

VOLUME ONE

PROFESSIONALS' EXPERIENCES OF DEAF PEOPLE; A GROUNDED
THEORY APPROACH WITHIN THE MENTAL HEALTH AND CRIMINAL
JUSTICE SYSTEM

by

Elizabeth Sarah Wakeland

A THESIS SUBMITTED TO THE UNIVERSITY OF BIRMINGHAM FOR THE
DEGREE OF DOCTOR OF FORENSIC AND CLINICAL PSYCHOLOGY

Department of Clinical Psychology

School of Psychology

University of Birmingham

June 2017

UNIVERSITY OF
BIRMINGHAM

University of Birmingham Research Archive

e-theses repository

This unpublished thesis/dissertation is copyright of the author and/or third parties. The intellectual property rights of the author or third parties in respect of this work are as defined by The Copyright Designs and Patents Act 1988 or as modified by any successor legislation.

Any use made of information contained in this thesis/dissertation must be in accordance with that legislation and must be properly acknowledged. Further distribution or reproduction in any format is prohibited without the permission of the copyright holder.

Overview

This thesis is submitted in partial fulfilment of the requirements for the degree of Doctorate of Forensic and Clinical Psychology (Foren.Clin.Psy.D.) at the University of Birmingham. The thesis consists of two volumes.

Volume One

This volume consists of three chapters: the first, a literature review of the prevalence of abuse within the deaf and hard of hearing population; the second is a qualitative study using grounded theory exploring professionals' experiences when working with deaf offenders with mental health difficulties; the third chapter comprises a public domain briefing document which briefly provides a plain language explanation of both the literature review and the empirical paper.

Volume Two

The second volume contains five forensic clinical practice reports (FCPR). The first contains the case of a 16-year-old girl in a low secure adolescent unit presenting with self-injurious behaviours and aggression, formulated from both psychodynamic and behavioural perspectives. The second FCPR is an evaluation of the Structured Assessment for Violence in Youth (SAVRY) when used in a low secure adolescent service to predict future aggression. The third report is a single-case experimental design investigating the effectiveness of individual therapy using Cognitive Behavioural principles with a 17-year-old female presenting with low mood. The fourth FCPR presents a case study of a 53-year-old Deaf female with paranoid schizophrenia, formulated using narrative principles. The final report is an abstract of an oral presentation of a case study involving a 27 year old female within a prison based Offender Personality Disorder Pathway (OPDP) comprising a detailed assessment, formulated from a psychodynamic perspective, and recommendations for interventions.

Pseudonyms have been used throughout to ensure full anonymity.

Dedication

For my Mum and Dad.

For the unconditional love and support you have bestowed me. For the emotional and financial support you have provided throughout this doctorate. For welcoming Danny and I back into your home when times were tough. For the curiosity you have encouraged within me. For never doubting my abilities and for always pushing me forward. I hope I have made you proud.

For Danny; my fiancé, my best friend.

For your unwavering love and belief in me even when I have not been so sure myself! For the unreserved emotional support you have continuously provided throughout the course. For keeping me laughing and smiling. For giving me something to look forward to. For taking a backseat without complaining.

I could not have achieved this if it were not for all of you.

Thank You

I Love You

Acknowledgements

I would like to express my heartfelt gratitude to a number of important people who along the way have helped me to achieve this doctorate. Their belief, kindness, compassion, inspiration and understanding have been thoroughly appreciated.

To my research supervisor, Professor John Rose. Your wisdom, support, encouragement, guidance and humour have been a crucial part of this journey. Thank you for your patience and understanding along the way! To Dr Sally Austen. Your expertise in this subject area has been astounding. You inspire me. To Dr Zoe Stephenson; you took the time to help me when you didn't have to, for that I am forever grateful. To those who volunteered to participate in my study, your experiences and honesty have been invaluable.

I have also been blessed with an amazingly supportive group of family and friends; past and present, old and new. Thank you for understanding when I said I was too busy but still being there when I needed you. Daisy and Nic, you provided a second pair of eyes and ears throughout this process, providing feedback and direction when I had lost my way. To Charlotte, Adele, Jo and Amy; you shone the way with your intellect, showing me that this was possible.

Lastly, but by no means the least, an extra special mention goes to my cohort; Shevaun, Lisa and Lorna. This journey has not been easy, but together we have grown more confident and more capable than we ever thought imaginable. Your emotional support, motivational talks and constant cheerleading reminds me that *we can do this*.

Contents of Volume One

Chapter One: Literature Review: What is the prevalence of abuse in the deaf/ hard of hearing population?

Abstract	1
Introduction	2
Method	9
Results	14
Descriptive Summary	16
Quality Review	23
Narrative Synthesis	26
Discussion	41
References	45

Chapter Two: Empirical Research: A professional's experience of deaf offenders with mental health difficulties

Abstract	50
Background	51
Method	58
Results	68
Discussion	94
References	103

Chapter Three: Public Domain Briefing Document

Overview	110
Literature Review	111
Empirical Research	113
References	117

Appendices Volume One

A: Down's & Black (1998) Methodological Quality Checklist	119
B: Colour Coded Quality Scores and Risk of Bias Rating	122
C: List of Papers used in the Literature Review	123
D: University of Birmingham Ethical Approval	125
E: Participating NHS Trust R&D Approval Letter	126
F: Participating Police Force Approval Letter	127
G: Sponsorship form University of Birmingham	128
H: Recruitment Poster for Police	129
I: Recruitment Poster for MHP	130
J: Participant Information Sheet	131
K: Example of Line by Line Coding in a Police Officer's Transcript	133
L: Example of Line by Line Coding in a Mental Health Professional Transcript	134
M: Memo Writing Example	135

Illustrations for Volume One

Chapter One

Figure 1: Diagrammatical Presentation of Selection Process 15

Chapter Two

Figure 2: Example of the Interview Guide 63

Figure 3: Theoretical Model 70

Figure 4: Simplified Theoretical Model 101

Chapter Three

Figure 5: Theoretical Model for Public Domain Briefing Document 114

Tables for Volume One

Chapter One

Table One: Inclusion and Exclusion Criteria	10
Table Two: Search Descriptors and Keyword Terms	11
Table Three: Summary of Papers included in the review	18
Table Four: Quality Review Summary Table	24

Chapter Two

Table Five: Overview of Categories and Subcategories	69
--	----

Chapter Three

Table Six: Subcategories within the Five Main Categories	114
--	-----

Contents of Volume Two

Forensic Clinical Practice Report One: Psychological Models Emma, A Case of a 16-Year-Old Female admitted to a Low Secure Unit due to Self-Injurious Behaviours and Aggression: Formulations from a Psychodynamic and Behavioural Perspective

Abstract	1
Presenting Difficulties	2
Assessment Method	3
Formulation from a psychodynamic perspective	12
Formulation from a behavioural perspective	22
Reflections	28
References	30

Forensic Clinical Practice Report Two: Service Evaluation An Evaluation of the Use of the Structured Assessment for Violence in Youth (SAVRY) in an Inpatient Adolescent Secure Unit for Predicting Aggression

Abstract	33
Introduction	35
Method	41
Results	49
Discussion	54
References	59

Forensic Clinical Practice Report Three: Single Case Experimental Design A Cognitive Behavioural Approach with a 16-Year-Old Female Presenting with Low Mood.

Abstract	64
Case Summary	66
Assessment	69
Formulation	73
Intervention	78
Method	83
Results	84
Discussion	89
Reference	94

Forensic Clinical Practice Report Four: Case Study A Case of a 53-Year-Old Deaf Female with Schizophrenia

Abstract	98
Introduction	100
Assessment	105
Formulation	114
Intervention	116
Evaluation	119
Reflections	122
References	124

Forensic Clinical Practice Report Five: Oral Presentation of a Case Study
An abstract of an oral presentation of a case study involving a 27-year-old female within a prison based Offender Personality Disorder Pathway (OPDP) formulated from a psychodynamic perspective.

Abstract

127

Illustrations for Volume Two

Forensic Clinical Practice Report One:

Figure One: Emma's Genogram	11
Figure Two: An Example of the Interaction between the Triangle of Person and the Triangle of Conflict	13
Figure Three: Emma's Triangle of Conflict	14
Figure Four: Emma's Triangle of Person	17
Figure Five: Adapted from Nezu, Nezu and Lombardo (2004)	23
Figure Six: Example of Emma's Behavioural Cycle	27

Forensic Clinical Practice Report Three:

Figure Seven: Nina's Genogram	72
Figure Eight: Nina's Negative Cognitive Triad	74
Figure Nine: Nina's Longitudinal Formulation based on Beck (1974)	77
Figure Ten: Nina's Mood Ratings across Phase A (baseline) and Phase B (intervention)	86
Figure Eleven: The Distribution of Data Points across Phase A	86
Figure Twelve: Nina's Mood Ratings during Baseline (Phase A) and Intervention (Phase B) Phases – Effect of CDC Analysis on Baseline Trend Line	88

Forensic Clinical Practice Report Four:

Figure Thirteen: Wendy's Genogram	104
Figure Fourteen: Wendy's Diagrammatical Formulation	115

Tables for Volume Two

Forensic Clinical Practice Report One:

Table One: Summary of Emma's SAVRY risk rating	7
--	---

Forensic Clinical Practice Report Two:

Table Two: Items of the SAVRY	43
Table Three: Severity Ratings on the Behavioural Monitoring Data	46
Table Four: Overall Predictive Validity of the SAVRY for Frequency of Aggressive Behaviours	51
Table Five: Overall Predictive Validity of the SAVRY for the Severity of Aggressive Behaviours	52
Table Six: Predictive Validity of the SAVRY for Severity of Each Type of Aggressive Behaviour	53

Forensic Clinical Practice Report Four:

Table Seven: Wendy's PSYRATS scores	120
-------------------------------------	-----

Appendices for Volume Two

Forensic Clinical Practice Report Two:

Appendix A: NRES Guidance for a Service Evaluation

130

CHAPTER ONE

WHAT IS THE PREVALENCE OF ABUSE IN THE DEAF AND HARD OF HEARING POPULATION?

Elizabeth Sarah Wakeland

School of Psychology

University of Birmingham

School of Psychology

University of Birmingham

Edgbaston

Birmingham

B15 2TT

ABSTRACT

Background: It is thought that deaf or hard of hearing individuals are at greater risk of abuse than the hearing population. The purpose of this paper is to systematically examine and integrate existing literature to determine the prevalence rates of neglect, emotional, physical and sexual abuse, and intimate partner violence.

Method: A set of inclusion and exclusion criteria was determined. Following this a comprehensive search of numerous databases was conducted.

Results: Fourteen studies met the inclusion criteria. Eight studies reviewed the prevalence of sexual abuse, seven reviewed physical abuse, five reviewed emotional abuse, four reviewed neglect and six examined intimate partner violence. This exceeds fourteen as numerous studies examined multiple types of abuse. Quality assessment indicated twelve studies were of 'moderate' quality and the remaining two were rated 'good' quality.

Conclusion: Issues with similar samples, a tendency towards young, educated women within the Intimate Partner Violence data, and small samples suggest caution is to be used when interpreting results. The reliance on written measures and the absence of an interpreter or translation of materials in some studies further complicates the results. All types of abuse were found to be more prevalent within the deaf and hard of hearing population compared to the hearing population.

Keywords: deaf; hard of hearing; abuse; maltreatment; prevalence

INTRODUCTION

Reason for review

This review explores the victimisation experiences of deaf people by considering the prevalence of being the victim of abuse, including sexual, physical, emotional, neglect and intimate partner violence. Due to the inclusion of both deaf and hard of hearing participants, the participants in this review will range from a mild to profound level of hearing loss. The review includes studies that involve children, or adults when discussing prevalence of abuse. It would be beneficial to bring the studies examining the prevalence of victimisation to various types of abuse together to identify a more accurate representation of abuse experienced within the deaf and hard of hearing population. From this, need for treatment and interventions can be identified.

Key Terms

Deaf and Hard of Hearing; what's the difference?

“There are more than eleven million people in the United Kingdom with some form of hearing loss, or one in six of the population” (Action on Hearing Loss, 2016). The degree of hearing loss is measured by decibels (db) and defined by the quietest sound that people can hear. There are four categories; mild (25-39db), moderate (40-69db), severe (70-94db) and profound (95+db) (World Health Organisation, 2016). Nine hundred thousand people are estimated to be severely or profoundly deaf within the UK (Action on Hearing Loss, 2016). The term ‘deaf’ usually refers to a profound hearing loss which implies little or no functional hearing (WHO, 2016). Individuals who are hard of hearing generally have hearing loss ranging from mild to severe, and can

benefit from an auditory device, such as a hearing aid or a cochlear implant which can provide adequate assistance to process speech (WHO, 2016). As this review includes deaf and hard of hearing, the degree of hearing loss experienced by the participants may vary from mild to profound.

Different terminologies are also used to inform when the hearing loss occurred; prelingual suggests hearing loss acquired prior to the development of language, congenital represents hearing loss present at birth and can be caused by genetic or nongenetic factors, postlingual means hearing loss that is acquired after the acquisition of speech and language, usually after the age of six years (Centers for Disease Control and Prevention, 2016).

These differentiations are important in the understanding of the psychological impacts of deafness. For example, profound deafness from an early age can have wide implications and may affect many areas of an individual's development, whilst the sudden onset of deafness at a later stage of development can be extremely traumatising and require many readjustments (Denmark, 1994).

Big D or Little d

The term deafness can be used as a blanket term to encompass the varying degrees and types of deafness which can have different implications. Many of those individuals who are prelingually deaf hold the view that they are not disabled, but are members of a cultural and linguistic minority (Denmark, 1994). Within writings, this is reflected with the use of a capital 'D' for the word Deaf. For those who became deaf and do not associate themselves with the Deaf community, a small 'd' is used for the word deaf. If no statement of identity

or type of deafness is required, then the word deaf will have a small 'd'. This follows the standard way of representing the differences, as used by Austen and Crocker (2004) and will be used in this review.

Communication

The UK Census states that approximately 24,000 deaf people use British Sign Language (BSL), although this is likely to be an under-estimation (Action on Hearing Loss, 2016). BSL was officially recognised as a language in its own right by the government in 2003, but deaf people use a variety of methods of communication, including Sign Supported English (SSE), lip-reading, pen and paper, and light-writers to name a few.

Abuse

The Department of Health (2001) published a report titled 'no secrets' which aimed to create a coherent policy for the protection of adults who are vulnerable to abuse. A vulnerable adult consists of an individual

who may be in need of community care services by reason of mental or other disability, age or illness; and who is unable to take care of him or herself, or unable to protect him or herself against significant harm or exploitation. (p. 8)

Abuse was defined by The Department of Health report (2001, p. 9) as "a violation of an individual's human and civil rights by any other person or persons". Abuse can take the form of physical, sexual, psychological, financial, neglect or discriminatory abuse.

The Department of Health (2001) suggests sexual abuse may include rape and sexual assault, or sexual acts to which the vulnerable adult has not consented. Physical abuse may include hitting, pushing or misuse of medication. Psychological abuse includes emotional abuse, deprivation of contact or intimidation, and neglect includes neglecting physical and/ or medical care needs.

However, within research, various definitions of abuse, and types of abuse, have been used. This inevitably causes issues when reporting prevalence figures. For example, when considering the definition of sexual abuse, Brown and Turk (1992) intentionally used a broad term so as to include non-contact acts such as involvement with pornography or indecent exposure, however other research using only penetrative definitions of sexual abuse would report a much lower rate of sexual abuse. The way in which the concept is also presented to the participants may also influence the figures reported as Finkelhor et al (1990) found that when people were asked directly if they had been sexually abused, only a small percentage said yes, yet if the interviewer described all the acts that constitute abuse more participants reported being abused.

There are further complications when not all research use the same terminology, for example, the terms sexual violence, sexual trauma or sexual assault are also used. Sexual harassment can also be found in the literature, however this is a broader term used to describe feeling distressed, intimidated or offended by another's behaviour which is sexual in nature (Civil Rights Movement, 2016).

Abuse and Deafness in context

Ninety percent of deaf children are born to hearing families, which may create difficulties with communication if no member of that family acquires an adequate way of conversing with the child (Feher-Prout, 1996). This may depend on the parent's acceptance of deafness and of other modes of communication (Crocker and Edwards, 2004). This can have a substantial impact on that child's acquisition or understanding of appropriate or inappropriate behaviours, and thus increase their vulnerability to abuse victimisation and perpetration (Crocker and Edwards, 2004). This lack of access to the wider world due to communication barriers is known as the fund-of-information deficit (Pollard, 1996). This is a distinct limitation in a deaf person's knowledge base in comparison to the general population, despite normal IQ and educational attainment (Pollard and Barnett, 2009). Often, this is due to an inability to access publicly available information via means such as radio, television, overheard conversations, public address announcements and other auditory sources. This fund-of-information can span many topics (e.g. health, rights, justice) and may contribute to difficulties associated within these areas. Other implications of living in an environment which inhibits a person's communication, are that of isolation, and detriments to their mental health.

Schild and Dalenberg (2011) suggest that when a lack of information is associated with an event that could be traumatic, this is likely to exacerbate the individual's traumatic experience as the event may seem more sudden, unpredictable and uncontrollable, all factors which are associated with labelling an event as traumatic. Schild and Dalenberg (2011) labelled this type of trauma

as Information Deprivation Trauma (IDT) and suggest it may be more common within deaf and hard of hearing populations.

Little research has focussed on deaf perpetrators of abuse, and has predominantly focussed on victimisation; often relating to their disability (Williams and Porter, 2015). Many studies tend to place deaf and hard of hearing participants in with a larger sample of people with other disabilities, assuming that the category 'disability' implies a homogenous sample. However it is important to recognise factors that are more likely, or unique, within deaf and hard of hearing participants. For example, Knutson, Johnson and Sullivan (2004) found that mothers of children with profound hearing impairments were more likely to utilise physical discipline in response to child transgressions.

One hypothesis is the additional parental stress that accompanies parenting a child with a disability; particularly a hearing impairment (Fellinger, Holzinger and Pollard, 2012). Another hypothesis relates to the discipline-mediated model of abuse (e.g. some abuse is conceptualised as normative discipline that has escalated to injurious level) (Knutson, Johnson and Sullivan, 2004). However this only provides an explanation for physically abusive practices. Charlson (2004) found many similarities between hearing and deaf families that were characterised by severe abuse (e.g. substances, mental health, poverty, parental child abuse) however found factors particular to the interaction of deaf parent-hearing child (e.g. communication, lack of access to support).

Other research suggests that deaf children are at greater risk of sexual abuse, perhaps due to the abuser assuming it safer to abuse a deaf child

(Ridgeway, 1993), the abuser may believe that the deaf child would not be able to complain or would be unaware that the behaviour was unlawful, or the deaf child may have limited sexual awareness or be over-dependent on others (Denmark, 1994).

Educational settings, whether mainstream or residential, appear to represent an extra risk of abuse for deaf children as nearly half of Kvam's (2004) Norwegian deaf victims reported that their abuse took place in a special school for deaf children; which was also reported by Sullivan, Vernon and Scanlan's (1987) study conducted in the United States. Mertens' (1996) qualitative study within a residential school in the US highlighted several themes as to the perpetuation of sexual abuse within these settings, including a tendency to 'blame the victim', 'blame the system', 'blame the deaf culture' or 'inadequate staff skills' (e.g. signing skills or ability to enforce the rules); leading to a lack of reporting the perpetrators and thus preventing future assaults.

METHOD

Aim

The purpose of this paper is to systematically examine and integrate existing literature to determine the prevalence rates of deaf people being victim to neglect, emotional, physical and sexual abuse, and intimate partner violence. From this, need for treatment and interventions can be identified.

Scoping Review

To identify whether such a review was relevant or necessary, a scoping review of 'deaf' and 'abuse' was completed in May 2016. It identified a summary of the literature completed in 1998 by Sullivan and Knutson, however they do not outline whether this was completed systematically, therefore it was deemed appropriate to use papers prior to 1998 in the present review. An electronic search of The Campbell Collaboration of Systematic Reviews 2016 and the Cochrane Database of Systematic Reviews was conducted. This identified that no review had been, or was in the process of being, conducted.

Criteria for Considering Relevant Studies for Review

To allow for identification and selection of relevant studies, a set of inclusion and exclusion criteria were defined. The criteria are presented in Table 1 below.

Table 1: Inclusion and Exclusion Criteria

Inclusion Criteria	Exclusion Criteria
<p>Include study if it meets the following:</p> <ul style="list-style-type: none"> • Participants include individuals who are deaf (profound) and/or hard of hearing (mild to severe) • The study focusses on at least one type of abuse (sexual, physical, emotional, neglect, intimate partner violence) • The study reports on the prevalence of at least one type of abuse in their deaf/ hard of hearing sample • Intervention or non-intervention study • Published empirical paper 	<p>Exclude study if it meets one of the following:</p> <ul style="list-style-type: none"> • The study does not differentiate hearing impairment/ deafness as separate from other disabilities in analyses, results or other areas of reporting • The study focusses on the trauma associated with losing hearing in old age • The study is not focussed on abuse • The study does not report on the prevalence of abuse within their sample • Case study/ opinion pieces • The study only reports perpetration and not victimisation to abuse

Search Methods

A comprehensive search strategy was identified following a review of the synonyms found during the scoping review. Keywords associated with prevalence were not included in the search as it was felt that this may have excluded some useful papers during the database search. The search term ‘hearing impaired’ was not used due to its associations with becoming deaf in

later life. Table 2 below illustrates the search terms identified for the search of the electronic database.

