1997; NHS, 2011). In addition, this study found that 6 out of 20 deaf paedophiles had deafness caused by rubella suggesting a link between brain damage, poor impulse control and sexual offending.

Young and colleagues (2000) similarly imply that deafness, as a result of rubella, is linked with sexual aggression, however, as this has not been considered elsewhere in the literature it would suggest that rubella is linked to poor impulse control rather than sexual offending directly (Vernon & Greenberg, 1999). Some anecdotal evidence is provided by the case of Donald Lang, a deaf offender who murdered two prostitutes in 1966 and 1971 (Vernon & Greenberg, 1999; Vernon & Raifman, 1997). A doctor testified at his trial that he had clear symptoms of pre-natal rubella and linked this to Lang's deviant behaviour discussing traits such as "excitability and explosiveness" and connecting this with stunted language development (People V. Lang, 1986). The doctor was clearly connecting Lang's early brain damage from the rubella virus to his adult violent offending. This adds weight to the links between brain damage, deafness and offending. However, this is just one case and although violence was used, this was not sexual violence

and therefore this theory is unsuccessful in providing conclusive evidence of a direct relationship between brain damage and sexual offending specifically. Interestingly, Lang also exhibited classic traits of PPD (discussed above) increasing the validity of theories relating to PPD, deafness and violent offending (Vernon & Greenberg, 1999).

Mental Illness

There is evidence amongst the literature linking poor mental health in deaf individuals and sexual/violent offending (Bramley, 2007; Vernon & Rich, 1997). Vernon and Rich (1997) found all 20 of the deaf paedophiles in their sample to have antisocial personality disorder (ASPD). In addition, their evaluations unearthed various issues linked to mental health problems, such as Post Traumatic Stress Disorder (PTSD) as linked to early childhood abuse and anxiety and anger problems. However, Vernon and Rich (1997) omit their full methodology from their published research and therefore it is difficult to asses the validity of such accounts and the consequent links between these mental health issues and sexual offending. In 1998 a review of referrals to the National Centre for Mental Health and deafness identified that deaf patients who had sexually offended against children suffered more from mental disorders than hearing patients did (Bramley, 2007). The cause of which may be due to viruses such as rubella or due to the social exclusion, low self esteem and limited social intimacy often experienced by deaf individuals (Bramley, 2007). This provides some realistic evidence connecting mental illness with sexual offending. In contrast, Young et al. (2001) found that of the

385 deaf sex offender cases in their study for which a diagnosis was available, 204 (53%) were diagnosed as having no mental disorder. They suggest in fact that the prevalence of mental illness amongst deaf offenders is heavily over estimated (Young et al., 2001). Mitchell and Braham's 2011 literature review on the psychological treatment needs of deaf mental health patients in high secure settings support this view stating that deaf individuals experience similar levels of mental health problems to hearing individuals. Assessment and identification of mental illness is inherently complex and this is particularly the case in ensuring accurate assessment of mental health problems amongst the deaf population. Deaf individual's use of sign language, facial expressions and alternative ways of communicating can be mistaken as a mental impairment. In addition, professionals who are not trained in sign language may misinterpret assessments or interviews and wrongly diagnose individuals (Rourke & Grewer, 2005; Young et al., 2001). The literature surrounding mental illness and sexual offending is therefore inconclusive and further academic attention is warranted to refute or confirm the existence of a relationship between these two variables.

Developmental Disorders

It is thought that learning developmental disorders that can lead to intellectual disabilities and educational deficiencies are prevalent within the deaf offending community (Hayes, 2009; Miller, Vernon & Capella, 2005; Mouridsen & Hauschild, 2009; Vernon & Greenberg, 1999; Young et al., 2001). Indeed, many studies highlight that deaf individuals experience

learning disabilities at a significantly greater level than hearing people (Mitchell & Braham, 2011; Vernon & Greenberg, 1999). Vernon and Greenberg (1999) highlight this prevalence and go on to evidence links between developmental disorders and a propensity towards violent and deviant behaviour. In particular they discuss that the occurrence of a learning disability and hearing loss together dramatically increases the likelihood that an individual will use violence (Vernon & Greenberg, 1999). They point out the psychological effect a learning disability can have upon a child and that in conjunction with poor educational attainment, this can increase frustrations towards others and towards society further increasing the likelihood that the individual will be anti-social in their behaviour (Vernon & Greenberg, 1999). In a study reviewing 20 hearing sex offenders with intellectual disabilities it was noted that participants with intellectual problems were more likely than their control counterparts (non-disabled participants) to be diagnosed with other mental illness such as depression or PTSD and were more likely to use aggressive behaviour (Hayes, 2009). Interestingly, those sex offenders with intellectual disabilities who had also been physically abused in childhood were significantly more likely to use violence within their sexual offence (Hayes, 2009). This highlights links between experiencing violence as a child and using violence as an adult and adds some weight to social learning theory discussed in Greenberg et al's 1993 study. However, this does not appear to link intellectual or development issues directly to later sexual offending.

Young et al. (2001) propose a direct link between developmental disorders and sexual offending. In particular they discuss that a proportion of deaf

individuals suffer from developmental delays. Their study pinpointed 84 out of 204 cases to have communication difficulties such that could mask an underlying disorder such as Aspergers syndrome (Young et al., 2001). Research suggests that if these disorders are not recognised they go untreated and can result in deviant behaviour such as sexual offending (Allen et al., 2008; Young et al., 2001). Aspergers syndrome manifests itself in relation to poor impulse control, social misinterpretations, poor consequential thinking and vulnerability, all of which are similar, if not identical traits to those experienced by deaf people who have experienced significant communication difficulties in terms of inadequate development of language (Allen et al., 2008; Bramley, 2007; Schneider & Sales, 2004; Young, Monteiro & Ridgeway, 2000). In line with this, Mouridsen and Hauschild (2009) are active in explaining the links between developmental learning disorders (DLD) and offending behaviour. Mouridsen and Hauschild compared a large group of DLD individuals (469) with an even larger control group of the general population without DLD (2345). They found no differences in general offending rates between the two groups. Interestingly, they did find that males with DLD had statistically significantly more convictions for sexual offending (2.7%) than males from the non DLD group (0.6%). Although this percentage works out at 9 males out of 329 convicted for sexual offences, which is a very small subsample, it is still significantly higher than for the non DLD group (10/1645) and therefore would suggest a link between communication, social difficulties and sexual offending (Mouridsen & Hauschild, 2009). The authors highlight that DLD does not include individuals with hearing loss; however they note DLD to have symptoms of disrupted communication accompanied

by problems in education, social and emotional development; all of which can be experienced by deaf offenders who have been unable to develop some form of language in the early stages. It is thought therefore that this link between developmental disorders and sexual offending would be true for deaf offenders also. It should be noted, however, that two out of the nine sex offenders in this sample had some form of mental delay which Mouridsen and Hauschild (2009) admit could be a confounding variable suggesting that sexual offending may not be as closely associated with DLD as they initially propose.

Methodological Considerations and Limitations

The above studies evidence some compelling theories as to why deaf offenders have a propensity to offend sexually. Consideration however, should be given to the combination of American and UK studies and figures that are used interchangeably within this review. The differences in populations, diagnostic criteria and methodologies may therefore reduce the robustness of the conclusions drawn to some extent. Indeed the overall paucity of studies surrounding this complex population has made it necessary for the authors to draw upon studies from a variety of countries and studies that are somewhat dated. It should be noted that some sample sizes are very small and utilise very specific clinical populations that may also reduce the generalizability of results. Furthermore, the lack of randomised controlled trials further reduces the reliability of findings included within this study.