Table 2: Search descriptors and keyword terms

Descriptor Terms and Keywords		
Deaf:		Abuse:
deaf*		abus*
hearing loss	AND	maltreatment
hard of hearing		victim*
		trauma*
		sex*
		physical
		emotional
		neglect

Electronic Databases

The following databases were chosen due to their coverage of topics such as psychology, psychiatry and nursing. The dates contained in parenthesis relate to the start year of each database and the date the search was completed.

- Embase (1974 to July Week 6 2016)
- Ovid Medline (1946 to June Week 5 2016)
- PsychINFO (1967 to June Week 5 2016)
- PubMed (All years to 8 July 2016)
- Web of Science (All years to 8 July 2016)

To increase the sensitivity of the search, keywords were truncated to account for variations in spelling (*) and Boolean logical operators were used (OR, AND) to combine keywords resulting in a more focussed search result.

The only limit placed was 'full text' to ensure access to the full article. No limits were applied based on language or country of study. It was thought best to keep this broad to increase the reliability of the review and maximise the range of relevant studies.

Additional Searches

Further searches were conducted to identify additional studies. This included manually scanning the reference lists of all papers.

Study Selection

To identify the studies to be selected the titles were reviewed for relevance. Following this duplicates were removed from the database search, and full texts were retrieved and examined for eligibility against the inclusion and exclusion criteria.

Risk of Bias

Methodological quality was assessed using Downs and Black's (1998) Methodological Quality Checklist (see Appendix A). This checklist was designed to assess the quality of both randomised and non-randomised studies, including the quality of reporting, internal validity (bias and confounding), power, and external validity (generalisability). The Quality index was shown to have high internal consistency, and good test-retest and inter-rater reliability (Downs and

Black, 1998). It was also found to have little difference in its performance when used with randomised or non-randomised studies.

The Checklist provides a set of scores covering methodological issues, with a maximum score of 28 available. There are 27 items related to five areas: Reporting, External Validity, Internal Validity – bias, Internal Validity – confounding, and Power. Each item is scored either 1 (evidence for the item) or 0 (unable to determine evidence or none available). Question 5 is scored from 2 to 0, with 1 representing partial evidence present.

RESULTS

Search Strategy and Study Selection

Using the descriptor terms 'abuse' and 'deaf' (which include the truncated keywords) the search strategy produced a total of 1421 papers from the five electronic databases. All papers retrieved were in the English language. After deduplication, there remained 1021 papers. The titles of these papers were then reviewed for relevance; 985 papers were subsequently excluded due to irrelevant content/ subject matter (e.g. physical health, loss of hearing in old age) and 36 papers were eligible for further review. Once these papers were collated and abstracts further scrutinised, 12 papers remained. Two more studies were found through manually scanning the references; providing a total number of papers to be reviewed as 14. Figure 1 below provides a diagrammatical presentation of the selection process.

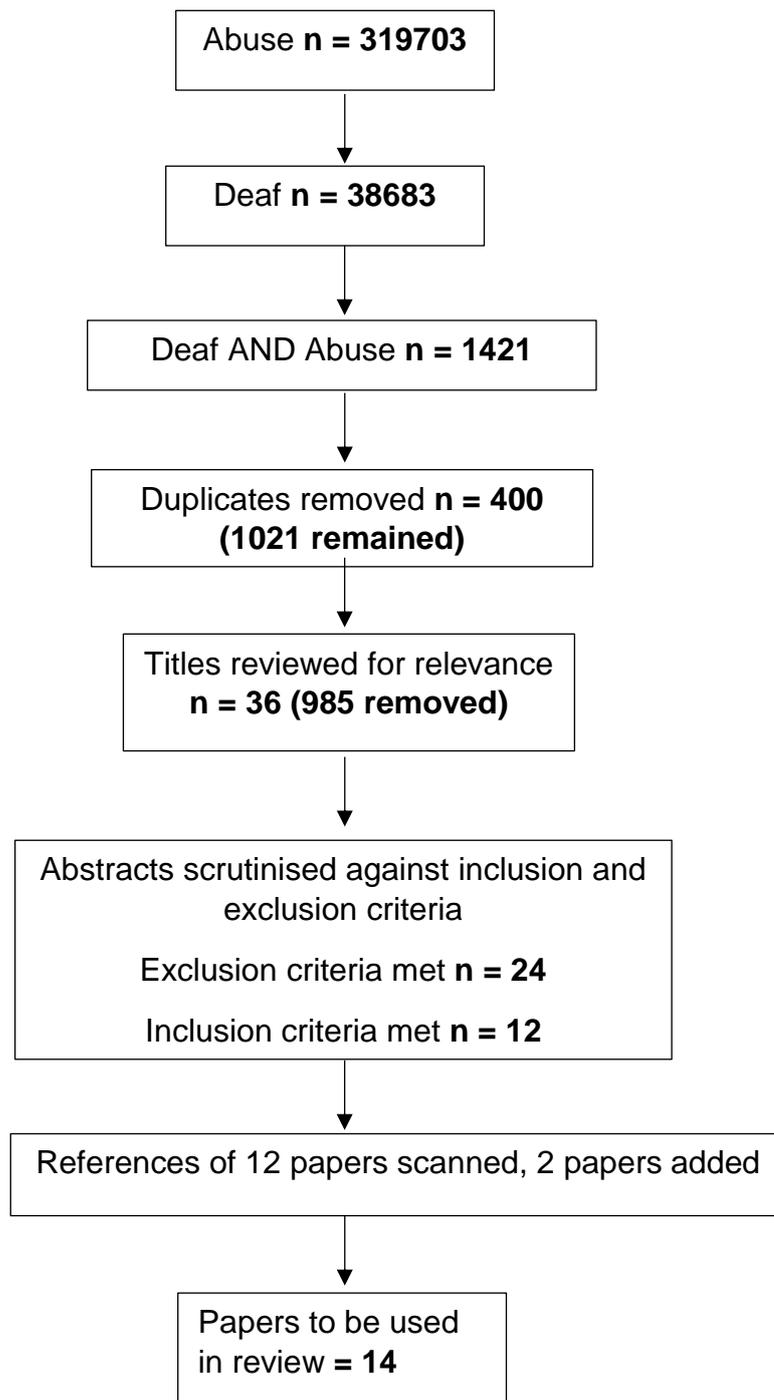


Figure 1: Diagrammatical Presentation of Selection Process

Descriptive Summary

In total, fourteen papers met the inclusion criteria and were included in the review. All the studies used quantitative methodologies, with thirteen cohort, and one case-control study. The predominant country of origin for the studies was the United States of America, with two carried out in Norway. An outline of the key characteristics of each study can be found in table 3, listed in date order. Due to the predominance of studies being carried out in the United States, it may limit the transferability and generalisability of their findings.

As this review was only reviewing the prevalence of victimisation, any papers focussing on the prevalence of deaf perpetrators of abuse were excluded. Four studies reviewed the prevalence of victimisation to sexual, physical, emotional abuse and neglect in deaf and hard of hearing participants, two studies examined the prevalence of victimisation to sexual and physical abuse, one study examined the prevalence of victimisation to sexual, physical and emotional abuse, and one study examined the prevalence of victimisation to sexual abuse only. Six studies examined the prevalence of intimate partner violence within deaf and hard of hearing relationships.

Recurrent Samples

Four principal authors occur on more than one occasion across eight papers included in the review (Anderson & Pezzarossi, 2011; Anderson & Leigh, 2011; Schild & Dalenberg, 2012; Schild & Dalenberg, 2015; Sullivan & Knutson, 1998b; Sullivan & Knutson, 2000; Williams & Porter, 2014; Williams & Porter, 2015). J. Porter and M. Anderson were contacted regarding their samples, to which both confirmed that the data was not collected from the same

samples. The Sullivan studies do not include the same participants, which is evident within the reporting of their studies. Schild and Dalenberg (2015) state they are examining the same sample as their 2012 study. Consideration was given to excluding the Schild studies, however, as the latter study provides further information such as examining co-morbidity of abuse, and the inclusion of a hearing sample, it was determined that they should be included. Despite this decision, it is important to note that this may impact on the results with these two papers possibly unduly influencing the results, as their prevalence figure will be represented twice.

It is also important to highlight that two of the studies recruited participants from Gallaudet University (Anderson & Pezzarossi, 2011; Anderson & Leigh, 2011) and four of the studies recruited participants from the Rochester Institute of Technology for the Deaf (RIT; Pollard et al. 2014; Schenkel et al. 2014; Williams & Porter, 2014; Williams & Porter, 2015). Therefore it is possible that some of these samples overlap, which is potentially a significant limitation.

Across the fourteen studies the most commonly used method of data collection included self-report measures (n = 10). One study used a parent rated questionnaire, two used adapted national surveys, and one reviewed police, foster care and health records. Of the ten studies which used self-report measures, the most commonly used was the Conflict Tactics Scale – Two (CTS2; n = 5). In all, a total of seventeen different measures were used across the ten studies.

Table 3: Summary of papers included in the review

Study Details and Aim	Sample	Assessment	Key Findings
<p>Sullivan & Knutson. 1998b (US)</p> <p>To examine the level of behaviour problems in deaf/ HOH children who have been subject to abuse.</p> <p>This study involves a retrospective cohort study of children referred to Boys Town National Research Hospital (BTNRH), over a 10 year period (1984-1994).</p>	<ul style="list-style-type: none"> • 123 deaf/ HOH abuse victims • 58 deaf/ HOH abuse victims also known to be perpetrators • 7 deaf/ HOH abuse victims with alcohol or drug dependency • 23 deaf/ HOH abuse victims, also known to be perpetrators with alcohol or drug dependency • 101 deaf/ HOH non-abused control group 	<ul style="list-style-type: none"> • Child Behaviour Checklist (CBC) was completed by the adult accompanying the child to the appointment at BTNRH 	<ul style="list-style-type: none"> • Most prevalent types of maltreatment in order of magnitude, are neglect, physical abuse, sexual abuse, and emotional abuse. • Half of the children endured multiple forms of maltreatment • When comparing their sample of maltreated deaf children to other studies reporting maltreated children without disabilities, deaf/ HOH children are 1.4 times more likely to be neglected and twice as likely to be physically abused • Abused deaf/ HOH children exhibit clinically elevated scores in Internalising behaviours and Total behaviour problems, are significantly more withdrawn, anxious and depressed, and aggressive than non-abused peers.
<p>Sullivan & Knutson. 2000 (US)</p> <p>To assess the prevalence of abuse and neglect among disabled children.</p> <p>This study was a retrospective case control design.</p>	<ul style="list-style-type: none"> • Maltreated, disabled sample n = 1012 (hearing impairment n = 13) • Maltreated, nondisabled n = 3491 • Non-maltreated, disabled n = 2250 • Non-maltreated, nondisabled n = 33458 • Age range 0-21 years 	<ul style="list-style-type: none"> • Review of records of Social Services, Nebraska Foster Care Review Board and Omaha Police Department 	<ul style="list-style-type: none"> • Deaf and HOH children have twice the risk for neglect and emotional abuse • Deaf and HOH children have four times the risk for physical abuse than nondisabled peers. • Prevalence of abuse in deaf/ HOH sample, in order; physical abuse, neglect, emotional abuse, and sexual abuse.
<p>Kvam. 2004 (Norway)</p> <p>To estimate the prevalence of childhood sexual abuse among deaf children in Norway.</p> <p>A cohort design.</p>	<p>Cohort 1</p> <ul style="list-style-type: none"> • 302 deaf persons, recruited from the general population via the national database, aged 18-65 years who became deaf before the age of 9 years <p>Cohort 2</p> <ul style="list-style-type: none"> • 925 members of the general population 	<ul style="list-style-type: none"> • Self-administered questionnaire, adapted from the sexual abuse survey in the general population by the National Institute of Public Health (Tambs, 1994) 	<ul style="list-style-type: none"> • Most common abuse was sexual abuse with physical contact which was reported by 39.6% of girls and 32.8% of boys • Deaf women experienced sexual abuse more than twice as often as hearing women • Deaf men experienced childhood sexual abuse more than three times as often as hearing men

Study Details and Aim	Sample	Assessment	Key Findings
<p>Titus. 2010 (US)</p> <p>To assess the prevalence, severity and characteristics of victimisation among a group of youths with hearing loss.</p> <p>A retrospective cohort design.</p>	<p>Cohort 1</p> <ul style="list-style-type: none"> • 111 deaf and HOH youths <p>Cohort 2</p> <ul style="list-style-type: none"> • 4368 hearing youths • Age range 11-24 years, recruited from outpatient and residential settings for substance misuse 	<ul style="list-style-type: none"> • The dataset is from a collection of 71 adolescent and young adult treatment studies between 1998 and 2007 • All data reported was collected as part of a treatment intake interview using the Global appraisal of Individual Needs (GAIN) 	<ul style="list-style-type: none"> • 50.9% of the victims of abuse with physical contact reported it was in connection with a boarding school for the deaf • Hearing loss group reported significantly more physical abuse (42% vs. 29%) and weapon attacks (48% vs. 32%) • Rates of sexual abuse was not significantly different between the two groups (11% vs. 8%) • Emotional abuse not significantly different across groups (37% vs. 31%) • Youths with hearing loss indicated a more severe victimisation history
<p>Anderson & Pezzarossi. 2011 (US)</p> <p>To assess the prevalence of violent behaviours experienced by Deaf women undergraduates in their past year relationship and what proportion identify this as abuse.</p> <p>A cohort design.</p>	<ul style="list-style-type: none"> • 97 Deaf women undergraduate students, aged 18-25 years, attending Gallaudet University (educational facility for the deaf) 	<ul style="list-style-type: none"> • Three measures administered: demographic questionnaire, the Revised Conflict Tactics Scales (CTS2) and one question investigating the labelling of violence. 	<ul style="list-style-type: none"> • 87.5% of sample reported psychological aggression • 39.6% reported physical assault • 56.7% reported sexual coercion
<p>McCabe et al. 2011 (US)</p> <p>To examine domestic violence and perceived social support in a clinical sample of Deaf and HOH women.</p> <p>A cohort design.</p>	<ul style="list-style-type: none"> • 46 adult women who were Deaf or HOH and had previously, or was currently, receiving mental health services in community outpatient clinics. • Age range 18-69 years 	<ul style="list-style-type: none"> • Self-report measures including: demographic questionnaire, Conflict Tactics Scale (CTS), and the Interpersonal Support Evaluation List (ISEL). 	<ul style="list-style-type: none"> • 71.7% of the sample reported that they had been in a relationship at some point in their lives in which they were the victim of psychological or emotional abuse • 56.6% reported to have been victims of some type of physical abuse in an intimate relationship • 26.1% reported sexual violence in their relationships
<p>Anderson and Leigh. 2011 (US)</p>	<ul style="list-style-type: none"> • 100 Deaf or HOH women undergraduate students, aged 18-25 years, attending Gallaudet University 	<ul style="list-style-type: none"> • Self-report measures including: demographic questionnaire, and the CTS2. 	<ul style="list-style-type: none"> • 91/100 participants reported at least one incidence of being the victim of psychological aggression in the past year

Study Details and Aim	Sample	Assessment	Key Findings
<p>To ascertain the prevalence of intimate partner violence victimisation in a sample of Deaf women college students.</p> <p>A cohort design.</p>			<ul style="list-style-type: none"> • 52/100 reported being the victim of physical assault • 22/100 experienced an injury as a result of this assault • 61/100 students reported sexual coercion in the last year • When compared to other samples of hearing undergraduate students, it indicates that the current sample of Deaf students are roughly two times as likely to have experienced victimisation in the past year
<p>Schild and Dalenberg. 2012 (US)</p> <p>To examine prevalence, symptom manifestation, and/or unique characteristics of deaf adults and children who experience traumatic events.</p> <p>A cohort design.</p>	<ul style="list-style-type: none"> • 45 women and 34 men recruited from the Deaf community via advertisements, aged 18-83 years. 	<ul style="list-style-type: none"> • Self-report measures including: The Life Events Checklist (LEC, Clinician Administered PTSD-Scale (CAPS), Peri-traumatic Distress Scale (PDST), Trauma Symptom Inventory (TSI), Somatoform Dissociation Questionnaire (SDQ), Peabody Individual Achievement Test – Revised (PIAT-R), Socio-Demographic Questionnaire (SoDe-Q) and the Interpersonal Support Evaluation List (ISEL). 	<ul style="list-style-type: none"> • Sexual assault was reported by 20.6% of men and 37.8% of women which are substantially higher than the hearing population • 73.5% of men and 71.1% of women experienced physical assault • Only 19.5% of all participants met the diagnostic criteria for PTSD, which is lower than the hearing population of 25-30%, hypothesised to be due to a difference in presentation, or the more chronic symptoms being present rather than acute
<p>Pollard et al. 2014 (US)</p> <p>To examine the prevalence of intimate partner violence.</p> <p>A cohort design.</p>	<p>Cohort 1</p> <ul style="list-style-type: none"> • 308 Deaf participants recruited through Deaf community organisations “Rochester sample” (age range 18-64 years) <p>Cohort 2</p> <ul style="list-style-type: none"> • 162 Deaf participants who responded to the survey during a 40-year alumni reunion hosted by the National Technical Institute for the Deaf (NTID) “National sample” (age range 19-64 years) <p>Cohort 3</p> <ul style="list-style-type: none"> • 1906 of the general population 	<ul style="list-style-type: none"> • Data collected via a touch screen kiosk presenting the Deaf Health Survey. • Telephone survey completing the Monroe County Behavioural Risk Factor Surveillance System (BRFSS) 	<ul style="list-style-type: none"> • 25.4% and 27.5% of both deaf samples reported experiencing emotional abuse • 20.1% and 21% of the deaf samples reported experiencing physical abuse across the lifetime compared to 13.9% of the general population sample • 14.5% and 20.8% reported experiencing forced sex compared with 5.8% of the general population sample • Almost three to four times as many deaf persons, in the “national” sample and the “Rochester” sample respectively, reported experiencing forced

Study Details and Aim	Sample	Assessment	Key Findings
	<ul style="list-style-type: none"> National Violence Against Women Survey (NVAWS; Tjaden and Thoennes, 2000) 		<p>sex at some point in their lives compared to the BRFSS sample.</p> <ul style="list-style-type: none"> More men than women reported experiencing forced sex in the past year in both deaf samples.
<p>Williams and Porter. 2014 (US)</p> <p>To explore differences between Deaf students' and HOH students' experiences and risk factors of psychological and physical abuse in the intimate relationships.</p> <p>A cohort study.</p>	<ul style="list-style-type: none"> 222 Deaf and hard of hearing college students randomly selected from forty classes at Rochester Institute of Technology (RIT) Age was defined as either 21 years and below, or more than 21 years of age. 	<ul style="list-style-type: none"> Self-report measures including a demographic questionnaire and the CTS2 	<ul style="list-style-type: none"> 61.3% reported psychological abuse, accounting for auditory status, this figure remains similar 39.6% reported physical abuse in the last year (53.85% HOH, 35.3% Deaf) More men (48%) than women (32%) reported physical abuse
<p>Schenkel et al. 2014 (US)</p> <p>To examine the prevalence of child maltreatment and lifetime exposure to other traumatic events in a sample of deaf and HOH, and matched hearing college students.</p> <p>A cohort design.</p>	<p>Cohort 1</p> <ul style="list-style-type: none"> 86 Deaf students and 61 HOH students (DHH) <p>Cohort 2</p> <ul style="list-style-type: none"> 317 hearing students (H) <ul style="list-style-type: none"> All recruited from Rochester Institute of Technology (RIT), mean age 21.24 (SD = 4.59) 	<ul style="list-style-type: none"> Self-report measures including, a demographic questionnaire, The Childhood Trauma Questionnaire (CTQ), Traumatic Life Events Questionnaire (TLEQ) and the PTSD Checklist (PCL). 	<ul style="list-style-type: none"> DHH participants reported significantly more emotional abuse than hearing participants (48% and 29%) DHH participants reported significantly more physical abuse than hearing participants (39% and 18%) DHH participants reported significantly more sexual abuse than hearing counterparts (32% to 13%)
<p>Ohre et al. 2015 (Norway)</p> <p>To investigate the prevalence of traumatic events and subsequent traumatisation in adults referred to specialised psychiatric outpatient units for deaf and HOH patients.</p> <p>A cohort design.</p>	<ul style="list-style-type: none"> 62 deaf or hard of hearing participants referred to Mental Health clinics for the deaf, age range of final sample unspecified, however sample from which they recruited ranged from 18-62 years. 	<ul style="list-style-type: none"> Self-report measures including, Traumatic Experiences Checklist (TEC), Mini International Neuropsychiatric Interview (MINI), the SCL-25 and the Global Assessment of Function (GAF). 	<ul style="list-style-type: none"> 71% reported childhood trauma, 37 of these respondents also reported trauma in adulthood The three most frequent traumatic event types reported by the sample were emotional neglect, family problems (e.g. poverty, parent with alcohol problems) and emotional abuse. 85% of the sample reported traumatic experiences, compared with 90% of the TEC norm sample which may suggest that the prevalence of traumatic experiences is not fundamentally different in deaf/HOH population and hearing populations.