It should be considered how effective hearing professionals are at assessing, interviewing and researching such offenders, in relation to the level of accuracy that can be obtained (Rourke & Grewer, 2005). For example, with reference to an earlier point, deaf people are often wrongly diagnosed (Rourke & Grewer, 2005). Misinterpretations of facial movements, lack of speech and poor communication can result in an incorrect diagnosis of a mental illness or can in fact, hide a diagnosis of developmental problems. Outcomes of assessments therefore are somewhat subjective in nature, which in turn, has huge implications surrounding the validity of the current research available and the strength of interventions and treatment currently in place to rehabilitate such offenders. Rourke and Grewer (2005) equally note that a professional's use of open questions may potentially confuse a deaf person and may not be easily translated into sign language. Similarly, translated assessments such as assessments of intelligence for example, should be considered in terms of their accuracy and reliability. It is thought that the mere translation of a standardised measure, and the differences factored in from the abilities of the sign language interpreter would reduce the validity of such a measure; thus rendering it inaccurate (Rourke & Grewer, 2005).

The amount of research that is reliant on self reported experiences should be further scrutinised. It is heavily documented that 'hearing' sex offenders experience distorted thoughts in relation to their offending and have cognitions that rationalise and support their offending behaviour (Abel et al., 1989; Blake & Gannon, 2008; Rourke & Grewer, 2005). Perhaps a deaf sex offender claiming that he has sexually assaulted a young child because he did

not get the opportunity to learn appropriate sexual behaviour is therefore simply a justification which is used to reduce cognitive dissonance associated with their offence. It should be considered that a deaf offender might use their deafness to rationalise their behaviour. This view would suggest that professionals need to be wary of such justifications and consider more effective methods of assessment in order to develop a more accurate understanding of the deaf sex offender.

The need for much improved assessment methods has been highlighted. In their 2001 study, Young and his colleagues, analyzing forensic referrals for deaf service users found that out of 431, 60% of cases would have benefitted from more specialist and intensive treatment thus highlighting the need for much improved assessment methods and specialist services for this population (Rickford & Edgar, 2005; Young et al., 2001). Indeed, the prevalence of deaf individuals in the high secure establishments appears to be due to the lack of appropriate treatment facilities within the lower secure services (Mitchell & Braham, 2011; Rickford & Edgar, 2005; Young et al., 2001). This suggests deaf offenders are being held within the high secure units when they would be better suited to lower security regimes. In addition to this, this offender group are being restricted to high secure settings and not moving down through the system in line with treatment success and reduction in risk behaviour; thus hindering individual progress and creating an inaccurately negative perception of the deaf offender population. More recently the Department of Health (DoH) has recognised the weakness in current assessment and appropriate treatment methods for deaf offenders. A

recent increase in available funding from the DoH has brought about vital research opportunities in this area in order to develop practitioners' deaf awareness and provide additional specialist training and expertise in this area. For example, the proposed implementation of specialist psychological prison in-reach teams will assist in developing understanding of this complex population and consequently increase the capacity to accurately assess and responsively treat such individuals (Rickford & Edgar, 2005).

Young et al. (2000) highlight that the explanations discussed within this paper do not account for those deaf people who share such adverse experiences, for example childhood abuse, neglect, limited language and mental illness, and yet do not go on to commit offences and alternatively go on to live pro-social and positive lifestyles. For example, as previously highlighted, not all deaf individuals who were sexually abused as children will go on to abuse others as an adult. Therefore, in order to establish any robust, causal link as to why deaf individuals are more likely to offend sexually more research must be conducted (Schneider & Sales, 2004; Young et al., 2001).

Conclusion

There is a high prevalence of deaf offenders within the Criminal Justice System and an unusually large amount of these offenders have offended sexually. The literature suggests that this could be due to deaf people having been sexually abused in their childhoods, having poor communication abilities and lacking in language. Some have suggested a deviant deaf personality or

brain damage to be somewhat responsible for this trend. In addition, mental illness and developmental disorders were considered to play some role within this association.

Indeed, whilst the forensic deaf population are a distinct group of individuals, many of the issues discussed in this paper are relevant to the hearing forensic population too. Certainly mental illness, learning and developmental disability, childhood sexual abuse and brain damage are all risk factors to offending for a hearing individual as well. Therefore, although some compelling evidence has been reviewed, there remains no satisfactory explanation as to why deaf people in particular, have a propensity to sexually offend.

Although far from water tight, this review paper highlights the strongest theories linking deaf individuals to sexual offending are childhood sexual abuse and the presence of a learning/ developmental disability. Indeed, if treatment were to be responsive to the areas highlighted in this paper then interventions might focus around dealing with trauma, appropriate social and sexual education and effective assessment and management for developmental learning disorders. Certainly, these explanations highlight greater scope and indeed, need, for prevention strategies to be put in place. For example developing sexual education for deaf children, improving safety and education throughout the social services and educating those who care for young deaf people in deaf awareness and appropriate sign language would aim to reduce the grossly disproportionate amount of deaf children who are sexually abused. Developing standardised, culture appropriate and

accurate assessments of learning disability and linked early intervention programmes would reduce life frustrations and deviant behaviour that deaf individuals with developmental disorders go on to experience. In order to develop effective needs-based treatment for this population more research is paramount. Accurate assessment materials, and well educated and specialised clinicians and interpreters are a necessity in order to work ethically and effectively with deaf offenders. Once these errors have been recognised and amended, then perhaps it will be possible to determine appropriate and targeted treatment and respond effectively to the needs of this complex population.

Appendix 1: Literature Summary Table

Title of Study	Author/s	Date	Country	No. of participants/ cases	Study type/ Brief Methodology	Main findings
Working with deaf people who have committed sexual offences against children: The need for an increased awareness.	Bramley, S.	2007	UK	-----	A review of the literature around deaf people and forensic mental health needs	• Profoundly deaf people suffer from mental disorders more than their hearing counterparts • Factors influencing violent behaviour for deaf people- communicative limitations, brain damage and learning disability • High numbers of deaf people commit sexual offences • Factors influencing sexual offending among deaf people- childhood sexual abuse, social isolation, lack of appropriate sexual education.
Heterosexual male perpetrators of childhood sexual abuse: A preliminary neuropsychiatric model.	Cohen, I. J., Nikifozov, K., Gans, S., Poznansky, O., McGeoch, P., Weaver, C., King, E. G., Cullen, K., Galynker, I.	2002	USA	22	Data was collected on 22 pedophiles on their neuropsychology. Personality and sexual history through administering a battery of tests.	• Early childhood sexual abuse leads to neurodevelopmental abnormalities in the temporal regions mediating sexual arousal and erotic discrimination and the frontal regions mediating the cognitive aspects of sexual desire and behavioural inhibition.
Childhood Sexual Experience and Adult Offending: An exploratory comparison of 3 criminal groups	Connolly, M., Woollons, R.	2008	New Zealand	125 males. 58 were in prison for non-sexual crimes, 23 were serving sentences for rape and the remaining 44 were undergoing therapeutic treatment	A questionnaire was administered to three criminal groups (child molesters, rapists and non-sexual offenders) with the aim of investigating the statistical relationships between the men's early childhood sexual experiences.	• The two sex offending groups reported higher levels of physical and sexual abuse. • The rapist group reported significantly higher levels of emotional abuse and neglect. • The child molester group was more likely to report both consenting and non-consenting activity with other children • Higher abuse reporting by the child molester and rapist groups suggests a link between early sexual experiences and later offending pathways