Study Details and Aim	Sample	Assessment	Key Findings
<p>Williams and Porter. 2015 (US)</p> <p>To explore the extent of partner violence among men and women college students by auditory status and the relationship between partner abuse and childhood maltreatment.</p> <p>A cohort design.</p>	<p>Cohort 1</p> <ul style="list-style-type: none"> • 99 deaf undergraduate students, 122 HOH students from RIT <p>Cohort 2</p> <ul style="list-style-type: none"> • 465 hearing undergraduate students • Age was defined as 18-19 years, or 20+ 	<ul style="list-style-type: none"> • Self-report measures including, CTS2, the addition of 11 specific questions relating to perpetration of behaviour over the last year, and 6 items from the Parent-Child Conflict Tactics Scale to assess experiences of childhood maltreatment. 	<ul style="list-style-type: none"> • Deaf and HOH were significantly more likely to experience psychological abuse and physical violence at the hands of partners than hearing students • Deaf and HOH students were significantly more likely to perpetrate physical partner violence and psychological abuse than hearing students. • Witnessing father-mother violence was significantly related to physical abuse victimisation
<p>Schild and Dalenberg. 2015 (US)</p> <p>To evaluate the consequences of sexual and physical trauma among a sample of deaf adults.</p> <p>A cohort design.</p>	<p>Cohort 1</p> <ul style="list-style-type: none"> • 37 deaf adults with sexual abuse history or both sexual and physical abuse history (SPA group) <p>Cohort 2</p> <ul style="list-style-type: none"> • 28 deaf adults with physical abuse histories only (PA group) <p>Cohort 3</p> <ul style="list-style-type: none"> • 12 deaf adults with no physical or sexual abuse histories <ul style="list-style-type: none"> • The sample was recruited from the community via advertisements, age range 18-83 years 	<ul style="list-style-type: none"> • Self-report measures including, Life Events Checklist (LEC), Clinician Administered PTSD Scale (CAPS), Trauma Symptom Inventory (TSI), Somatoform Dissociation Questionnaire (SDQ-20) and a demographic questionnaire. 	<ul style="list-style-type: none"> • 40.6% of men and 53.3% of women had experienced some type of sexual trauma • Sexual trauma was rarely experienced by itself and three times more likely to be comorbid with physical abuse • Adult sexual trauma was substantially higher in the group reporting child and adolescent sexual trauma compared to those with no sexual trauma • Most common form of childhood trauma was physical abuse, characterising 46.8% of the sample • Women's prevalence figures for sexual and physical abuse are similar to that of the hearing population, however for men it is substantially higher.

Key: BRFSS, Behavioural Risk Factor Surveillance System; BTNRH, Boys Town National Research Hospital; CAPS, Clinician Administered PTSD Scale; CBC, Child Behaviour Checklist; CTQ, Childhood Trauma

Questionnaire; CTS-2, Conflict Tactics Scale-Second Edition; DHH, Deaf and Hard of Hearing; GAF, Global Assessment of Functioning; GAIN, Global Appraisal of Needs; H, Hearing; HOH, Hard of Hearing; ISEL, Interpersonal Support Evaluation List; LEC, Life Events Checklist; MINI, Mini International Neuropsychiatric Interview; NTID, National Technical Institute for the Deaf; NVAWS, National Violence against Women Survey; PA, Physical Abuse; PCL, PTSD Checklist; PDST, Peri traumatic Distress Scale; PIAT-R, Peabody Individual Achievement Test – Revised; RIT, Rochester Institute of Technology; SDQ-20, Somatoform Dissociation Questionnaire; SoDe-Q, Sociodemographic Questionnaire; SPA, Sexual and Physical Abuse; TEC, Traumatic Experience Checklist; TLEQ, Traumatic Life Events Questionnaire; TSI, Trauma Symptom Inventory; US, United States.

Quality Review

Methodological quality was assessed using the Methodological Quality Checklist (Downs & Black, 1998). The original checklist contains 27 items and is suitable for both randomised and non-randomised studies. As all the papers included in the review were cohort or case-control design, and thus all non-randomised, some of the items on the checklist relating to randomisation were deemed unnecessary for this review. Therefore the checklist was reduced to 25 items, excluding items 23 and 24 (Internal Validity – confounding). Due to the language differences associated with this population, it was deemed important to note whether the study had recognised this difference, and accommodated for it within their assessment measures (e.g. the use of a sign language interpreter, back translation, video recordings). This was included when scoring item 20 ‘outcome measures used were accurate’.

Once scored, each study was assigned to a colour coded category representing ‘good’, ‘moderate’ and ‘poor’ quality of studies, and thus risk of bias. Appendix B indicates the cut-offs for each category of scoring. Downs and Black (1998) reported a mean score of 11.7 on the quality review for non-randomised studies, with a range of 1-19. Therefore within this review, any study receiving a score of 10 or less was awarded a grade of ‘poor’, and any study receiving a score of 19 or above was awarded a grade of ‘good’. Table 4 outlines the quality scores each study received and its associated colour coded risk of bias rating.

The aim of the review was to evaluate the evidence reported when considering the prevalence of abuse in the deaf and hard of hearing population.

Table 4: Quality review summary table

Study Design	Case-control	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort	Cohort
Study Author	Sullivan & Knutson 1998b	Sullivan & Knutson 2000	Kvam 2004	Titus 2010	Anderson & Pezzarossi 2011	McCabe et al. 2011	Anderson & Leigh 2011	Schild & Dalenberg 2012	Pollard et al. 2014	Williams & Porter 2014	Schenkel et al. 2014	Ohre et al. 2015	Williams & Porter 2015	Schild & Dalenberg 2015
Reporting														
1. Clear description of hypothesis/ aims	1	1	1	1	1	1	1	1	1	1	1	1	1	1
2. Main outcomes clearly described	1	1	1	1	1	1	1	1	1	1	1	1	1	1
3. Characteristics of subjects clearly described	1	1	1	1	1	1	1	1	1	0	1	1	1	1
4. Intervention clearly reported	1	1	1	1	1	1	1	1	1	1	1	1	1	1
5. Principal confounders reported	1	0	0	2	2	2	0	2	2	1	1	2	0	1
6. Main findings clearly described	1	1	1	1	1	1	1	1	1	1	1	1	1	1
7. Estimates of random variability reported	1	1	1	1	1	1	1	1	1	1	1	1	1	1
8. Adverse events as consequence reported	0	0	0	0	1	0	0	0	0	0	0	0	0	0
9. Subjects lost to follow-up described	1	1	1	1	1	1	1	1	1	1	1	1	1	1
10. Actual probability reported	1	1	0	1	0	0	1	0	0	1	1	1	1	0
External Validity														
11. Sample representative of population	0	0	1	0	0	0	0	0	0	0	0	0	0	0
12. Subjects representative of population	0	0	Utd	0	0	0	0	0	0	0	0	0	0	0
13. Ecological validity of intervention	0	1	1	0	0	0	0	0	0	0	0	0	0	0
Internal Validity – bias														
14. Attempt to blind subjects to the intervention	0	0	0	0	0	0	0	1	0	0	0	0	0	1
15. Attempt to blind those measuring outcomes	Utd	0	0	0	0	0	0	0	0	0	0	0	0	0
16. No unplanned statistical analyses	1	1	1	1	1	1	1	1	1	1	1	1	1	1
17. Adjustment made for length of follow-ups	Utd	1	1	Utd	1	1	1	1	0	1	1	1	1	1
18. Statistical tests appropriate	1	1	1	1	1	1	1	1	1	1	1	1	1	1
19. Compliance with intervention reliable	1	1	0	1	1	1	1	1	1	1	1	1	1	1
20. Outcome measures used accurate	0	1	1	0	0	1	0	1	1	0	0	1	0	1
Internal Validity – Confounding														
21. Subjects recruited from same population	1	1	1	1	1	1	1	1	0	1	1	1	1	1
22. Subjects recruited over the same time period	1	1	0	1	Utd	1	1	1	0	1	1	1	1	1
25. Adjustment for confounding variables	0	0	0	1	1	0	Utd	1	Utd	Utd	1	1	0	1
26. Subjects lost to follow-up accounted for	1	1	0	1	Utd	1	1	1	1	1	1	1	1	1
Power														
27. Sufficient power for clinical significance	0	0	1	0	0	0	0	0	1	0	0	0	1	0
RISK OF BIAS SCORE OUT OF 25	15	17	15	17	16	17	15	19	15	15	17	19	16	18

Key: Green, Good; Yellow, Moderate; Red, Poor.

Two studies were awarded a quality grade of 'good', indicated by the colour green. The cohort studies by Schild & Dalenberg (2012) and Ohre et al. (2015) received the highest scores, 19/25. Twelve studies were awarded a grade of 'moderate' indicated by the colour orange, and no studies were awarded a grade of 'poor'.

Common methodological strengths included the reporting of their hypothesis, aims, and results. Common limitations included failure to discuss whether the participants were representative of the general deaf population, making adjustments for confounding variables or having sufficient power. For example, one study (Sullivan & Knutson, 2000) contained only thirteen deaf or hard of hearing participants, despite their participant sample containing 1012 maltreated disabled children. The most common limitation was the use of the outcome measures, as none of the assessment measures used were validated for use within the deaf population, therefore the findings should be interpreted with caution. These limitations are important when considering the strength of the study, regardless of their overall score on the quality review. Six studies attempted to compensate for the lack of validated assessment measures with thorough back-translations of the questions, sign language videos of the questions, and/ or the accessibility of an interpreter whilst completing the questionnaires.

The studies used participants from a variety of pools, including children, university students, hospital samples, and community samples. This provides a broad range, and may increase the generalisation of the overall findings, but may also offer an explanation of any differences found across the results. Three

studies only used women samples. These studies focussed on intimate partner violence.

The quality review is also not without its limitations. If a paper provides a good written report of aims, method and results, this receives 10 points; being only one away from a grade of 'moderate'. This can mask limitations in other areas such as sampling, sample sizes, and measures which can hold greater weight with regards to the results.

Narrative Synthesis

What is the prevalence of sexual abuse?

In total, eight studies examined the prevalence of sexual abuse in deaf and hard of hearing populations (Knutson, 2000; Kvam, 2004; Ohre et al, 2015; Schenkel et al, 2014; Schild and Dalenberg, 2012; Schild and Dalenberg, 2015; Sullivan and Knutson, 1998b; Sullivan and; Titus, 2010). Many of these studies also studied physical abuse, emotional abuse, and neglect. Therefore the limitations and strengths that follow also apply when considering the prevalence of these other types of abuse.

Kvam (2004) found that sexual abuse was experienced significantly more so in their deaf and hard of hearing sample than their hearing sample. Their sample contained 302 participants, much greater than many other papers. They found that 45.8% of deaf girls, and 42.4% of deaf boys were exposed to unwanted sexual experiences as a child, with sexual abuse with physical contact occurring in 39.6% of deaf girls, and 32.8% of deaf boys, compared to 19.2% of hearing girls, and 9.6% of hearing boys. Sexual abuse which involved intercourse occurred in 39.3% of the deaf and hard of hearing sample, and

10.8% of the hearing sample. This was reported to be a significant difference. Kvam (2004) used an adapted version of a previous sexual abuse survey administered in the general population and was the only study which attempted to provide a whole population sample, despite this, the paper is one of the lowest scoring as it is unclear whether their final sample was representative of the Norwegian deaf population, and whether those responding fully understood the questionnaire. The two samples (deaf and hearing) were also not recruited over the same time period, although the same tool was used.

Schenkel et al (2014), carried out in the United States, reported similar prevalence rates to Kvam (2004) for sexual abuse; with 32% of their deaf and hard of hearing sample and 13% of their hearing sample reporting experiences of sexual abuse. Their sample consisted of college students, therefore potentially representing a more middle class, educated sector of the deaf population. This paper also received a grade of 'moderate', due to their restricted sample, and lack of offering translations of the questionnaires.

Schild and Dalenberg (2012) and Ohre et al (2015), although not including a hearing sample, found similar prevalence rates within their deaf and hard of hearing samples as the previous studies, and they also received the highest quality ratings. They recruited from different geographical areas, with Schild and Dalenberg (2012) recruiting from the deaf community in Southern and Central California, and Ohre et al (2015) recruiting from a mental health facility in Norway. Schild and Dalenberg (2012) reported that overall, 20.6% of deaf and hard of hearing men, and 37.8% of deaf and hard of hearing women have experienced sexual assault. Ohre et al's (2015) results were similar for deaf and hard of hearing women (34%); however their results for deaf and hard

of hearing men was substantially lower (6%; n = 1/ 18). This may be due to their sample being predominantly women (71%; n = 44/ 62). It is also of note that their study looked at sexual harassment rather than sexual abuse, unfortunately neither paper provided definitions, but it is likely that the definitions differed, based on the general definitions for sexual harassment and abuse. Schild and Dalenberg (2015) analysed their results further, they discovered that only 11.7% of the sexual abuse occurred without another type of abuse also being present and sexual trauma was three times more likely to be comorbid with physical trauma.

Finally, Sullivan and Knutson (1998b) did not provide prevalence data via percentages of their sample; rather they ranked types of abuse in order of frequency, with sexual abuse being third, after neglect and physical abuse. However there are issues with the representativeness of their sample as the participant pool are likely to have been abused, hence their contact with the Boys Town hospital, which may have skewed their results. The sample size is also small, affecting the power analyses and no adjustments were made to the measures.

Two studies (Sullivan and Knutson, 2000; Titus, 2010) found no significant difference between their deaf and hard of hearing sample, and their hearing sample with regards to experiences of sexual abuse. However Sullivan and Knutson (2000) only included a sample of 13 deaf and hard of hearing participants. The unique nature of Titus' (2010) participants (patients attending services for those who have misused substances) also affects their generalisability to the deaf population.

There appears to be some variation in the prevalence of sexual abuse within the deaf and hard of hearing population, with some studies reporting no difference when compared to hearing samples, and some reporting significant increases. In common with the hearing population deaf women appear to experience more sexual abuse than men. Those that have reported a greater experience of sexual abuse amongst the deaf and hard of hearing population report prevalence rates varying from 34% to 39.6% in women, and 6% to 32.8% in men, and overall rates varying from 32% to 39.3%.

What is the prevalence of physical abuse?

Seven studies examined the prevalence of physical abuse within the deaf and hard of hearing population (Ohre et al, 2015; Schenkel et al, 2014; Schild and Dalenberg, 2012; Schild and Dalenberg, 2015; Sullivan and Knutson, 1998b; Sullivan and Knutson, 2000; Titus, 2010).

All the studies reported physical abuse to be more prevalent in the deaf and hard of hearing population than the hearing population. However, only two used comparative hearing samples, both of which received a quality grade of 'moderate' (Schenkel et al, 2014; Titus, 2010). They both report significant differences, with Schenkel et al (2014) reporting a prevalence of 39% in the deaf and hard of hearing sample compared to 13% in the hearing sample, and Titus (2010) reports 42% in their deaf and hard of hearing sample, compared to 29% in their hearing sample. Both of these studies' samples possibly provide skewed results as Titus' (2010) sample was collected via referrals to a substance misuse service, and Schenkel et al's (2014) sample consists of undergraduate college students. Higher rates of trauma are possible within

Titus' (2010) sample due to people perhaps using substances to self-medicate in a bid to cope with trauma symptoms.

Ohre et al's (2015) Norwegian sample reported that within their sample, 50% (n = 9/ 18) of men reported experiencing physical abuse. Unfortunately they did not also report women's experiences, although did indicate that there were no gender differences, suggesting it was similar.

The remaining two papers, Schild and Dalenberg (2012, 2015) report a prevalence rate of 72.2% of physical assault within their deaf and hard of hearing sample. Schild and Dalenberg (2015) identifies this across the lifespan, with 46.8% experiencing physical trauma within childhood, 11.7% in adolescence, and 14.3% in adulthood. Schild and Dalenberg (2015) also presented this data for the gender differences, which demonstrated little differences between men and women in childhood (46.9% and 46.7% respectively), and in adulthood (12.5% and 15.5% respectively), however it was almost doubled for men in adolescence (15.6% and 8.9% respectively).

Sullivan and Knutson (1998b) did not provide prevalence via percentages, rather they rank in terms of magnitude, with physical abuse in second place, behind neglect. When compared to non-disabled children, Sullivan and Knutson (1998b) report that deaf and hard of hearing children are twice as likely to be physically abused, whereas Sullivan and Knutson (2000) found they were four times as likely. This is a large discrepancy, and is likely associated with the latter study's very small sample size.

The hearing status and communication methods of a deaf or hard of hearing child's parents/ carers has been suggested as a potential risk factor for

physical abuse (Knutson et al, 2004). Three of the studies within this review examined the prevalence rates of physical abuse and contained information regarding the family of their sample (Ohre et al, 2015; Schenkel et al, 2014; Schild and Dalenberg, 2015), however only Schenkel et al (2014) explored this within their analyses. Schenkel et al (2014) found that the quality of the parent-child relationship and the family dynamics appeared to impact on the likelihood of experiencing emotional maltreatment, but did not find the same for physical abuse. Having a deaf sibling also appeared to be associated with a reduced risk for any form of child maltreatment. However, when Schenkel et al (2014) separated his sample into Deaf (n = 86), hard of hearing (n = 61) and hearing (n = 317), they found that the Deaf participants reported more types of child maltreatment, than hard of hearing and hearing, and the hard of hearing participants reported more types of child maltreatment than the hearing participants, suggesting that the severity of the deafness may increase the risk of victimisation of any form of child maltreatment, not just physical abuse.

Across the seven studies, they all found physical abuse to be of higher prevalence within the deaf and hard of hearing population compared to the hearing. The rates varied from 39% (Schenkel et al, 2014) to 46.8% (Schild and Dalenberg, 2015).

What is the prevalence of emotional abuse?

Five of the studies reported on the prevalence of emotional abuse within their samples (Ohre et al, 2015; Schenkel et al, 2014; Sullivan and Knutson, 1998b; Sullivan and Knutson, 2000; Titus, 2010).

Schenkel et al's (2014), and Ohre et al's (2015) sample reported similar figures for prevalence of emotional abuse, despite their possible cultural differences (48% and 39% respectively). Schenkel et al (2014) also included a hearing sample compared to which emotional abuse was significantly greater in the deaf and hard of hearing participants (48% versus 29%). This is similar to the figures of physical and sexual abuse, suggesting it is experienced to a similar degree as other forms of abuse, contrary to Sullivan and Knutson's (1998b, 2000), and Titus' (2010) findings. Titus (2010) did not find a significant difference between the deaf and hard of hearing participants (37%), and the hearing participants (31%), although she reported that the definition of emotional abuse made it a difficult concept to research. Of these studies, Ohre et al (2015) received a quality grade of 'good', and also provided a definition of emotional abuse, suggesting increased weight should be placed on their findings compared to Sullivan and Knutson (1998b, 2000) and Titus' (2010) findings, due to increased methodological flaws within the latter studies.

Sullivan and Knutson (1998b) report that emotional abuse was the least likely abuse experienced by their participants, behind neglect, physical abuse, and sexual abuse. Sullivan and Knutson (2000) reported emotional abuse to be twice as likely in deaf and hard of hearing participants, as participants with no disabilities.

These five studies report different findings across their samples, from no difference between deaf and hard of hearing participants' experiences of emotional abuse and hearing participant's experiences (Titus, 2010), to a significant difference of 48% (deaf and hard of hearing) and 29% (hearing) (Schenkel et al, 2014). Due to the few studies that investigate emotional abuse

it is difficult to identify the extent of deaf and hard of hearing participants' experiences. If the reports of prevalence rates between 39-48% represented an accurate picture of emotional abuse within the deaf and hard of hearing population, this would be similar to that of physical abuse (39-46.8%) and greater than that of sexual abuse (32-39.3%).

What is the prevalence of neglect?

Only four studies investigated the prevalence of neglect within the deaf and hard of hearing population, therefore making it the least examined type of abuse (Ohre et al, 2015; Schenkel et al, 2014; Sullivan and Knutson, 1998b; Sullivan and Knutson, 2000). However those studies that have examined neglect, report it to be the most prevalent abuse experienced by deaf and hard of hearing people (Sullivan and Knutson, 1998b; Sullivan and Knutson, 2000). There seems to be consensus that the figure is around 47%, as reported by both Schenkel et al (2014) and Ohre et al (2015). However this figure may be questionable as it is unclear whether similar experiences are being researched across each study as a definition is only provided within one study (Ohre et al, 2015).

Schenkel et al (2014) separated emotional neglect and physical neglect, which neither Sullivan and Knutson (1998b) or Sullivan and Knutson (2000) did. Schenkel et al (2014) found statistical significance for both types of neglect, with it being more prevalent within their deaf and hard of hearing sample than their hearing sample. Emotional neglect was reported in 45% of their deaf and hard of hearing sample, and 31% in their hearing sample, and physical neglect was

reported in 47% of their deaf and hard of hearing sample, and only 19% of their hearing sample.