				for their child molestation crime		
A study of 250 patients referred to a department of psychiatry for the deaf.	Denmark, J. C.	1985	UK	250	Referrals were randomly selected and studied. Factors such as age, sex, marital status, reason for referral, method of communication, diagnosis were examined.	• High prevalence of sexual crimes • Mental health issues and communication disorders • Psycho-social problems related to deafness • Results overall underlined the great need for specialised services for deaf patients of all types.
Frontal lobes and older sex offenders: A preliminary investigation.	Fazel, S., O'Donnell, I., Hope, T., Gulati, G., Jacoby, R.	2007	UK	50 sex offenders 50 control group	Participants were interviewed and three frontal lobe executive functioning tests administered	• Literature suggests sexual offending in older males is associated with frontal lobe dysfunction • This study did not find evidence of this link.
A comparison of Sexual Victimisation in the childhoods of Pedophiles and hebephiles	Greenberg, D. M., Bradford, J. M. W., Curry, S.	1993	USA	135 pedophiles and 43 hebephiles	All participants completed a self-report sexual history inventory.	• 42% of pedophiles and 44% of hebephiles reported being sexually victimized in childhood. • Both groups appear to have chosen their age specific victims in accordance with the age of their own experience of sexual victimization.
The Relationship between childhood abuse, psychological symptoms and subsequent sex offending: Brief report.	Hayes, S.	2009	UK	20 sex offenders with intellectual disabilities (ID) were compared with 20 non-disabled sex offenders.	The aim of this study was to examine the relationship between childhood abuse, history of psychological and psychiatric symptoms, and patterns of violence in later offending. The Kaufman Brief Intelligence Test, the Vineland Adaptive Behavior Scales, and a structured clinical interview were administered to participants.	• Offenders with ID were more likely to report that they had been the victim of physical abuse during childhood • Aggressive behavior during adulthood was related to a history of having been the victim of childhood physical abuse, or exposure to family violence. • Participants in the ID group were more likely to be diagnosed with depression, post-traumatic stress disorder and aggressive behavior. • Perpetrators with ID who had been physically abused during their developmental years were significantly more likely to threaten or use violence during the offence. • The study therefore suggests that childhood abuse may be related to severity of the

						crime, and to the development of later psychological and psychiatric symptoms.
The neuropsychology and neurology of sexual deviance: A review and pilot study.	Joyal, C., Black, D., Dassylva, B.	2007	USA	20	Review existing data derived from neuropsychiatry, neuroimaging and neuropsychology. Gather preliminary neuropsychological data.	• Frontal lobe abnormalities highlighted deficits in executive functioning (e.g. impulsivity) to play a role in sexual deviance
Breaking the Silence about Sexual Abuse of Deaf Youth	Mertons, D. M.	1996	USA	27 staff members 10 students	Data were collected at a residential school through document reviews, interviews and observations. Data was collected over two visits; Visit 1- 5 days Visit 2- 3 days.	• Staff had negative views of deaf students- deaf individuals lack sexual knowledge/poor judgement/ sexual assault 'normal' amongst deaf community • Some shifting of blame and denial by staff • Sexual abuse in homes- 'swept under carpet'.
Deaf Offenders in a Prison Population	Miller, K., Vernon, M.	2003	USA	41	A descriptive study of deaf sex offenders incarcerated in Texas state prisons over 3 months. Files/ electronic information examined.	• Sexual offending at 4 x higher for deaf offenders compared to hearing offenders • High occurrence of early childhood sexual abuse amongst deaf individuals • Evidence that those sexually abused as child are at high risk of becoming adult sex offender.
Violent Offenders in a Deaf Prison Population	Miller, K., Vernon, M., Capella, M. E.	2005	USA	99	Descriptive study of entire population of female deaf offenders in Texas state prisons. Files/ cases/ electronic information examined. The population of deaf prisoners was then compared to the hearing prison population in Texas.	• Deaf prisoners increased prevalence of sexual offences compared with hearing prisoners • Deaf individuals vulnerable to childhood sexual abuse, have lower educational attainments and communication abilities • Widespread lack of accessible interventions and treatment for deaf sex offenders.
The psychological treatment needs of deaf mental health patients in high secure settings: A review of the literature	Mitchell, T. R., Braham, L. G.	2011	UK	------	A review of the literature relating to the psychological treatment needs of deaf mentally disordered offenders residing in high secure settings.	• Literature surrounding this subject matter was very limited • Deaf offenders over-represented in high secure services and evidence higher levels of violent and sexual crimes • Explanations of the above surround social