Sullivan and Knutson (1998b, 2000) report neglect as the most prevalent form of abuse within their samples. They both also identified parents to be the most likely perpetrators of neglect, with the majority being women. However, consideration should be made regarding the small sample size in the 2000 study.

What is the prevalence of intimate partner violence (IPV)?

Six studies investigated the prevalence of IPV within the adult deaf and hard of hearing population (Anderson and Leigh, 2011; Anderson and Pezzarossi, 2011; McCabe et al, 2011; Pollard et al, 2013; Williams and Porter, 2014; Williams and Porter, 2015). Four of the studies examined variations of psychological abuse, physical abuse and sexual abuse within intimate partner relations, and two studies examined only psychological abuse and physical abuse. Across the studies, numerous terms are used to describe these types of abuse, including 'sexual coercion', 'forced sex', 'sexual violence', 'psychological abuse', and 'psychological aggression'. However, due to five of the six studies using the Conflict Tactics Scale – Version Two (CTS-2), the likelihood is that they are examining the same concept.

According to the six studies investigating IPV (Anderson and Leigh, 2011; Anderson and Pezzarossi, 2011; McCabe et al, 2011; Pollard et al, 2013; Williams and Porter, 2014; Williams and Porter, 2015), the prevalence of sexual abuse in intimate partner relationships ranges from 14.5% (Pollard et al, 2013) to 61% (Anderson and Leigh, 2011). Anderson and Pezzarossi (2011) report

prevalence figures of 56.7%, and similarly Anderson and Leigh (2011) report a figure of 61%. However McCabe et al (2011) found a much lower figure of 26.1% within their mental health sample. Pollard et al (2013) also found lower figures, 20.8% and 14.5% amongst their Rochester community and RIT samples.

The prevalence rate of physical abuse within intimate relationships ranges from 20.1% (Pollard et al, 2013) to 53.8% (Williams and Porter, 2014). This indicates a large discrepancy, which may be explained by Anderson and Pezzarossi's (2011) discovery that very few people label their experiences as abuse, compared to the figure of those who actually experience the behaviours associated with abuse.

Across these studies prevalence rates of emotional/ psychological abuse within intimate partner relationships range from 25.4% (Pollard et al, 2013) - 91% (Anderson and Leigh, 2011) which is a very large range. If the study which used a different method of data collection was removed (Pollard et al, 2013), the range becomes 61.6% (Williams and Porter, 2014) - 91% (Anderson and Leigh, 2011).

All three types of intimate partner violence demonstrate large discrepancies, with Pollard et al (2013) consistently scoring much lower than the other studies. This discrepancy may be due to the differences in the characteristics of their samples, as three of the studies only included women within their sample, limiting the generalisability of their findings. Only one paper recruited outside of college students, and recruited from individuals receiving mental health services. Therefore the majority of the data regarding IPV is

derived from college students, which form only one sector of the deaf population. Pollard et al (2013) used a mixed gender, general community sample and utilised a back translated and validated Deaf Health Survey taken from the BRFSS. Thus their sample was much more varied, involved men, and they made extensive attempts to accommodate for the language. The remaining five studies used the CTS-2, with two studies providing interpreters, and three did not. This may be another factor influencing the variability of prevalence figures as this may have impacted on the participants' understanding of the questionnaire, leading to either over or under-reporting.

Most of the studies do not provide information regarding the mix of hearing loss within their sample. Williams and Porter (2014) did include separate figures for the deaf and hard of hearing participants, with physical abuse reported as more prevalent within the hard of hearing population (53.8% compared to 35.3%). As the other papers did not investigate prevalence within the degrees of deafness, it cannot be known whether this difference is present across all the studies and may have influenced the data.

Anderson and Leigh (2011) reference a hearing sample from the Strauss et al (1996) study, and Pollard et al (2013) use the BRFSS data collected via a random digit dial survey in 2006. They both find all forms of abuse to be lower within the hearing population, however there is also large variability within their findings, for example, one hearing study (Strauss et al, 1996) report the prevalence of sexual coercion as 27.8%, whereas Pollard et al (2013) report a prevalence of forced sex as 5.8%. This may be due to the 10 year difference in data collection, or it may relate to the difference in definition.

Therefore, none of the populations included in these studies were representative of the deaf and hard of hearing population, for example most of the studies examined women who are literate and educated. This excludes a lot of the deaf community from these prevalence figures. Due to these issues, all of the papers regarding IPV were rated as 'moderate' in quality, ranging in scores of 15-17 out of 25. McCabe et al (2011) received the highest score (17/25).

Overall, emotional/psychological abuse was reported to be the most prevalent, with the highest reported figure being 91% (Anderson and Leigh, 2011). This was followed by sexual abuse (61%; Anderson and Leigh, 2011), and physical abuse (53.8%; Pollard et al, 2013). However the range of each type of abuse within intimate partner relationships was extremely large. Therefore these prevalence figures need to be interpreted with caution. Williams and Porter (2015) also note that deaf and hard of hearing people may be at risk of "disability specific forms of violence" which they suggest includes behaviours such as destruction of communication devices, and denying the person important information. This may form an entirely new form of abuse, or it may fall under emotional/ psychological abuse, hence the large prevalence figures.

What factors are hypothesised to influence the rates of abuse in the deaf and hard of hearing population?

Across the fourteen studies numerous factors have been hypothesised to be risk factors for abuse. Living in Residential schools has often been suggested as increasing the risk for physical and sexual abuse (Sullivan and Knutson, 1998b). Some of the studies included this as part of their analyses, including Kvam (2004) who reports 50.9% of their victims were abused in

connection to school, and Schenkel et al (2014) found increased rates of child maltreatment among deaf and hard of hearing people who attended residential school compared to mainstream school. This appears to have an impact on later development and behaviours, as Sullivan and Knutson (1998b) report that men who are deaf and attended residential schools, who have been a victim of physical or sexual abuse, are more likely to develop drug problems and become perpetrators of abuse. Regardless of whether the individual attended a residential school, those that experience abuse may be more likely to use substances as a form of self-medicating to cope with the subsequent trauma (Titus, 2010).

Titus (2010) suggests that communication difficulties place the individual at a higher risk of physical abuse. Knutson et al (2004) found that mothers with deaf and hard of hearing children were more likely to use corporal punishment, suggesting physical abuse is present. Schild and Dalenberg (2012) suggest that it may be due to the increased use of touch to communicate that makes deaf and hard of hearing children vulnerable to exploitation. However when considering communication difficulties across intimate partners, McCabe et al (2011) found that there was no significant difference on modality of communication across partners.

Witnessing domestic violence is found to be associated with being an adult victim of physical partner violence (Williams and Porter, 2015), which is also found within many other populations (Motz, 2014). Schenkel et al (2014) found that any form of child maltreatment was a significant predictor for later re-victimisation in adulthood. However McCabe et al (2011) found no difference in

later re-victimisation between those reporting child sexual or physical abuse and those that did not.

It has been suggested that deaf individuals are more likely to be targets of abuse due to the communication difficulties they experience when reporting the abuse to authorities (Schild and Dalenberg, 2015). Within Kvam's (2004) participants, 49% did not tell anyone about the abuse they suffered, however 10.8% did tell someone but were not believed.

Schild and Dalenberg (2012) found that men were just as likely to experience sexual abuse as women, and Pollard et al (2013) report much smaller gender differences in the deaf population compared to the hearing population. Schild and Dalenberg (2012) report that their victims were mostly from low income households and communities with high violence rates; which are also factors associated with abuse in populations other than the deaf and hard of hearing (Dubowitz et al, 2011).

Schenkel et al (2014) found that identification with the Deaf community decreased the individual's post-traumatic stress symptoms as measured by various trauma questionnaires. This can have great benefit as Sullivan and Knutson (1998b) found that youth who are deaf or hard of hearing and had been abused exhibited clinically elevated scores on Internalizing Behaviour and Total Behaviour scores on the Child Behaviour Checklist completed by a caregiver. The individuals were also found to be more withdrawn, anxious, depressed and aggressive than their non-abused peers.

Williams and Porter (2014) found that hard of hearing individuals reported higher rates of all types of abuse within their relationships

(psychological, physical and sexual) which they suggested may be due to hard of hearing individuals having less support than Deaf individuals, as they do not have a community or a shared primary language, therefore they may become ostracised from both the hearing world and the Deaf world. However Williams and Porter (2014) did not measure this objectively.

Kvam (2004) found that those adults who reported having experienced sexual abuse were more likely to report having fewer friends, to have been bullied, and have bad relations with their parents. Schenkel et al (2014) report that having a deaf sibling decreases the risk for child maltreatment, suggesting it may not only be peers and parents that help protect from abuse, but also other close relationships.

DISCUSSION

Fourteen studies were reviewed as to the prevalence of five types of abuse (neglect, sexual, physical, emotional and intimate partner violence) within the deaf and hard of hearing population. Of these, thirteen were cohort studies and one was a case-control design. Various methods of data collection were used including self-report measures, national surveys and reviewing records. Overall the studies generally reported an increased risk of all types of abuse within the deaf and hard of hearing population, although there was some variation with this.

None of the studies was given a methodological rating of 'poor', twelve were rated as 'moderate' and two were awarded a quality grade of 'good'; although the quality review was not without its limitations. These include small samples, or samples that would not be representative of the general deaf and hard of hearing population. The samples used when examining the prevalence of IPV were predominantly women currently in education, between the ages of 18-25 years. This misses a huge part of the deaf community. The main methodological flaw was the use of unstandardised assessment measures, which suggests the findings should be interpreted with caution. The use of interpreters, back-translating the questions or using signed videos of the questions builds confidence in the questionnaires being understood. Although 24,000 deaf people in the UK are estimated to use British Sign Language, there are many who do not have an identified language, and struggle to communicate with others. The use of self-report questionnaires isolates these individuals, leaving their experiences unknown. Reporting of abuse may also have been negatively influenced if, at the point of information gathering, the participant was

accompanied by their abuser, or the abuser was providing the information. For example, in Sullivan and Knutson's (1998b) study the parents/ carer completed the Child Behaviour Checklist at admission which provided the information regarding abuse. This may have resulted in inaccurate figures of victimisation.

There were also no studies identified in this review from the UK, with twelve being from the US and two from Norway. Although these are western countries, future research should be completed more broadly to identify the prevalence of various types of abuse in other countries.

The studies do provide preliminary information regarding the possible extent of abuse within this population, which supports the clinical experience of abuse within this population. The prevalence rates reported within the studies reviewed indicate that neglect is most commonly experienced within the deaf and hard of hearing population, with both studies that reported percentages, reporting a figure of 47%. Emotional abuse and physical abuse have similar prevalence rates reported, ranging from 39-48% and 39-46.3% respectively. Sexual abuse was reported to have prevalence figures of 32-39.3%. When compared to hearing samples, these percentages were all found to be higher, although one study found no difference when examining emotional abuse.

With regards to IPV, the findings are more varied, and therefore harder to derive conclusions from. When examining emotional/ psychological abuse, it was reported to be experienced by 25.4% to 91% of the samples. Physical abuse was reported to range from 20.1% to 53.8%, and sexual abuse was reported to be similar figures, ranging from 14.5% to 61%.

To strengthen our knowledge and understanding, further research would benefit from being undertaken across a variety of cultures and countries. This would aid in identifying whether the prevalence rates found in the US and Norway are applicable elsewhere. The use of quantitative longitudinal studies, or whole population cross sectional studies, with larger sample sizes, and with participants pooled from a variety of communities would provide valuable information regarding the variables associated with prevalence, risk and protective factors of abuse. Within these studies, detailed information regarding class, hearing status, gender, education experiences, and family experiences would provide further supporting information. The addition of qualitative interviews would add rich detailed information to accompany the figures to further understand the experiences of deaf and hard of hearing people.

What is gained from this review, is the knowledge that the deaf and hard of hearing population are vulnerable to all forms of abuse, and that the prevalence of abuse is generally higher than that of the hearing population. A review focussing on deaf perpetrators of abuse will provide further information of the experiences of abuse within the deaf population; especially due to the often dynamic nature of IPV. Traditional risk factors also appear to apply within this population, but there are also specific risk factors associated with communication difficulties which can increase their vulnerability. Difficulty in accessing the support regarding these risk factors may provide an explanation regarding the high prevalence rates, therefore working with families early, supporting them with the communication barriers and the frustrations this might bring, educating children regarding appropriate behaviours, and increasing the access to interpreters may be a few areas for services to prioritise. Based on

this review, it is also suggested that when an individual who is deaf or hard of hearing is in contact with services, the possibility of child maltreatment, or violence within their current relationships should be considered and factored into the assessment process (e.g. interview) and treatment plan. This would also suggest the development of appropriate standardised measures to assess the effects of abuse in deaf and hard of hearing people, and also the evaluation of trauma-specific therapy with this population.

REFERENCES

Action on Hearing Loss. (2016, August 12). *About Deafness and Hearing Loss*. Retrieved from the Action on Hearing Loss Website <https://www.actiononhearingloss.org.uk/your-hearing/about-deafness-and-hearing-loss/statistics.aspx>

Austen, S., & Crocker, S. (2004). *Deafness in Mind: Working Psychologically with Deaf People across the Lifespan*, London: Whurr Publishers.

Centers for Disease Control and Prevention. (2016). *Types of Hearing Loss*. Retrieved from the Centers for Disease Control and Prevention Website <http://www.cdc.gov/ncbddd/hearingloss/types.html>

Charlson, E. (2004). At-Risk Deaf Parents and their Children In S. Austen & S. Crocker. (Eds) *Deafness in Mind*. (pp. 222-234) London: Whurr Publishers.

Civil Rights Movement. (2016). *Sexual Harassment and Your Rights*. Retrieved from the Civil Rights Movement Website <http://www.civilrightsmovement.co.uk/sexual-harassment-your-rights.html>

The Cochrane Database of Systematic Reviews. (June 6, 2016). Retrieved from the Cochrane Library Website <http://www.cochranelibrary.com/cochrane-database-of-systematic-reviews/>

Crocker, S., & Edwards, L. (2004). Deafness and Additional Difficulties. In S. Austen & S. Crocker (Eds.), *Deafness in Mind: Working Psychologically with Deaf People across the Lifespan* (pp. 252-269). London: Whurr Publishers.

Denmark, J. (1994). *Deafness and Mental Health*. London: Jessica Kingsley Publishers.

Downs, S., & Black, N. (1998). The Feasibility of Creating a Checklist for the Assessment of the Methodological Quality Both of Randomised and Non-Randomised Studies of Health Care Interventions, *Epidemiology Community Health*, 52, 377-384.

Dubowitz, H., Kim, J., Black, M., Weisbert, C., Semiatin, J., & Magder, L. (2011). Identifying Children at High Risk for a Child Maltreatment Report. *Child Abuse & Neglect*, 35, 96-104.

Feher-Prout, T. (1996). Stress and Coping in Families with Deaf Children, *Journal of Deaf Studies and Deaf Education*, 1, 155-166.

Fellinger, J., Holzinger, D., & Pollard, R. (2012). Mental Health of Deaf People, *The Lancet*, 379, 1037-1044.

Knutson, J., Johnson, C., & Sullivan, P. (2004). Disciplinary Choices of Mothers of Deaf Children and Mothers of Normally Hearing Children, *Child Abuse & Neglect*, 28, 925-937.

Mertens, D. (1996). Breaking the Silence about Sexual Abuse of Deaf Youth, *American Annals of the Deaf*, 141, 352-358.

Motz, A. (2014). *Toxic Couples: The Psychology of Domestic Violence*, London: Routledge.

National Society for the Prevention of Cruelty to Children. (2016). *Statistics on Child Abuse*. Retrieved from the NSPCC Website

<https://www.nspcc.org.uk/services-and-resources/research-and-resources/statistics/>

Pollard, R. (1996). Professional Psychology and Deaf People: The Emergence of a Discipline. *American Psychologist*, 51, 389-396.

Pollard, R., & Barnett, S. (2009). Health-Related Vocabulary Knowledge among Deaf Adults, *Rehabilitation Psychology*, 54, 182-185.

Ridgeway, S. (1993) Abuse and Deaf Children: Some Factors to Consider, *Child Abuse Review*, 2, 166-173.

Schild, S., & Dalenberg, C. (2012). Trauma Exposure and Traumatic Symptoms in Deaf Adults, *Psychological Trauma: Theory, Research, Practice and Policy*, 4, 117-127.

Straus, M., Hamby, S., Boney-McCoy, S., & Sugarman, D. (1996). The Revised Conflict Tactics Scales (CTS2): Development and Preliminary Psychometric Data. *Journal of Family Issues*, 17, 283-316.

Sullivan, P., & Knutson, J. (1998a). The Association between Child Maltreatment and Disabilities in a Hospital-Based Epidemiological Study, *Child Abuse & Neglect*, 22, 271-288.

Sullivan, P., Vernon, M., & Scanlan, J. (1987). Sexual abuse of Deaf Youth, *American Annals of the Deaf*, 132, 256-262.

The Campbell Collaboration of Systematic Reviews. (2016, June 8). Retrieved from the Campbell Collaboration of Systematic Review website <http://www.campbellcollaboration.org/published-issues/explore/published-issues>

The Department of Health. (2001). *No Secrets*. Retrieved from the Government website

https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/194272/No_secrets_guidance_on_developing_and_implementing_multi-agency_policies_and_procedures_to_protect_vulnerable_adults_from_abuse.pdf

Williams, L., & Porter, J. (2015). The Relationship between Child Maltreatment and Partner Violence Victimization and Perpetration among College Students: Focus on Auditory Status and Gender, *Journal of Interpersonal Violence*, 30, 2304-2325.

World Health Organisation. (2016, August 12). *Deafness and Hearing Loss*. Retrieved from the World Health Organisation website <http://www.who.int/mediacentre/factsheets/fs300/en/>

CHAPTER TWO

PROFESSIONALS' EXPERIENCES OF DEAF OFFENDERS WITH MENTAL HEALTH DIFFICULTIES

Elizabeth Sarah Wakeland

School of Psychology

University of Birmingham

School of Psychology

University of Birmingham

Edgbaston

Birmingham

B15 2TT

ABSTRACT

Background: There is a paucity of research regarding deaf offenders with mental health difficulties. There are a number of problems specific to this population in relation to their contact with the CJS and healthcare system. The aim of this study was to develop a greater understanding of professionals' experiences of this offender group and the factors that influence their involvement with services.

Method: This study adopted a grounded theory approach to explore the experiences of nine police officers and fourteen mental health professionals through semi-structured interviews.

Results: The analysis resulted in the development of a theoretical model of the various influencing factors, represented in five categories, involved when working with deaf offenders with mental health difficulties. The model suggests that when a deaf offender with mental health difficulties comes into contact with either the healthcare or justice system there are a multitude of factors that moderate the outcome. These include factors associated with the respective system they are in contact with, the individual professional involved, and the offender themselves, which are moderated via relational factors.

Discussion: This study offers a tentative theoretical model from which to derive future research. It provides multiple avenues of exploration that can be undertaken via quantitative and qualitative methods. This study provides support for prior literature regarding professional experiences of deaf people.

Keywords: deaf; mental health; offending; grounded theory

BACKGROUND

Nine hundred thousand people are estimated to be severely or profoundly deaf within the UK (Action on Hearing Loss, 2016). According to the Oxford English Dictionary (2017) to be deaf is defined as 'lacking the power of hearing or having impaired hearing'. The term 'deaf' can be used as a blanket term to encompass the varying degrees and types of deafness which can have different implications. Many deaf individuals are members of a cultural and linguistic minority (Denmark, 1994) and thus use a capital "D" for Deaf. This distinguishes between those that have become deaf in later life, or those that do not align themselves within the Deaf community. This study focusses on Deaf individuals whose main form of communication is British Sign Language.

The majority of Deaf children experience significantly different developmental environments compared to hearing children (Hindley and Kroll, 1998). This is due to experiences such as a lack of communication between child and parent, as approximately 96% of Deaf children are born to hearing families (Mitchell and Karchmer, 2004) and many are the only member of their family who are Deaf (Denmark, 1994). This lack of ability to effectively communicate has an impact on the parent's capacity to deliver effective and adequate boundaries and punishment (Knutson, Johnson and Sullivan, 2004). This communication barrier may also lead to difficult family relationships (Denmark, 1994), a lack of access to education (Stinson and Antia, 1999), theory of mind deficits (Crocker, 2004) and social isolation (Knutson and Lansing, 1990). For example, research suggests that language is the underlying need in developing theory of mind, therefore, deficits are indicative of poor language development and communication opportunities; both of which are

often found with deaf children raised in a spoken language environment (Crocker and Edwards, 2004).

These life experiences are suggested to increase the deaf person's likelihood of coming into contact with the Criminal Justice System (CJS) (Miller, Vernon and Capella, 2005). It is suggested that these experiences may also impact on the deaf person's moral reasoning and consequential thinking making them more likely to engage in criminal behaviour (Young, Monteiro and Ridgeway, 2000). However, true figures of Deaf people in contact with the CJS are not available due to Deaf people often being grouped with other forms of disabilities (Gahir, O'Rourke, Monteiro, and Reed, 2011; Mccolloch, 2012).

A number of difficulties have been highlighted when Deaf people come into contact with the CJS, namely that of communication barriers that are faced as a part of Deafness, and the subsequent need for interpreters (Lundeberg and Breivik, 2014; Miller, 2001; Smith, 2010; Vernon and Miller, 2005). Other difficulties may include false assumptions regarding a Deaf person's communicative ability (Young, Howarth, Ridgeway and Monteiro, 2001), the professionals misunderstanding of the Deaf person's needs (Mitchell and Braham, 2011) or the Deaf person's gestural behaviour being mistaken for aggressive or sexual acts (Young et al, 2001).

An overview of a Deaf person's contact with various aspects of the CJS was undertaken by Smith (2010). She interviewed interpreters and other professionals working in the area of deafness regarding their experiences of the police, court processes and prisons. Smith (2010) also provided police officers with a questionnaire regarding their involvement with Deaf offenders. Smith

(2010) found that other professionals felt that police officers were unable to cope with the demands of a Deaf suspect (e.g. interpreter, time demands) and often their deafness was seen as “above their crime” and cases subsequently dropped (e.g. deafness viewed as more important than the offence). However the questionnaires given to police officers were not concerned with gathering the police’s view regarding their abilities with Deaf offenders, but rather their knowledge of policies and procedures governing their work. This did identify a lack of training, resources and knowledge regarding policies and procedures associated with this offender group (e.g. PACE guidelines) which may impact on the outcomes.

Other professionals have also discussed other aspects that may influence the outcomes of Deaf offenders. Vernon and Miller (2005) discuss an ‘indifference and hostility’ towards Deaf persons within the American legal system and state that many injustices start with police officers and their arrest of Deaf suspects, for example, a loss of rights due to the lack of access to a qualified interpreter. They also suggest that police officers may be unlikely to pursue a conviction due to feeling sorry for Deaf persons, or an unwillingness or inability to locate an interpreter (Vernon and Miller, 2005). However these assumptions were not driven from empirical research, but rather professional experience and case studies.

Young et al (2001) found that within their sample of referrals to the three high secure settings in the UK, contrary to other professionals’ perceptions (e.g. Denmark, 1994; Vernon and Miller, 2005), police did pursue convictions with Deaf offenders. However, they found an increased likelihood that Deaf offenders would receive probation orders (49%) as opposed to prison

sentences (24.5%) and that this difference could not be explained by the severity and nature of the offences as Young et al's (2001) cohort included those convicted of sexual offences (38.6%), offences against the person (38.3%), and offences against children (19.8%).

This increased use of probation, even though the offences were severe in nature, may be due to misplaced perceptions held by professionals (O'Rourke, Glickman and Austen, 2013; Smith, 2010; Vernon and Miller, 2005; Vernon, Raifman, Greenberg and Monteiro, 2001;) or may be due to the perception of prison being a "double sentence" (e.g. isolated by deafness and further isolated in prison), as found by McCulloch (2012) when he interviewed ten profoundly Deaf prisoners and professionals working with Deaf prisoners. McCulloch (2012) also discovered that Deaf prisoners do not have access to the full prison regime, including education, work and offending behaviour courses. This could have a profound impact on their ability to demonstrate change whilst in prison and may prevent release in some cases (e.g. those with a tariff or indeterminate sentence). Similar findings were also reported by Haualand (2015) in a Norwegian sample of Deaf prisoners.

McCulloch's (2012) findings may offer an explanation as to Gahir et al's (2011) findings that Deaf people are over-represented within the prison population, at a ratio of one Deaf prisoner to every 566 hearing prisoners (compared to one Deaf person to every 1500 hearing persons in the general population). Similar reasons may also lend an explanation as to why Deaf offenders are also over represented within high secure hospital settings (Mitchell and Braham, 2011), at a prevalence rate of 12 times higher than the expected figure, given the size of the Deaf population.

However the latter finding may also be due to the higher figure of mental illness within the Deaf population than the hearing population (32.8%:16% respectively; Miller et al, 2005).

An individual's mental health creates an additional factor that impacts the processes of the CJS. There are set procedures within the CJS to help manage offenders with mental health difficulties, for example, Section 136 (Royal College of Psychiatrists, 2011) and the use of the 136 suite as a place of safety rather than the police cells and the use of the mental health triage team, which includes a Community Psychiatric Nurse (CPN). Bayney and Ikkos (2003) suggest that when police officers are faced with a suspect with mental health difficulties, they are less likely to pursue a conviction due to a number of assumptions (e.g. they are not responsible for their actions, deviant behaviour is an intrinsic part of the mental health difficulty or they perceive psychiatric hospitals as responsible for controlling the offender's criminal behaviour).

Thomas, Cromwell and Miller (2006) conducted a qualitative study with Community Mental Health Teams (CMHT) and their perspectives of working with Deaf people with severe mental illness. They found five key themes within the study, these included a lack of knowledge, skills, or resources, communication difficulties, distance of specialist Deaf services, joint working between CMHT and specialist Deaf services, and issues specific to Deaf patients. This greater prevalence of mental health problems, or the increased difficulties associated with being faced with a deaf offender, with mental health problems, may add another factor as to why Deaf persons may be perceived to 'escape [appropriate] punishment'. However this may have repercussions, as Lacey and Pickard (2013) suggest that a system should hold an individual

accountable for their actions otherwise this may erode their responsibility for the crime, and the crime becomes a symptom of their “illness”, or in this case, their deafness.

This experience of either harsher treatment when in the CJS, or being provided leniencies is summarised by O'Rourke, Glickman & Austen (2013) and they refer to it as a 'dialectic response'. They argue that this ambiguity may be due to a variety of reasons, including assumptions held by the professionals, a reluctance to report Deaf offenders because treatment services are rarely available and prisons can only incarcerate them rather than rehabilitate; or police officers find it easier to 'let them off' with a warning due to communication difficulties and time constraints in accessing an interpreter; or victims of offences feel sorry for the Deaf person therefore drop the charge (O' Rourke et al, 2013). These factors may make it more difficult to pursue a conviction for Deaf offenders, yet they have not been empirically researched, but drawn from expert experiences in the field of deaf mental health.

Research Aims

There is a lack of empirical research undertaken to identify professionals' experiences of Deaf people within the CJS, and the factors that are associated with those experiences. The aim of the present study was to develop a greater understanding of professionals' experiences of deaf offenders with mental health difficulties and the factors that influence the deaf person's involvement with the CJS. Focussing on deaf offenders with mental health difficulties presents a double disadvantage; it is currently unclear as to how these difficulties may interact or which has the most impact. It is hoped the results will

suggest the best ways of supporting the CJS when working with deaf offenders with mental health difficulties. It is also hoped that the findings will highlight future research opportunities.

METHOD

Ethical Approval

Ethical approval was granted by the University of Birmingham (see Appendix D). Further approval was also sought from the Research and Development department of the participating National Health Service (NHS) Trust (Appendix E) and the participating Police Force (Appendix F). Sponsorship for the study was provided by the University of Birmingham (Appendix G).

Design

The qualitative approach adopted in this study was grounded theory (Charmaz, 1995). Charmaz's (1995) contemporary view on grounded theory allows for interplay between the researcher's experience and knowledge and the data being collected. It allows for a connection between the researcher's experiences and the collected data. Charmaz's (1995) contemporary approach to grounded theory was applied within this study.

Grounded theory involves gathering data via various sources; this study involved semi-structured interviews. The data is considered to be narrative reconstructions of experience as they are stories told to reflect an individual's experience (Charmaz, 2000). Analysis of such materials was conducted in accordance with grounded theory principles, beginning with coding, taking form with memos and developing into a theoretical framework that explains the collected data (Charmaz, 2000).

In order to achieve the study's aims, a method designed to be interactive and analytic with the data, whilst striving towards a theoretically-driven conceptualisation, was deemed most suitable. Due to the paucity of research relating to the study's subject matter it was important to gather a wide sample base to develop a thorough understanding regarding the experiences of professionals working with deaf offenders with mental health difficulties. Grounded theory was thus deemed to be a suitable approach.

Participants

Participants included professionals from the participating police force, and professionals from the participating NHS Trust. Similar inclusion criteria were used across both services and involved participants being over the age of 18 years, with no upper age limit; to be of any position within their respective service; and to have had at least one contact with a deaf person (of any level of hearing loss) whilst working in their professional capacity. Participants could also be hearing or deaf, as the researcher had access to interpreters for the interview process. Participants were excluded if they had no experience of working with deaf people.

Semi-structured interviews were conducted with nine police officers and fourteen mental health professionals. All provided written informed consent to participate prior to commencing the interview. To ensure anonymity, all participant data was coded and assigned a letter (prefix A for police officer and prefix B for mental health professional) and a number and any identifying information was removed during transcription.

Police Officers

A range of ranks within the police force were interviewed. Police officer (PO) ranks included response officer (n = 2), police constable (n = 3), sergeant (n = 1), detective sergeant (n = 2) and triage officer (n = 1). Their ages ranged between 26-50 years of age and included six men and three women. All police officers were hearing.

Mental Health Professionals

A range of qualified professionals within the mental health trust were interviewed. The mental health professionals (MHP's) included staff nurses (n = 5), healthcare assistants (n = 2), doctors (n = 2), occupational therapy staff (n = 2) and members of the management team (n = 3). Their ages ranged between 25-50 years of age and included six men and eight women. Two of the participants were deaf, the remaining twelve were hearing.

Procedure

Making Contact

Prior to the research commencing, contact was made with the participating police force's communications team and the participating NHS Trust regarding conducting research within their service. Within the police force, a Chief Inspector, lead for Mental Health in the respective police force was identified as a champion for the project; and later, a sergeant with a keen interest in the field of deafness also joined the project, and in the NHS a Consultant Clinical Psychologist on the deaf mental health unit within the NHS Trust was identified. All of these professionals were provided with information

regarding the purpose of the research and participant recruitment, and the participant information sheet and consent form were also shared with them. Advice was sought from these individuals as to the best method of recruitment within their service. These professionals were then independent points of contact for the participants.

Recruitment

Convenience sampling was utilised to locate participants with the relevant experience. Following initial analysis of the interviews, purposeful sampling was employed to ensure a variety of disciplines and ranks amongst the respective services were recruited, as it was recognised that experiences may be limited within the boundaries of their role.

Participants were recruited primarily through the use of a poster (Appendix H and I). This was displayed within the deaf mental health unit of the participating NHS Trust, and was placed on the participating police force's message board, and also sent via e-mail to all police officers.

Participants either contacted the researcher directly via contact information provided on the poster, or contact was made through the service champion. At this stage the participant information sheet (Appendix J) was shared and questions were answered via e-mail. Consent was gained face-to-face upon meeting the participant. They were given a period of two weeks post interview to withdraw consent, and for their interview to be destroyed, this allowed time for the participant to change their mind. None of the participants withdrew their consent post interview.

Generating the Interview Guide

The semi-structured interview guide was constructed in consultation with the academic supervisor, clinical supervisor and by consulting the relevant literature within both grounded theory and deaf mental health. It was designed to gather a range of their thoughts and experiences when working with deaf offenders with mental health difficulties.

This was used as a guide for conversation and the participants were encouraged to also discuss topics that they felt were important for this area. The interview guide went through alterations at various stages of the recruitment process. This was following initial analyses indicating this to be required. For example, after approximately four interviews, the interview guide was altered, and the discussion of “challenging behaviours” was excluded as this was directing conversation onto topics not within this research remit. This created the intermediate interview guide (see Figure 2). The interview guide went through further alterations as the process developed. This process is recommended by grounded theorists (Charmaz, 1996) and accommodates for the participants’ direction during the interview process.

The term ‘offender’ was used within the interviews to capture any deaf person who came into contact with the CJS or MHS. To ensure a consensus of this term, the interviews began with a pre-amble outlining who this entailed (e.g. deaf suspects and people engaging in behaviour that would be an offence if it were reported to the police).

Figure 2: Example of the Intermediate Interview Guide

How long have you been in the police force? What is your role?

Tell me about a typical week at work, including a brief explanation of your duties.

How old are you?

Deaf offenders

Tell me in what capacity have you worked with a Deaf person? Arrest? Conviction? Court? What were your experiences of working with Deaf people.

- *What is your understanding of deafness and its impact on offending?*
- *How many Deaf people who offend have come across in your line of work?*
- *Where/ in what situations have you encountered Deaf people who offend?*
- *Anything more difficult/ easier now?*

In your opinion, are deaf people responsible for their actions?

- *Would there be anything that would make them less responsible?*
- *Is there anything different about this client group in terms of responsibility?*

What, in your experience, have been the consequences for deaf offenders?

What do you think is the best way to manage a Deaf person who offends? (prompt and explore)

- *What factors might you consider when deciding whether to pursue a conviction?*
- *Are there any differences in the way you would work compared to other client groups?*

What difficulties/ barriers do deaf people face in the CJS?

What barriers do the CJS face when trying to charge/ prosecute a deaf offender?

- *Can these be overcome? How?*

Have you suspected that any of the Deaf people you have come across have had a mental health problem or other difficulties?

- *How did you assess this? What did you do?*
- *What was different compared to a Deaf person without?*
- *What is the difference between a Deaf person with a mental health problem and a hearing person with a mental health problem?*

What do you think is the best way to manage this offender group? (prompt and explore)

- *What factors might you consider?*
- *Are there any differences in the way you would work compared to other client groups?*

Are Deaf people better placed in the CJS or MHS?

Mental Health and Deafness

What is your understanding of mental health problems?

What is your understanding of deafness and its impact on mental health?

Tell me about any difficulties/ barriers that Deaf people with mental health problems who offend may experience within the mental health system (prompt and explore)

Tell me about your thoughts and feelings about Deaf people with mental health problems who offend

Tell me about any difficulties/ barriers that you came across when dealing with this client group (prompt and explore)

- *How did you manage these?*

What factors do the CJS take into account when looking to prosecute?

- *Do these factors make conviction less likely for a deaf person? Or more likely?*
- *Why do they take into account these factors?*

Is there anything else that you want to tell me, that I haven't asked you about?

Interview Format

Participants were interviewed on one occasion by the researcher. They were all interviewed at their place of work, in a quiet interview room. Each interview was audio-recorded with permission from the participant. The interviews varied in length, between 35 minutes and 90 minutes.

Post interview notes were kept detailing salient points, interesting points that had arisen during the interview, and hypotheses that were appearing throughout the interview. Interviews were transcribed verbatim by the researcher as they were collected. Alterations to the interview guide from the MHP's were then used with PO's, possibly allowing for saturation to occur quicker as the process was more refined by this point in recruitment.

The researcher remained open and flexible to the data that was arising from interviews until saturation was reached. Saturation was considered separately for MHP's and PO's, and thus was considered to have occurred before the final sample of fourteen MHP's and nine PO's was reached. Saturation is considered to have occurred when the cultural pattern of the data is alike (e.g. at an abstract level all the data reveals similar underlying themes), and no further information towards the underlying themes are being demonstrated by the data; at this point sampling may cease (Morse, 2007).

Analysis

In line with grounded theory recommendations, an inductive process was undertaken when analysing the interviews. This began early, with the alterations to the interview guide, however continued once all data was collected. There

are two key processes within grounded theory analysis; coding and memoing (Holton, 2007).

Line-by-Line Coding

Coding is the beginning of the theory development. In accordance with Charmaz's (2000) description of line-by-line coding, the researcher examined each line of data, defined events within it which identified initial/ open codes within the data (see Appendix K and L for examples). This type of coding deters the researcher from imposing their own beliefs onto the data. The line-by-line coding provides the starting point and rich, dense information for building analysis (Holton, 2007).

Memo Writing

Alongside coding, the researcher maintained memo writing to gather ideas about the codes, as described by Holton (2007). This process develops the researcher's thought processes and gains further perspective on the data (Charmaz, 2000). Through the memo writing process the codes were elaborated and core categories began to emerge (see Appendix M for an example). Through the use of memo writing it became evident that similar codes and categories across PO's and MHP's were emerging, therefore the data was brought together. This suggests that, although the participants worked within different systems, and their overall aims are different (e.g. rehabilitation/ recovery versus retribution and safety of the public), when working with deaf offenders with mental health difficulties, the deafness is the factor that appeared to overshadow the mental health aspect.

Theory Development

The theory developed through constantly comparing the data to identify whether it supported the emerging categories, as recommended by Charmaz (1996). This was completed by using post-it notes relating to each code and grouping them with similar codes to create a category. A high number of codes were identified as the researcher attempted to remain as open as possible to the emergence of the data, however this naturally also created some repetition. These were reviewed numerous times, with categories collapsing due to the repetition and similarities across them. A theory developed that represented both the PO's and MHP's experience.

Credibility and Validity Analysis

To ensure credibility of the interpretation, emerging categories and the developing theory were discussed with four professionals with varying amounts of experience. This included academic and clinical supervisors, a researcher independent of the study with an expertise in grounded theory, and a clinician with expertise in the field of deaf mental health. Two transcripts from PO's and two transcripts from MHP's were shared and analysed by the two professionals independent of the research, one with an expertise in grounded theory and one with expertise in deaf mental health. Codes were then reviewed to identify similarities and differences with the researcher's interpretations. Codes and categories were discussed with the academic supervisor and the independent researcher with an expertise in grounded theory to ensure interpretations were grounded in the data. The final categories and theory were shared with the

clinical supervisor to discuss their 'fit' with current experience and knowledge of deaf mental health literature.

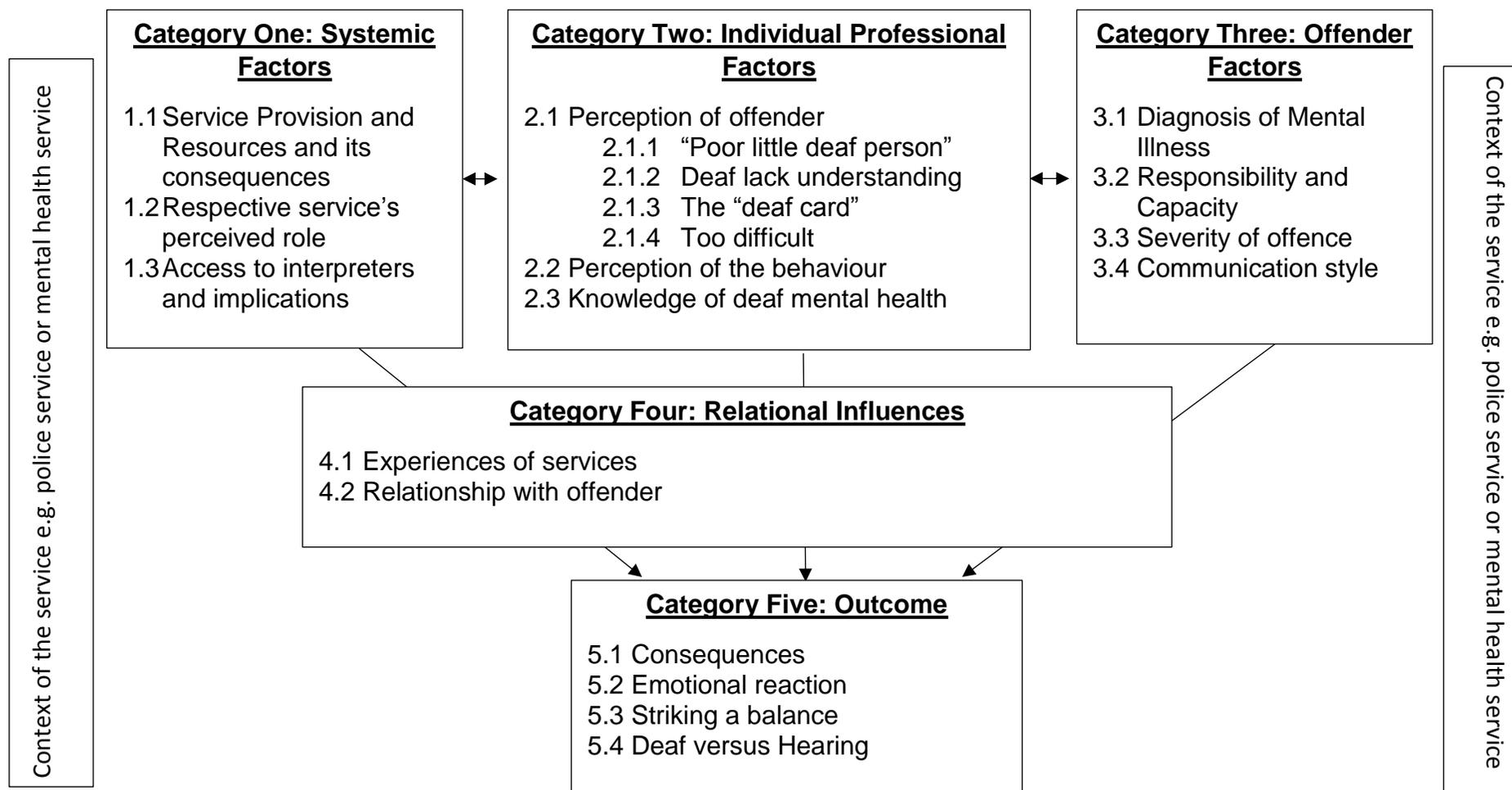
RESULTS

From the analysis of interviews, five categories emerged. The categories and subcategories are outlined in table 5 below. The accompanying theoretical model in figure 3 provides a visual representation of the categories and a clear visual explanation of how the categories interact with one another. The discussion and accompanying quotes that follow explore the categories and their meanings when working with deaf offenders with mental health difficulties, with the subcategories identified in **bold text**. Whilst the categories are presented as individual items, there is inevitably some overlap due to the complex nature and the multitude of factors that the individual professional considers when working with this offender group.