						misunderstandings and biases in the judicial system • Deaf population experience similar levels of mental illness as hearing population • Deaf people experience greater levels of learning disability • There are numerous sources of error when assessing and providing treatment interventions for deaf offenders.
A long-term study of offending individuals diagnosed with a developmental language disorder (DLD) as children.	Mouridsen, S. E., Hauschild, K. M.	2009	USA	469- DLD 2345- Non-DLD	Descriptive statistics were gathered and compared between a group of offenders with DLD and a group of offenders without DLD	• No difference in offending rates between the two groups • Males with DLD had statistically significantly more convictions for sexual offending than males from the control group.
Assessment of deaf people in forensic mental health settings: A risky business	O'Rourke, S., Grewer, G.	2005	UK	------	An attempt to review the literature and provide a succinct account of current knowledge of deaf offenders and highlight future areas of research	• Deaf people over-represented in the prison estate compared with the general population • Higher rates of sexual offending among deaf offenders • Childhood sexual abuse highlighted as a key explanation for later adult sexual offending • Inaccurate mental assessments of deaf individuals • Issues highlighted around the true accuracy of assessments and interviews of deaf offenders due to communication/ language/ body language differences.
Executive Functioning impairment in sexual offenders.	Stone, M., Thompson, E.	2001	USA	63	63 sex offenders were investigated using a battery of neuropsychological tests.	• Frontal lobe impairment to be associated with deficiencies in executive functioning and evident in sexual offenders.
Violence in deaf and hard of hearing people: A review of the literature.	Vernon, M., Greenberg, S. F.	1999	USA	------	A review of the literature	• Developmental disorders to be particularly rife amongst deaf offenders • Linked developmental disorder to later deviance; particularly violent behaviour.
Issues in the sexual molestation of deaf youth	Vernon, M., Miller, K.	2002	USA	-------	An overview of the literature surrounding sexual abuse in schools and characteristics	• Sexual abuse does occur in schools and deaf individuals are particularly vulnerable to this • Men who are sexually

					of pedophiles and hebephiles.	abused as children are at greater risk of going on to offend against children themselves. • Many deaf offenders report having been sexually abused when a child
Recognising and handling problems of incompetent deaf defendants charged with serious offenses.	Vernon, M., Raifman, L. J.	1997	USA	26	26 homicide cases involving deaf defendants were examined	• 12/26 cases the deaf defendant had primitive personality disorder (PPD) • 7/26 had borderline PPD • PPD individuals have limited understanding of social world, impulsive and psychologically naïve.
Pedophilia and Deafness	Vernon, M., Rich, S.	1997	USA	22	22 deaf pedophiles interviewed. Descriptive data on the sample was provided and evaluated against a sample of hearing pedophiles.	• Prevalence of primitive personality disorder (PPD) in deaf sample of pedophiles • Within the deaf sample- higher percentage of brain damage, illiteracy and communication difficulties. • Most of the sample of pedophilia had been sexually abused in some way as a child.
Residential Psychiatric Treatment of Emotionally Disturbed Deaf Youth	Willis, R. G., Vernon, M.	2002	USA	58	58 deaf children/ adolescents at Tampa Bay Academy were compared with 168 hearing equivalents. Assessed/ interviewed and file information collated.	• Dramatically increased levels of sexual abuse in deaf individuals compared to hearing individuals.
Forensic referrals to the three specialist psychiatric units for deaf people in the UK.	Young, A., Howarth, P., Ridgeway, S., Monteiro, B.	2001	UK	431	National study of forensic referrals through electronic searches and consultation of case files. Data collected on patient characteristics, offending behaviour, court disposal and diagnosis.	• A steady and continuing rise in referrals from mid 1980s • High proportion of violent and sexual crimes • 50% NOT suffering from a mental illness • 36% with a personality disorder • A tendency to erroneous assumptions about deaf peoples mental health • Developmental disorders and psycho-social issues • Need for improvement in forensic services for deaf offender population.
Deaf People with Mental Health Needs in the Criminal Justice System: A	Young, A., Monteiro, B., Ridgeway, S.	2000	UK	------	Critical analysis of the existing literature regarding	• 12 x higher prevalence of deaf offenders than hearing in high secure

review of the literature.					prevalence and characteristics of deaf offenders.	establishments • Prevalence towards violent and sexual offending • Psychosocial factors, Deaf personality.

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