Table 5: Overview of Categories and Subcategories

Category	Subcategory	Sub-subcategories
1. Systemic Factors	1.1 Lack of service provision and resources and its consequences	
	1.2 Respective services perceived role	
	1.3 Access to interpreters and implications	
2. Individual Professional Factors	2.1 Perception of deaf offenders	2.1.1 “poor little deaf person”
		2.1.2 Deaf lack understanding
		2.1.3 The “deaf card”
		2.1.4 Too difficult
	2.2 Perception of the behaviour	
	2.3 Knowledge of deaf mental health	
3. Offender Factors	3.1 Diagnosis of mental illness	
	3.2 Responsibility and Capacity	
	3.3 Severity of offence	
	3.4 Communication Style	
4. Relational Factors	4.1 Experience of services	
	4.2 Relationship with offender	
5. Outcome	5.1 Consequences	
	5.2 Emotional Reactions	
	5.3 Striking a balance	
	5.4 Deaf versus Hearing	

Figure 3: Theoretical Model



One category was not found to be of greater importance than the others, multiple factors were considered to be at play when working with deaf offenders with mental health difficulties, all of which required consideration or had an impact on the outcome of the individual professional's particular experience.

Category one 'systemic factors' encapsulates the professional's view on their respective service's ability to manage when working with deaf offenders with mental health difficulties, with regards to resources, time, cost, and also includes their perceived role with this offender group.

The second and third category are related to the individual people; the professional, and the offender, within each system, and include factors associated with their individuality working within the wider system. Factors associated with the professional themselves are encapsulated in the second category; 'individual professional factors'. This contains subcategories related to their perception of the offender, the behaviour, and their knowledge of deaf mental health. The 'offender factors' are represented in the third category and include subcategories associated with their diagnosis of mental illness, perceived capacity, the severity of their offence and communication style.

The first three categories also relate to one another as part of a dynamic system of elements, and can be influenced by the fourth category 'relational factors'. For example, how the respective services experience one another, and how the individual professionals within the system relate to the offender.

Finally, all categories feed into the fifth category; 'outcome'. This exemplifies the professional's experiences of outcomes within this offender group and highlights an imbalance of consequences, with either a lack of them,

or an overly harsh experience, and compares them with their experiences of hearing offenders.

Category One: Systemic Factors

This category contains three subcategories and contain factors that impact on the individual professional's ability to work effectively with deaf offenders with mental health difficulties. These are factors associated with the wider system within which the individual professional works. One of the larger subcategories was that of **service provision and resources and its consequences**. Outdated resources, or lack of resources, was often identified as limiting the service that they could provide, and the standard of service that was received by deaf offenders with mental health difficulties; as explained by Participant A5 when discussing the use of outdated video-interviewing facilities *“just botch it...it will give the evidence and it will do the job but as a streamlined process, for people with those needs it is not to the same standard...”*

This lack of resources was also considered to have wider impact factors, such as the ability for rehabilitation and change.

...they can't get involved in groups in therapy groups and hearing people are having their therapy and the deaf person is left behind and they have no way of learning or changing their behaviours and way of thinking...deaf people can't access this therapy can't make those improvements and therefore left there longer – Participant B4

The PO's spoke about their lack of training with regards to both deafness and mental health, and the MHP's spoke of a lack of policies guiding their work. Both professional groups expressed a lack of service provision for deaf

offenders with mental health difficulties, resulting in lengthier stays in services, or inappropriate responses by services (e.g. the use of A&E when in crisis), as participant B1 explains *“People really need – like the access in the community...so many hearing people have the opportunity to stay out of hospital and stay with their families...and that option isn’t available for deaf patients.”*

As a result of the lack of resources and limited service provision for this offender group, those services that are available were often used inappropriately, with cases that they cannot manage. This consequence led to services feeling unable to cope. Mental health professionals report working with patients they feel their service is not *“really equipped to manage”* [participant B9] and thus at times being unable to cope with the behaviours they are presented with. This can result in behaviours escalating, as participant B1 described one service user’s behaviour becoming *“worse and worse and worse until eventually she went to a forensic unit...”*

Due to the mental health service being overwhelmed, the PO’s often reflected on their service being used as the service of last resort.

...we were called to...an institution...looks after people with mental health problems...they were calling because they couldn’t manage the client. I think it was shouting, making lots of noise, aggressive, uncontrollable behaviour. So as I said, service of last resort, who do you go to – the police – Participant A2

When participant A2 shares his experience, it also conveys a sense of frustration, but the language used also indicates minimal knowledge within the

area of mental health, for example, the use of the outdated term 'institution' and the dehumanisation of the client with the term 'it'. This links with 'individual professional factors' and is outlined further within that section.

However this lack of knowledge, training and service provision also impacts on the way professionals respond when working with deaf offenders with mental health difficulties. A general sense of not knowing what to do, who to turn to and where to access support leaves them reacting first, and investigating later. As highlighted by participant B1 "*...we fire fight and deal with immediate situations rather than find out what happened and try to prevent*" and participant A1:

Police turn up and see a man, waving his arms, flailing about. So they run up and get hold of him, and obviously start shouting at him and telling him what to do, it turned out he was deaf, drunk with mental health problems. – Participant A1

This leads to a reactive service rather than a preventative one, and can have consequences for the offender's mental health "*...so things aren't picked up as early and so they generally get a lot worse and then it's more difficult to get better*" [participant B1] but also their likelihood of re-offending "*there is however, a group of people who I know of, if they had been in court sentenced for their behaviour 20-30 years ago, may not be offending now*" [participant B12].

Participants also discussed their **respective service's perceived role**, and also reflected on the other service's role. This appeared to have an impact on how they used the other service. For example, MHP's expressed a

reluctance to report offences that occurred against them in their line of work (e.g. assaults) as police would “*see that the person is in a mental health hospital and think okay you know you deal with that...*” [participant B11]. The view that mental health was not part of the police role was also supported by many of the PO’s.

I have got mental health in my family, and I know how difficult that could be. Coupled with being deaf imagine how difficult that must be...it’s really awkward isn’t it because I just feel a lot of compassion there because it must be so hard. However the fact is you have committed an offence, so I have to get back to being a cop... – Participant A3

Here participant A3 conveys empathy for the individual who is experiencing mental health difficulties, and also expresses how difficult this must be coupled with also being deaf. However she makes a differentiation between this compassion and her role as an officer working with an offender. Predominantly the PO’s discussions revolved around procedural elements of their role, resulting in a portrayal of emotionless working.

In contrast, the mental health service’s role was perceived to be that of managing offenders with mental health difficulties, and mental health hospitals being the most appropriate placement for this offender group. Both PO’s and MHP’s reported mental health hospitals as having in-house management strategies for dealing with offenders with mental health difficulties, and that often reporting to police is simply a “*footprint because the offence has happened but it goes on their file and taken into account*” [participant A9] rather than a wish to pursue the offence through the Criminal Justice System (CJS).

The majority of the MHP's expressed some view that experiencing assaults at work was expected and "*a risk we take in this job...*" [participant B14]. Although this was recognised as an unhelpful culture within the hospital system, it was also seen as necessary due to the unpredictable nature of some illnesses (e.g. psychosis) "*and then there is an unwritten rule which I completely agree with if someone is that distressed because they are unwell and they hurt you unless it is really serious you grin and bear it...*" [participant B1].

All participants discussed **access to interpreters and the implications** of this. Communication was often spoken about as being the biggest barrier to effectively working with deaf offenders with mental health difficulties, and accessing interpreters are a large part of this barrier. Although all the participants recognised that having an interpreter was the best option for communication as this ensured fair access to all the information and limited chances of misinterpretation of the facts, there were systemic issues that limited the availability of interpreters, or systemic pressures that meant alternative communication methods became necessary. For example, PO's often expressed frustration at the lengthy process of waiting for an interpreter to be available, and how this has an impact when working in such a time-pressured environment as the police force, as participant A3 highlights:

...trying to get an interpreter for that interview took me – bearing in mind we are only allowed to keep somebody in custody for 24 hours, and then we have to release them if we are not going to charge them – I think I waited about 10 hours for an interpreter.

The MHP's often reflected on the difficulty of accessing interpreters within the CJS, as they recognised that their service was fortunate in that they had in-house interpreters available during the hours of 7am until 7pm. However there were still difficulties related to working in a healthcare service, rather than a justice service, such as the use of interpreters within therapy.

The cost of interpreters was also often reflected on, especially due to the financial pressures within both the healthcare system and police force as expressed by participant B9 *"I think there are a lot of barriers like interpreters, advocacy, solicitors, everything becomes more expensive because of communication interpreters involved."*

This quote indicates just how important an interpreter is within many aspects of the healthcare and criminal justice system. When an interpreter has not been available other methods of communication have been required. This has included writing, gestures, speaking loudly and using relatives to help with communication. These methods come with many problems, as participant B10 highlights:

... they have used a family member as an interpreter and then handed out written information. This is A) the abusive brother – brilliant, genius! 2) Reading level of age 8 in English so you can write it down all you like but it isn't a proper communication.

Many PO's reflected that they struggled to complete their job effectively without access to an interpreter, for example, completing risk assessments regarding bail and the risk of further offences was deemed unmanageable without adequate communication support. The deaf offenders were also

impacted as PO's reported that they were usually in custody for many hours, longer than was necessary if communication was not a barrier. Communication is further complicated with the addition of mental health, as participant B1 explains *"if their signing is really quick or...just so thought disordered that they're jumping from one thing to another and so I've got no sort of subject to base it on, it will be interpreter please help a lot."*

This subcategory is also linked with the subcategory 'communication style' within category three 'offender factors'. For example, accessing interpreters became less of a concern if the offender could read and write sufficiently, or lip-read.

Category Two: Individual Professional Factors

This category represents the factors associated with the individual professional working within each system. The category contains three subcategories; perception of offender, perception of the behaviour and the professional's knowledge of deafness and mental health. The subcategory **perception of offender** also contains four sub-subcategories. These represent the various perceptions that were expressed within the data.

One of the largest perceptions that emerged from the data represented the belief that deaf people are vulnerable and as such evoked feelings of sympathy, care and feeling *"sorry for the person who is committing the act of aggression"* (participant B6). This subcategory was termed **"poor little deaf person"** as this was the image evoked by some of the language participants used (e.g. *"it's a shame"* – participant A6, *"poor little deaf boy"* – participant B14). However deaf people do *"fall under both section 16 and 17 of the*

Vulnerability Act” [participant A6] which guides how PO’s work and likely has an impact on their perception of the offender. This concept of vulnerability appeared to be further exaggerated when coupled with mental health difficulties.

However the fact is you have committed an offence, so I have to get back to being a cop and thinking you have committed that robbery and then on the side of that you are deaf, but that doesn’t mean you can’t commit a robbery just because you are deaf, but coupled with that you have got a mental health condition...it must be awful. – Participant A3

This perception is also linked to category five ‘outcomes’, as it was suggested that this perception could lead to more lenient treatment when working with deaf offenders, and the view that certain aspects of the CJS (e.g. prisons) are too harsh for deaf offenders due to the isolation this would cause. This is demonstrated by participant A8 “*we released him. It was unnecessary he was vulnerable because of his mental health, he was vulnerable because he’d been arrested, he was scared, he was isolated...*” and participant A9’s comments: “*...she did have more leeway just because of the difficulty by sticking her on PNC...*”

The following subcategory **deaf lack understanding** is also associated with the former subcategory. This perception assumes that deaf offenders with mental health difficulties are not aware that their behaviour is wrong or against the law.

He was shocked to hell that he was doing something wrong...his understanding of the legal framework and what he could and couldn’t do,

he didn't see he was doing anything wrong, he was pressing his face up against this lady's window in the middle of the night and tapping on the window to get her attention. It resulted in him actually hitting her over the head with a hammer, because she refused his advances. He didn't see anything wrong with this. – Participant A6

This was perceived as a consequence of being deaf and being unable to access the same information as hearing individuals, or being born into a hearing family, and as such there was a lack of communication and ability to instil boundaries. *“They might start thinking, their understanding of right and wrong is skewed because they have not had access to the information”* [participant B5].

Although some participants believed it was more likely the mental health difficulties that impacted on an individual's ability to understand right from wrong rather than their deafness. For example participant B8 stated *“...I know hearing loss plays a big part but I don't think that would stop them from understanding what they have done. I think the illness would but I don't think the deafness would.”*

This perception is also associated with the category three 'offender factors', specifically the subcategory responsibility and capacity. If the professional holds the view that this offender group do not understand their actions, this will likely impact their perception as to whether the offender has capacity and is thus responsible for their behaviour. It is then likely to influence the outcomes in a similar way as highlighted within the previous subcategory.

Another perception many of the participants expressed was the use of the **deaf card**. This perception was in contrast to the previous two

subcategories, however was often expressed within the same participant interviews, suggesting the same professional can hold both perceptions, perhaps at different times, in different situations. The **deaf card** encompassed the idea that an individual would utilise their deafness to their advantage to avoid consequences and excuse their behaviour: *“I think they use and abuse it I think the deaf population...they get away with blue murder...I’ve even heard interpreters go “they use the deaf card”* [participant B1].

This quote also highlights that mental health difficulties can also be used as a reason to avoid legal consequences. However this was not thought to be specific to deaf offenders with mental health difficulties, but rather all people when faced with the law might exaggerate an illness or disability: *“If it is a deaf offender, from the few that I have taken to that level, they play on it. Just the same as anybody else does on any issue they raise in defence.”* [participant A6].

The communication barrier faced when working with deaf offenders with mental health difficulties resulted in this population being perceived as **too difficult** to work effectively with. This was echoed within both the police force and the healthcare service. Participant A3 labelled this offender group as a *“...nightmare incident to go to”* and thus often PO’s were reluctant to be involved in such cases. This appeared to be directly related to the communication barrier, as many of the police force’s processes require effective communication.

Because of the perceived challenges they are going to have when that person gets to custody...maybe officers just really are reluctant to do

it...the whole process of custody would be very difficult with somebody you can't speak to...the booking on period, explaining their rights to them, finding out their details, making sure they're aware of why they have been arrested...what happens past that, every time you have got to go and ask them "do you want food? Do you want drink? Is everything okay?"...it would be very difficult...I think it is just going to be a nightmare. – Participant A4

There were similar issues within the healthcare service, specifically relating to communication. This was seen as too difficult within the therapy process but also in gaining access to other services.

...or use the fact that these individuals are deaf to not cater for their needs...they will do anything they can to stop a referral or transfer of a deaf person because they think well how are we going to communicate with them, it's going to be a nightmare... – Participant B13

The participants not only expressed perceptions of the offender, but also **perceptions of the behaviour**. This predominantly took the form of minimising or justifying offending behaviours, however also consisted of self-blame and victim blaming. For example, when participant B4 discussed being assaulted at work within the healthcare service she stated that she was “*...angry at myself for letting it happen.*” The behaviour was also seen as a form of communication or an expression of an emotion that the offenders struggled to verbalise due to communication barriers with others. The process of externalising the behaviour onto the illness or disability of the offender was also expressed.

...I'm not sure whether he is a vulnerable person that needs help, or he is an offender...his deafness has isolated him which has made him vulnerable to offending...so he knew what he was doing was wrong, but he was doing it because he was potentially isolated. And it was to make friends or to form relationships. – Participant A8

This quote offers a dialectic between a vulnerable person, and an offender, perhaps suggesting that an individual cannot be both. It also goes on to suggest that although the individual was offending, the reasons underlying this (e.g. isolation) were driven by his vulnerability (e.g. deafness) and the motivating factor of the behaviour was “innocent” (e.g. to make friends). This often led to the behaviour being viewed as less serious by authorities.

The final subcategory within category two was created to encompass the professional's **knowledge of deaf mental health**. The difference in communication and the use of a visual language was felt to be easily misunderstood. Many participants discussed a deaf person's communication as being perceived as aggressive or intimidating.

They got arrested because there was something that happened in the pub, the police officers didn't understand, and they interpreted the behaviour of some of the deaf people there as being aggressive because of their facial expression, gesticulating, the inability for them to explain what had happened was misinterpreted for a public order offence. – Participant A3

It was also reflected that deaf offenders could also be assumed to have mental health difficulties, even if they did not, if the professional lacked

knowledge within this field: *“I also think people’s perceptions of experiences when they’re deaf means they’re more likely for them to think they have a mental illness and the professionals who don’t work with deaf people to then give them that label”* [participant B1].

Category Three: Offender Factors

This category encompasses the factors that are associated with the offender. This category includes four subcategories including the offender’s mental health status, their responsibility or capacity with regards to the offence, the severity of the offence, and the offender’s communication style.

The subcategory **diagnosis of mental illness** refers to the offender’s mental health status and how this impacts on the procedures such as reporting, arresting and the conviction of the offender. As participant A3 stated: *“...having a mental health condition really does carry a lot of weight when decisions are made about the Criminal Justice System.”*

This was reflected with healthcare professionals who were victims of assault, as they discussed being more understanding towards the offender and reluctant to report the assault. But it was also reflected in PO’s decisions in pursuing cases: *“Well the police would say “well she is mentally ill” and they wouldn’t get involved...”* [participant B4].

This is also linked to the following subcategory, **responsibility and capacity** and was linked with the offender’s understanding (as outlined in category two). When discussing responsibility, it often came with the proviso *“as long as they have [been] educated to understand...”* [participant A3] or *“...if*

they're aware of what they're doing..." [participant A7]. They were felt to perhaps lack that awareness due to their deafness:

...if they're not fully aware of their surroundings because they can't hear what's going on and they commit some form of offence or do something and they're not aware of what's happened, then obviously that's not their fault, because they're not aware of everything that's going on. –

Participant A7

However some felt that it was a misconception held by many within the service that a vulnerability such as mental illness inevitably caused the individual to lack capacity.

Another subcategory that is related to the previous two is **severity of the offence**. This was often considered alongside the offender's diagnosis of mental illness and their capacity, and was described as having an impact on the likelihood of reporting, arrest and conviction. There appeared to be a general hierarchy, as participant B9 states "*I know some offences you can't ignore can you, so bad that you can't ignore*", and a consideration that some offences such as theft, common assault, damage to property were minor and could be disposed of quickly if the offender was considered to have mental health difficulties. However offences such as murder, sexual assault and offences involving children were considered serious offending.

And whatever has happened, if it is pretty minor then it is disposed of, murder or something it is different, but generally if you are mentally ill and you have slashed a door for instance, and you are shown to be

mentally ill at that time by the mental health team that turn up and that negates it, usually. – Participant A1

The offender's **communication style** was discussed by all participants and participant B3 highlighted just how important communication is when they said *"it's all about communication, communication, communication."* Their style of communication (e.g. BSL, lip-reading, writing) was described as having a big impact on the professional's ability to work effectively, but also the outcome of the involvement with the offender. Communication was considered to be the *"main barrier"* [participant A7] or a *"massive barrier"* [participant B4], and a lot of the PO's reported feeling *"stuck for communication"* [participant A4].

...if the communication isn't right at the start then it wouldn't get as far as the CPS because the evidence wouldn't be obtained properly...if we have not got the communication right to start with you have probably not got that description...They then make a decision, we don't have this, we don't know this, we can't get it for whatever reason, case discontinued usually. – Participant A6

This quote highlights the importance of communication in effective police working, and the impact of not achieving the "right" communication.

Category Four: Relational Factors

This category highlights how the previous categories interplay and influence one another. This category contains two subcategories; the experience the respective services have with one another, and the relationship with the offender.

The subcategory **experience of services** encapsulates both the PO's experience of the mental health service, and the MHP's experience of the police force. It also considers the experiences of the deaf community with the police force, as many PO's considered this to be impacting on the deaf person's likelihood of reporting crimes that occurred within the deaf community. This was thought to be driven by an insular deaf community that dealt with problems "in-house" without the need for the police. This was also reflected in the MHP's experiences of the police force, as they often expressed that the "*police just aren't interested*" [participant B1] in this offender population, particularly if they are already placed in a hospital setting. Due to this many have expressed similar frustrations as participant B12 "*...the police aren't going to get involved so I am not going to report it.*"

The PO's also reported frustrations with the mental health services, describing it as a "*fight*" [participant A4] to access support when the police have an offender with mental health difficulties.

The other relational aspect concerns the **relationship with the offender**. This was primarily discussed within the MHP's. This is likely due to the nature of their work compared to that of police officers, as MHP's develop a therapeutic relationship with their clients (who may be offenders) and work with them daily; whereas police officers likely only encounter the offender on a couple of occasions for limited, structured periods. One officer did describe developing a relationship with the offender after her role with him had been completed, and one officer discussed the victim-offender relationship and how this may impact on reporting (e.g. deaf victim is reliant on the deaf offender for support). However the MHP's relationship with the offender was often blurred between

professional and victim, as many reported being assaulted during their role as a MHP. For example, participant B4 stated that they would be “*understanding*” and *empathising*” due to their current therapeutic relationship, and participant B9 stated:

No it never crossed my mind...I really liked him and he was by far one of the funniest people we have had on this ward and he was a lovely man, but he would just push...no matter what he had done, it would never had crossed my mind to press charges.

These quotes suggest that the prior professional relationship with the offender often influenced their view of them, but also their reaction to the behaviour.

Category Five: Outcomes

The final category, outcomes, outlines the PO’s and MHP’s experiences regarding the outcomes when working with deaf offenders with mental health difficulties. There are four subcategories which discuss consequences, the professional’s emotional reactions, a comparison of outcomes for deaf offenders versus hearing offenders, and ends with an apparent dichotomy with regards to outcomes.

There are a number of people on our caseloads that we have known for years...if they had been arrested and dealt with by the Criminal Justice System 30 years ago, they would be much less of a problem in their lives and other people’s lives.

Here, participant B12 suggests that there is a lack of **consequences** within this offender group and highlights the impact this has had on the offender's subsequent behaviour but also the community. This view was shared across many participants, with many emphasising the lack of consequences or leniency provided towards deaf offenders with mental health difficulties. For most it was difficult to 'unpick' this and identify whether this was due to the deafness or the mental health difficulty. However participant A3 highlighted that the consequences do not necessarily have to be through the justice system, as often within such an insular community, such as the deaf community, the consequences are further reaching:

...the consequence for him was just desperate embarrassment to his family and the deaf community...was ostracised by the deaf community...his caution has caused him major problems with his CRB check, I think the biggest embarrassment for him was the deaf community knowing he was arrested.

Participants also described a variety of **emotional reactions** that they experienced when working with deaf offenders with mental health difficulties. This included feeling embarrassed or devalued, however the main emotions the professionals expressed were guilt, frustration and feeling helpless and stuck. Participant B7 also described the work as "*ten-fold rewarding*" however there were few positive comments.

"...and she became more and more aggressive, so we had to cuff her, and I felt really guilty about that because her only way of communicating was through sign." [participant A2]. This quote describes a common, and standard

practice within the police force; cuffing an offender. However when this procedure is used with the deaf community, the participant describes experiencing a feeling of guilt, as they recognise this also oppresses the offender's form of communication. The issue of communication also often lead to the professional feeling frustrated, most commonly due to their lack of ability in communicating with the offender: *"...it is something that can be very difficult to manage, and at the time I had no signing experience...that was very frustrating for myself but must have been really, really frustrating for the patient..."* [participant B2].

This subcategory is therefore associated with other subcategories, such as perception of offender, access to interpreters, and experience of service; as the professional's emotional reactions were often related to these areas. For example, difficulty accessing interpreters and being stuck for communication lead to frustration, or the perception of the offender as vulnerable lead to feelings of guilt, shame and embarrassment.

When discussing outcomes, participants would often draw comparison to a hearing offender. This created the subcategory **deaf versus hearing**. Within this subcategory there was a divide, between those who perceived deaf offenders as different to hearing offenders and therefore required different outcomes, and those who felt that deafness was merely a loss of a sense, therefore outcomes for their actions should be the same.

The main difference highlighted was communication and the level of specialist training that is required to be able to effectively communicate with

deaf people. This was also thought to have an impact on their management, for example, community support or a placement in hospital.

...I would say deaf people are treated longer, they are also brought to the hospital probably unnecessarily. If you would, say, you have two people behaving exactly the same way but one is hearing and one is deaf, the deaf person has probably 90% chance end up in hospital. In hearing person it would probably be just about 50%. There is definitely the aspect of deafness and people being brought to the hospital rather more often than hearing people. – Participant B7

It was felt, as can be seen in the above quote, that deaf offenders with mental health difficulties were more likely to be placed in a hospital setting, and a hearing offender with mental health difficulties was more likely to receive a prison sentence.

Other participants expressed that being deaf was more than “*just different method of communication, it was a different way of life*” [participant A6] and thus required a number of changes in the CJS (e.g. extra support, slower or adapted processes).

Those that discussed similarities emphasised the guidance and procedures that govern the way systems work, as participant A7 explains:

It's kind of the way we deal with anybody: fairness, equality, no discrimination regardless of who they are or what they've done. At the end of the day, they're still a person and you have to treat them as such.

This quote also highlights that at the core of it all, deaf offenders are still people, the same as others, and therefore outcomes should be the same. This was often felt to be forgotten when working with someone with a vulnerability, such as a disability or mental illness, as people focus on these aspects, apply labels and the behaviour is then forgotten.

The various perceptions discussed in category two 'individual professional factors', and the previous subcategory that offers two conflicting views regarding deaf offenders may lead to a variety of different outcomes. The participants reflected on an apparent dichotomy within this population when it comes to outcomes, and a need to "*strike a better balance*" [participant A4]. Some participants noticed a potentially harsh treatment of deaf offenders within the CJS due to systemic issues of resources and service provision:

...he was convicted of manslaughter due to diminished responsibility, and was initially given a life sentence but with a tariff of three years...went off to prison, they expected him to go through all the various courses, regimes...was the only deaf person in the prison...roughly he had been in prison for 30 years...for a three year tariff. – Participant B12

Whereas other participants discussed providing leniencies to this offender group, or going above and beyond their role; "*that was my day off, so I swapped my day off and came in to deal with her*" [participant A9], due to either the difficulties associated with working with this client group or their emotional reactions of shame, guilt or feeling sorry for the offender.

This unpredictability of the CJS is outlined by participant B3. They explain that the "*...the whole justice can go different direction so they can be*

maybe more prone to go to be prisoned than others. Or even less...” They continue to explain that this may be due to a number of factors, and highlights the close association this category has with other subcategories: “...*risk of being more going to prison because of lack of communication and risk of...not having the consequences that they should be just because you’re deaf oh so you’re allowed.*”

Here they indicate both the impact that poor communication can have on the outcome, and thus associated with systemic factors such as access to interpreters, but also the impact the individual professional’s perception has on pursuing the case further.

DISCUSSION

This study employed a qualitative design, utilising grounded theory, to explore the experiences of nine police officers and fourteen mental health professionals when working with deaf offenders with mental health difficulties. There is a paucity of research within this area therefore undertaking a study to gather such experiences is an important starting point, and resulted in the development of a tentative model to identify the various factors involved in this process.

Summary of Main Findings

The analysis resulted in the development of a theoretical model of the most significant factors involved when working with deaf offenders with mental health difficulties. The model provides a theoretical framework from which future research can be considered. This model suggests that when a deaf offender with mental health difficulties comes into contact with either the healthcare or justice system there are a multitude of factors that influence the outcome. These include factors associated with the system they are in contact with (healthcare, justice or both), the individual professional involved, and the offender themselves, relational factors have an overarching effect on the other elements. The findings suggest that there is not likely to be one central factor that influences the outcome, but a complex scenario that involves many factors. In this sample, the individual professional's ability to effectively work with deaf offenders with mental health difficulties depends on their system's resources, perceived role and access to interpreters, their own knowledge of this offender group and their perceptions of this group, and the offender's communication

abilities, diagnosis and capacity. These professionals often reported under-resourced services with difficulty accessing interpreters and a lack of training and knowledge regarding this offender group. They described a number of different perceptions of this group, perhaps due to a lack of knowledge and training. The impact of mental health and the issue of communication with this offender group were prominent features that led to professionals feeling 'stuck', or resulted in a perceived lack of consequences.

There are similarities between this model and others that have been developed (e.g. Mash and Johnston, 1990; Rose, Mills, Silva and Thompson, 2013). The Mash and Johnston (1990) model is focussed on parent-child interactive stress, however it has been used to research other areas of stress, including carers in residential settings for learning disabled adults (Rose, Mills, Silva and Thompson, 2013). Both models have categories that can be mapped onto this study's theoretical model. For example, Rose et al's (2013) 'organisational characteristics' and Mash and Johnston's (1990) 'environmental characteristics' represent 'systemic factors' within this study's model, and Rose et al's (2013) 'staff cognitive variables' and Mash and Johnston's (1990) 'parent characteristics' portray 'individual professional factors' found within this study's model.

There were also some important findings that emerged from the data. The first worth noting is the concerns expressed about effectively communicating with deaf offenders. This was highlighted in category one 'systemic factors', but also category two 'individual professional factors' and category three 'offender factors'. The issue of communication therefore appears to be multi-faceted but also far reaching in its implications. For example, good

communication forms an essential part of processes within healthcare and the CJS, therefore when this is impeded due to the offender's native language being different to that of the officer or healthcare professional, this has an impact on their ability to identify the initial problem, work towards solving it and at every other stage in the processes that follow. The difficulty of non-English languages within health and CJS are not isolated to the deaf population, and has been widely discussed including the implications of miscommunication within the legal system (Brown-Blake and Chambers, 2007; Eades, 2003). Working towards providing better communication will improve services in a multitude of ways. A larger pool of interpreters available to work with deaf offenders with mental health difficulties would create a quicker response time, increase deaf awareness in staff, and improve outcomes as procedures can be undertaken with greater ease.

Secondly, the influence that mental health had on the subsequent outcome for an offender was apparent. The offender's mental health was also associated with the severity of the offence, the offender's perceived responsibility for their actions, and also created further complications for the process of working with the offender. It was also reflected as a particular issue within the police force as many of the participants stated that mentally unwell offenders do not fall within the police remit, and should be dealt with by healthcare services. The view that the CJS is not appropriate for offenders with mental health difficulties is supported by many government policies and reviews that outline various diversion schemes for individuals with mental health difficulties (Department of Health and Home Office, 1992; Home Office, 1990; The Bradley Report, 2009). However the MHP's within this study perceived a

potential lack of consequences for this offender group due to their mental health difficulties, or association with the mental health service, and at times felt there was a lack of punishment and deterrent for individuals who offended and 'escaped' contact with the CJS. Finding the right balance between appropriate punishment and rehabilitation whilst also considering this offender group's additional needs (e.g. deafness and mental health) is a complex process. A careful balance is required to ensure that responsibility is placed appropriately with the offender, yet still providing the necessary support to reduce reoffending. For example, for people with mental health difficulties, specialist secure services for deaf people are available in the UK which can act as a deterrent as they impose restrictions, yet their focus is rehabilitation of both mental health and offending behaviours. There are also services provided by charities that provide community support to deaf people with mental health difficulties. Access to these services may prevent offending or aid rehabilitation, however they would require additional support due to the further needs presented by individuals who pose risks associated with offending.

Thirdly, this study highlighted a number of perceptions that the professionals held regarding deaf offenders with mental health difficulties that previous literature had suggested were present, but was yet to research (Denmark, 1994; O'Rourke et al, 2013; Vernon et al, 2001;). The varying perceptions may provide some explanation as to why deaf people are found to be over-represented in prisons (Gahir et al, 2011) yet also found to be more likely to receive probation (Young et al, 2001). A study comparing each of these perceptions and their potential impact on decision-making and subsequent outcomes would illuminate any similarities and differences more clearly.

Finally, the model demonstrates that working with deaf offenders with mental health difficulties is complex and has multiple factors interplaying, and perhaps not surprising, the model is widely influenced by various relationships throughout it.

Clinical Implications

Professionals' lack of knowledge regarding deafness and mental health is echoed within other research over many years (Ralston, Zazove and Gorenflo, 1996; Smith, 2010; Thomas, Cromwell and Miller, 2006; Velonaki et al, 2015). Despite this re-occurring theme within research findings, there continues to be a lack of training provided for many professionals. This research highlights that further training and education to improve professionals' knowledge within the field of deafness and mental health is still required. It may be that improving professional knowledge will also influence other areas included within the model, such as the professionals' perceptions of this offender group, especially if deaf people were involved in the delivery of training.

The findings also suggest a lack of clarity regarding the role of each service regarding offenders with mental health difficulties. This may be likely due to the overlap across both services therefore requiring inter-agency working and effective communication between services. Promoting inter-agency working through training, co-locating staff and the maintenance of working relationships outside of crisis moments may also encourage skill sharing and can benefit all parties by making the best use of the resources available. This has commenced with the deployment of a triage car within the police force. Participants in this

study highlighted the usefulness of having access to healthcare records when responding to cases involving mental health. However this study also suggested that there remain issues accessing mental health assessments and inpatient care. Further education regarding each service's role with this offender group may be required as this lack of clarity may result in the needs of this offender group being unnoticed.

Communication was found to be influential within all areas of the model. It was considered to be the largest barrier and yet the most important element when working with deaf offenders with mental health difficulties. Improving access to interpreters within the police is likely to positively impact on an officer's ability to work effectively with the offender and also potentially shorten the length of time the deaf offender has to stay within the prison cells. Previously the police force have provided officers with British Sign Language (BSL) training and allocated an officer as the deaf liaison officer, however this is no longer the case. Officers trained in BSL available at each station would provide a link person to the deaf community and to other officers who may come into contact with deaf people.

Methodological Considerations

This research contained a reasonable sample of participants pooled from two different professional groups. However the research was conducted within one police force and one healthcare setting within the UK therefore cannot be said to be representative of the wider police force or healthcare settings across the UK. Other areas of the UK may have different experiences in terms of service provision, training and support when working with this offender group.

Discovering what is available in other areas, and sharing that resource, would be helpful.

This research required only one prior contact with deaf offenders with mental health difficulties; which was often the experience of the PO's, and in contrast to the MHP's. Further analysis of the impact of this degree of exposure may be beneficial.

The research focussed on a niche pool of participants, as it not only included deaf offenders, but also those with mental health difficulties. Although some findings can be expected to be present in deaf offenders without mental health difficulties (e.g. communication), other factors may not be. Carrying out future research comparing deaf offenders with and without mental health difficulties would help to further identify any factors specifically associated with deafness or mental health.

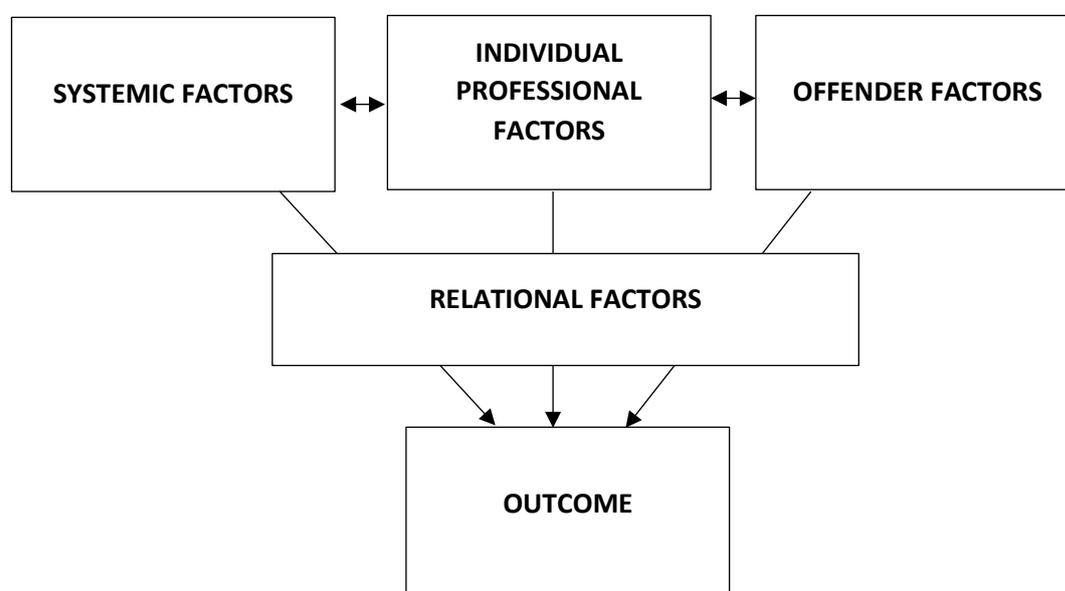
The quality and depth of the data collected highlights the usefulness and importance of qualitative methodology. However, the sample could have been expanded to include professionals from other services, for example, social care staff, or other professionals within health and justice. For example, Crown Prosecution Service (CPS) staff.

Recommendations for Future Research

This study has provided an empirically testable model with which to structure thoughts about future research and it would be beneficial to test some of the links suggested, which can be undertaken using further qualitative or quantitative strategies. For example, a study gathering information regarding professionals' level of knowledge or training can be undertaken to identify the

effect it may have on effective working and outcomes. The model could also be used with professionals who work with people who have mental health issues and are deaf to see which elements of the model are the most significant at influencing outcomes. In this way efforts at intervention could be more precisely targeted. Figure 4 provides a simplified version of the theoretical model which can be used to guide intervention outcomes.

Figure 4: Simplified Theoretical Model



This research has identified a number of perceptions that professionals hold regarding deaf offenders with mental health difficulties. It would benefit from further research exploring if certain perceptions or attitudes lead to particular outcomes, or impact on outcomes. For example, does holding the view that “deaf lack understanding” result in the offender being perceived to lack responsibility or capacity for an offence?

As this research examined professionals’ experiences of deaf offenders with mental health difficulties, identifying if these experiences are different when

the deaf offender does not have mental health difficulties could help to focus on key factors involved in the process.

One particular quote highlights the barriers and challenges faced within the prison system; with one offender spending 30 years in prison due to an inability to access the necessary programmes to meet his tariff requirements. Future research would benefit from focussing on this particular challenge further, as the consequences for the deaf offender appear great. This barrier was highlighted by the mental health professionals within this study, in particular, the difficulties accessing therapy and progressing through treatment, and requires further exploration.

The next stage for this research would be to study deaf people's experiences in the CJS. These findings would be used to better inform and refine the model, allowing the theory to continue to develop. This would also aid in identifying the specific elements of this model that are specific to deaf people. Currently it provides a generic structural organisation of many factors involved in the system, with subcategories within each factor; including deaf people's experiences may highlight which subcategories are more specific to this population.

REFERENCES

- Action on Hearing Loss. (2016, August 12). *About Deafness and Hearing Loss*. Retrieved from the Action on Hearing Loss Website <https://www.actiononhearingloss.org.uk/your-hearing/about-deafness-and-hearing-loss/statistics.aspx>
- Bayney, R., and Ikkos, G. (2003). Managing criminal acts on the psychiatric ward: understanding the police view. *Advances in Psychiatric Treatment*, 9, 359-367.
- Brown-Blake, C., & Chambers, P. (2007). The Jamaican-Creole speaker in the UK Criminal Justice System, *International Journal of Speech , Language & the Law*, 14, 269-294.
- Charmaz, K. (1996). The Search for Meaning – Grounded Theory. In J. Smith, R. Harre & L. Van Langenhove (Eds). *Rethinking Methods in Psychology* (pp. 27-49) London: Sage Publications
- Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In Handbook of Qualitative Research N. Denzin & Y. Lincoln (eds). Sage: USA.
- Crocker, S. (2004). Working Systematically with Deaf People and their Families. In S. Austen & S. Crocker (Eds.) *Deafness in Mind: Working Psychologically with Deaf People across the Lifespan* (pp. 89-100), London: Whurr Publishers.
- Crocker, S., & Edwards, L. (2004). Deafness and Additional Difficulties In S. Austen & S. Crocker (Eds.) *Deafness in Mind: Working Psychologically with Deaf People across the Lifespan* (pp. 252-269), London: Whurr Publishers.

Denmark, J. (1994). *Deafness and Mental Health*, London: Jessica Kingsley Publishers.

Department of Health/ Home Office. (1992) *Review of Health and Social Services for Mentally Disordered Offenders and Others Requiring Similar Services (the Reed Report)*. Cm208: London.

Eades, D. (2003). Participation of Second Language and Second Dialect Speakers in the Legal System, *Annual Review of Applied Linguistics*, 23, 113-133.

Gahir, M., O'Rourke, S., Monteiro, B., and Reed, R. (2011). The Unmet Needs of Deaf Prisoners: A Survey of Prisons in England and Wales, *International Journal on Mental Health and Deafness*, 1, 58-63.

Haualand, H. (2015). Punished and Isolated: Disabled Prisoners in Norway, *Scandinavian Journal of Disability Research*, 17, 74-87.

Hindley, P., & Kroll, L. (1998). Theoretical and Epidemiological Aspects of Attention Deficit and Overactivity in Deaf Children, *Journal of Deaf Studies and Deaf Education*, 3, 64-72.

Holton, J. (2007) The Coding Process and Its Challenges. In A. Bryant & K. Charmaz (Eds). *The SAGE Handbook of Grounded Theory*, Sage: London.

Home Office. (1990) *Provision for Mentally Disordered Offenders*, Home Office Circular 66/90. Retrieved from the Crown Prosecution Service website http://cps.gov.uk/legal/l_to_o/mentally_disordered_offenders/index.html

- Knutson, J., & Lansing, C. (1990). The Relationship between Communication Problems and Psychological Difficulties in Persons with Profound Acquired Hearing Loss, *Journal of Speech and Hearing Disorders*, 55, 656-664.
- Knutson, J., Johnson, C., & Sullivan, P. (2004). Disciplinary Choices of Mothers of Deaf Children and Mothers of Normally Hearing Children, *Child Abuse & Neglect*, 28, 925-937.
- Lacey, N., and Pickard, H. (2013). From the Consulting Room to the Court Room? Taking the Clinical Model of Responsibility without Blame into the Legal Realm. *Oxford Journal of Legal Studies*, 33, 1-29.
- Lundeberg, I., & Breivik, J.-K. (2014). Being Deaf in Court, *Scandinavian Journal of Disability Research*, 1-18.
- Mash, E., & Johnston, C. (1990). Determinates of Parenting Stress: Illustrations from Families of Hyperactive Children and Families of Physically Abused Children, *Journal of Clinical Child Psychology*, 19, 313-328.
- Mcculloch, D. (2012). Not Hearing Us: An Exploration of the Experience of Deaf Prisoners in English and Welsh Prisoners, *The Howard League of Penal Reform*, London: UK.
- Miller, K. (2001). Access to Sign Language Interpreters in the Criminal Justice System. *American Annals of the Deaf*, 146, 328-330.
- Miller, K., Vernon, M., and Capella, M. (2005). Violent Offenders in a Deaf Prison Population. *Journal of Deaf Studies and Deaf Education*, 10, 417-425.

Mitchell, R., and Karchmer, M. (2004). Chasing the Mythical Ten Percent: Parental Hearing Status of Deaf and Hard of Hearing Students in the United States, *Sign Language Studies*, 4, 138-163.

Mitchell, T., and Braham, L. (2011). The Psychological Treatment Needs of Deaf Mental Health Patients in High-Secure Settings: A Review of the Literature. *International Journal of Forensic Mental Health*, 10, 92-106.

Morse, J. (2007). Sampling in Grounded Theory. In A. Bryant & K. Charmaz (Eds). *The SAGE Handbook of Grounded Theory*. (pp. 229-244) Sage: London.

O' Rourke, S., Glickman, N., and Austen, S. (2013). Deaf People in the Criminal Justice System: Is a Culturally Affirmative Response Possible or Desirable? In N. Glickman. (Eds) *Deaf Mental Health Care*. (pp. 342-377) New York: Routledge.

Oxford English Dictionary (2017, May). Retrieved from the Oxford Dictionary website <https://en.oxforddictionaries.com/definition/deaf>

Police and Criminal Evidence Act (1984). *Code C Revised Code of Practice for the Detention, Treatment and Questioning of Persons by Police Officers*, Home Office, London.

Ralston, E., Zazove, P., and Gorenflo, D. (1996). Physicians' Attitude and Beliefs about Deaf Patients, *Journal of the American Board of Family Practice*, 9, 167-173.

Rose, J., Mills, S., Silva, D., & Thompson, L. (2013). Client Characteristics, Organisational Variables, and Burnout in Care Staff: The Mediating Role of Fear of Assault, *Research in Developmental Disabilities*, 34, 940-947.

Royal College of Psychiatrists. (2011). Standards on the Use of section 136 of the Mental Health Act 1983 (England and Wales), *College Report CR159*, London.

Smith, C. (2010). An Analysis of the Assessment and Treatment of Problematic and Offending Behaviours in the Deaf Population. Dissertation Chapter 3; Aspects of the Processing of Deaf Offenders within the Criminal Justice System. University of Birmingham, ForenPsyD

Stinson, M., & Antia, S. (1999). Considerations in Educating Deaf and Hard of Hearing Students in Inclusive Settings, *Journal of Deaf Studies and Deaf Education*, 4, 163-175.

The Bradley Report (2009, April). *Lord Bradley's Review of People with Mental Health Problems or Learning Disabilities in the Criminal Justice System*
Retrieved from the Royal College of Psychiatrists website
<http://www.rcpsych.ac.uk/systempages/gsearch.aspx?cx=005217297982068972824%3aqhx0tmhjcsy&cof=FORID%3a9&q=the+bradley+report>

Thomas, C., Cromwell, J & Miller, H. (2006). Community Mental Health Teams' Perspectives on Providing Care for Deaf People with Severe Mental Illness, *Journal of Mental Health*, 15, 301-313.

Velonaki, V., Kampouroglou, G., Velonaki, M., Dimakopoulou, K., Sourtzi, P., & Kalokerinou, A. (2015). Nurses' Knowledge, Attitudes and Behaviour toward Deaf Patients, *Disability and Health Journal*, 8, 109-117.

Vernon, M., Raifman, L., Greenberg, S., and Monteiro, B. (2001). Forensic Pre-trial Police Interviews of Deaf Suspects Avoiding Legal Pitfalls. *Journal of Law and Psychiatry*, 24, 43-59.

Vernon, M., and Miller, K. (2005). Obstacles Faced by Deaf People in the Criminal Justice System. *American Annals of the Deaf*, 3, 283-291.

Young, A., Monteiro, B., and Ridgeway, S. (2000). Deaf People with Mental Health Needs in the Criminal Justice System: A Review of the UK Literature, *The Journal of Forensic Psychiatry*, 11, 556-570.

Young, A., Howarth, P., Ridgeway, S., and Monteiro, B. (2001). Forensic Referrals to the three Specialist Psychiatric Units for Deaf People in the UK. *The Journal of Forensic Psychiatry*, 1, 19-35.

CHAPTER THREE

PUBLIC DOMAIN BRIEFING DOCUMENT

Elizabeth Sarah Wakeland

School of Psychology

University of Birmingham

School of Psychology

University of Birmingham

Edgbaston

Birmingham

B15 2TT

PUBLIC DOMAIN BRIEFING DOCUMENT

PROFESSIONAL EXPERIENCES OF DEAF PEOPLE

This document provides an overview of the literature review and empirical study submitted in partial fulfilment of the requirements for the degree of Forensic and Clinical Psychology Doctorate (Foren.Clin.Psy.D) at the University of Birmingham.

Key Term: Deaf

Nine hundred thousand people are estimated to be severely or profoundly deaf within the UK (Action on Hearing Loss, 2016). According to the Oxford English Dictionary (2017) to be deaf is defined as 'lacking the power of hearing or having impaired hearing'. The term deafness can be used as a blanket term to encompass the varying degrees and types of deafness which can have different implications. Many deaf individuals are members of a cultural and linguistic minority (Denmark, 1994) and thus use a capital "D" for Deaf. This distinguishes between those that have become deaf in later life, or those that do not align themselves with the Deaf community. If no statement of identity or type of deafness is required, then the word deaf will have a small 'd'. This follows the standard way of representing the differences, as used by Austen and Crocker (2004) and will be used in this review.

LITERATURE REVIEW: WHAT IS THE PREVALENCE OF ABUSE IN THE DEAF AND HARD OF HEARING POPULATION?

The aim of this paper was to examine and integrate the existing literature regarding abuse experienced within the deaf and hard of hearing population.

The deaf and hard of hearing population are thought to be at greater risk of abuse than other populations. This includes difficulties associated with communication. For example, Knutson, Johnson and Sullivan (2004) found that mothers of children with profound hearing impairments were more likely to use physical discipline with their children. Other research suggests that deaf children are at greater risk of sexual abuse, perhaps the abuser may believe that the deaf child would not be able to complain or would be unaware that the behaviour was unlawful, or the deaf child may have limited sexual awareness or be over-dependent on others (Denmark, 1994).

A systematic search of the literature in May 2016 identified fourteen papers relating to abuse in deaf and hard of hearing populations.

The prevalence rates reported within the studies indicate that the experience of abuse was very frequent. The studies included children and adult participants. Both studies reporting victimisation of neglect identified a prevalence of 47% in their participant sample. Emotional abuse and physical abuse have similar prevalence rates reported, ranging from 39-48% and 39-46.3% respectively. Sexual abuse was reported to have prevalence figures of 32-39.3%. When compared to hearing samples, these percentages were all found to be higher, although one study found no difference when examining emotional abuse.

With regards to Intimate Partner Violence (IPV), the findings were more varied, and it was harder to derive conclusions. When examining emotional/psychological abuse, it was reported to be experienced by 25.4% to 91% of the samples. Physical abuse was reported to range from 20.1% to 53.8%, and sexual abuse was reported to be similar figures, ranging from 14.5% to 61%.

This review suggests that the deaf and hard of hearing population are vulnerable to all forms of abuse, and that the prevalence of abuse is generally higher than that of the hearing population. Traditional risk factors also appear to apply within this population, but there are also specific risk factors associated with communication difficulties which can increase their vulnerability. Difficulty in accessing the support regarding these risk factors may provide an explanation regarding the high prevalence rates, therefore working with families early, supporting them with the communication barriers and the frustrations this might bring, educating children about appropriate behaviours, and increasing the access to interpreters may be useful for services to prioritise. Based on this review, it is also suggested that when an individual who is deaf or hard of hearing is in contact with services, the possibility of child maltreatment, or violence within their current relationships should be considered in the assessment process and treatment plan.

EMPIRICAL PAPER: PROFESSIONALS' EXPERIENCE OF DEAF OFFENDERS WITH MENTAL HEALTH DIFFICULTIES

There is a lack of research regarding deaf offenders with mental health difficulties. There are specific challenges that are unique to this population when they come into contact with the CJS. For example, communication difficulties and misunderstandings. Other research suggests there is an 'indifference and hostility' towards Deaf persons within the American legal system and that police officers may be unlikely to pursue a conviction due to feeling sorry for Deaf persons, or an unwillingness or inability to locate an interpreter (Vernon and Miller, 2005). The aim of this study was to develop a greater understanding of professionals' experiences of this offender group and factors that influence their involvement with services.

This study used a method called Grounded Theory (Charmaz, 2000) to explore the experiences of nine police officers and fourteen mental health professionals. Grounded theory is beneficial when there is a lack of prior research and helps in developing a model to frame future research. The participants were recruited from the local police force and NHS Trust. The participants that volunteered included a range of ranks of police officers and a variety of different healthcare professionals.

The analysis resulted in a theoretical model (see figure 5) outlining the influencing factors when working with deaf offenders with mental health difficulties. The model suggests that when a deaf offender with mental health difficulties comes into contact with the health or justice system there are multiple factors that influence the outcome. These include factors associated

with the system, the individual professional, and the offender, and are influenced by relational factors. Table 6 outlines the subcategories within each main category.

Figure 5: Theoretical Model for Public Domain Briefing Document

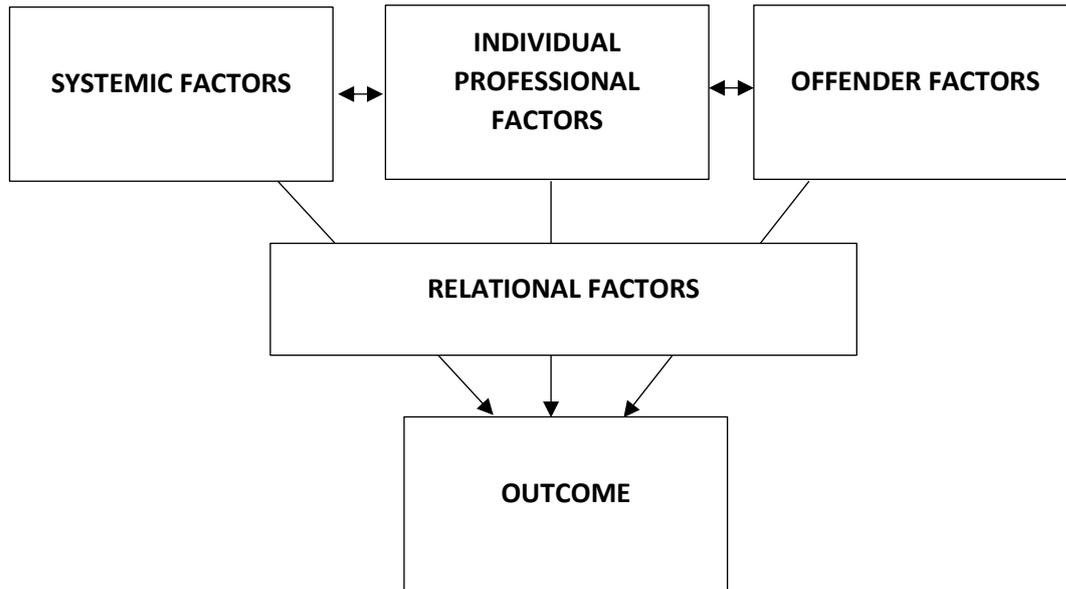


Table 6: Subcategories within the Five Main Categories

Category	Subcategory	Sub-subcategories
1.Systemic Factors	1.1 Lack of service provision and resources and its consequences	
	1.2 Respective service’s perceived role	
	1.3 Access to interpreter’s and implications	
2. Individual Professional Factors	2.1 Perception of deaf offenders	2.1.1 “poor little deaf person”
		2.1.2 Deaf lack understanding
		2.1.3 The “deaf card”
		2.1.4 Too difficult
	2.2 Perception of the behaviour	
	2.3 Knowledge of deaf mental health	
3. Offender Factors	3.1 Diagnosis of mental illness	
	3.2 Responsibility and Capacity	
	3.3 Severity of offence	
	3.4 Communication Style	
4. Relational Factors	4.1 Experience of services	
	4.2 Relationship with offender	
5. Outcome	5.1 Consequences	
	5.2 Emotional Reactions	
	5.3 Striking a balance	
	5.4 Deaf versus Hearing	

The findings suggest that there is not one central factor that influences the outcome, but a complex scenario that involves many factors. The individual professional's ability to effectively work with deaf offenders with mental health difficulties depends on their system's resources, perceived role and access to interpreters, their own knowledge of this offender group and their perceptions of this group, and the offender's communication abilities, diagnosis and capacity. In this sample of professionals, they often reported under-resourced services with difficulty accessing interpreters and a lack of training and knowledge regarding this offender group. They described a number of different perceptions of this group, perhaps due to a lack of knowledge and training. The impact of mental health and the issue of communication with this offender group were prominent factors that led to professionals feeling 'stuck', or resulted in the offender group receiving a perceived leniency and thus a lack of consequences (e.g. diversion, no conviction). For most it was difficult to 'unpick' this and identify whether this was due to the deafness or the mental health difficulty.

Professionals' lack of knowledge about deafness and mental health is echoed within other research over many years (Ralston, Zazove and Gorenflo, 1996; Smith, 2010; Thomas, Cromwell and Miller, 2006; Velonaki et al, 2015). Despite this re-occurring theme there continues to be a lack of training provided for many professionals. This research highlights that further training and education to improve professionals' knowledge of deafness and mental health is still required. It may be that improving professional knowledge will also influence other areas included within the model, for example, the professionals' perceptions of this offender group, especially if deaf people were involved in the delivery of training.

The findings also suggest a lack of clarity about the role of each service regarding offenders with mental health difficulties. This may be due to the overlap across both services which requires inter-agency working and effective communication between services. Promoting inter-agency working through training and co-locating staff may encourage skill sharing and can benefit all parties by making the best use of the resources available. This lack of clarity may result in the needs of this offender group being unnoticed.

Communication was found to be influential within all areas of the model. It was considered to be the largest barrier and yet the most important element when working with deaf offenders with mental health difficulties. Improving access to interpreters within services would positively impact the professional's ability to work effectively with the offender, but also potentially shorten the length of time the deaf offender has to stay within the services. Officers trained in BSL available at each station would provide a link person to the deaf community and to other officers who may come in to contact with deaf people.

This study has provided a model of which to structure such future research and it would be beneficial to test some of the links suggested, which can be undertaken using further qualitative or quantitative strategies.

REFERENCES

- Charmaz, K. (2000). Grounded Theory: Objectivist and Constructivist Methods. In Handbook of Qualitative Research N. Denzin & Y. Lincoln (eds). Sage: USA.
- Denmark, J. (1994). *Deafness and Mental Health*, London: Jessica Kingsley Publishers.
- Knutson, J., Johnson, C., & Sullivan, P. (2004). Disciplinary Choices of Mothers of Deaf Children and Mothers of Normally Hearing Children, *Child Abuse & Neglect*, 28, 925-937.
- Ralston, E., Zazove, P., and Gorenflo, D. (1996). Physicians' Attitude and Beliefs about Deaf Patients, *Journal of the American Board of Family Practice*, 9, 167-173.
- Smith, C. (2010). An Analysis of the Assessment and Treatment of Problematic and Offending Behaviours in the Deaf Population. Dissertation Chapter 3; Aspects of the Processing of Deaf Offenders within the Criminal Justice System. University of Birmingham, ForenPsyD
- Thomas, C., Cromwell, J & Miller, H. (2006). Community Mental Health Teams' Perspectives on Providing Care for Deaf People with Severe Mental Illness, *Journal of Mental Health*, 15, 301-313.
- Velonaki, V., Kampouroglou, G., Velonaki, M., Dimakopoulou, K., Sourtzi, P., & Kalokerinou, A. (2015). Nurses' Knowledge, Attitudes and Behaviour toward Deaf Patients, *Disability and Health Journal*, 8, 109-117.
- Vernon, M., and Miller, K. (2005). Obstacles Faced by Deaf People in the Criminal Justice System. *American Annals of the Deaf*, 3, 283-291.

VOLUME ONE

APPENDICES

Elizabeth Sarah Wakeland

School of Psychology

University of Birmingham

School of Psychology

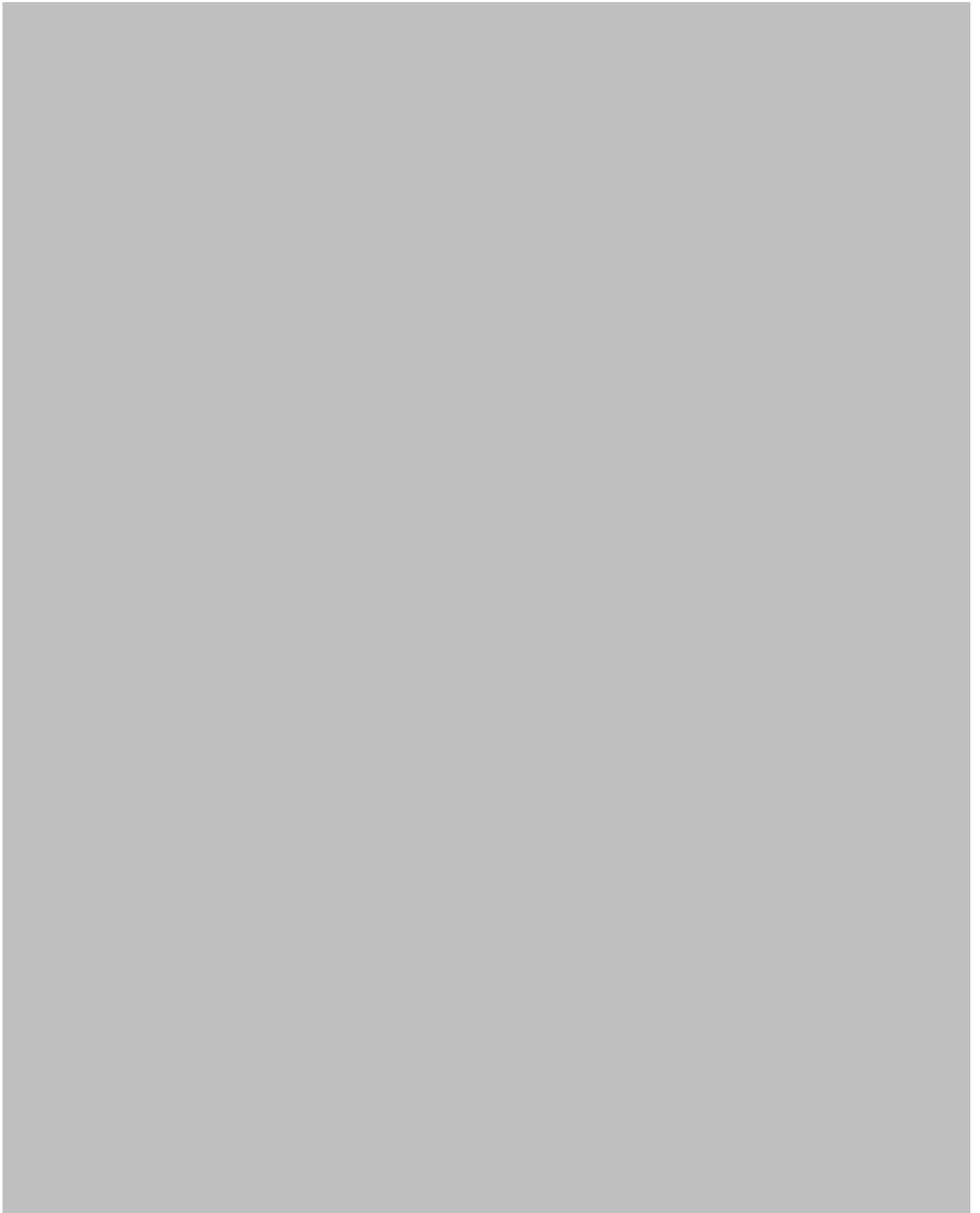
University of Birmingham

Edgbaston

Birmingham

B15 2TT

APPENDIX A: Down's & Black (1998) Methodological Quality Checklist







APPENDIX B: Colour Coded Quality Scores and Risk of Bias Rating

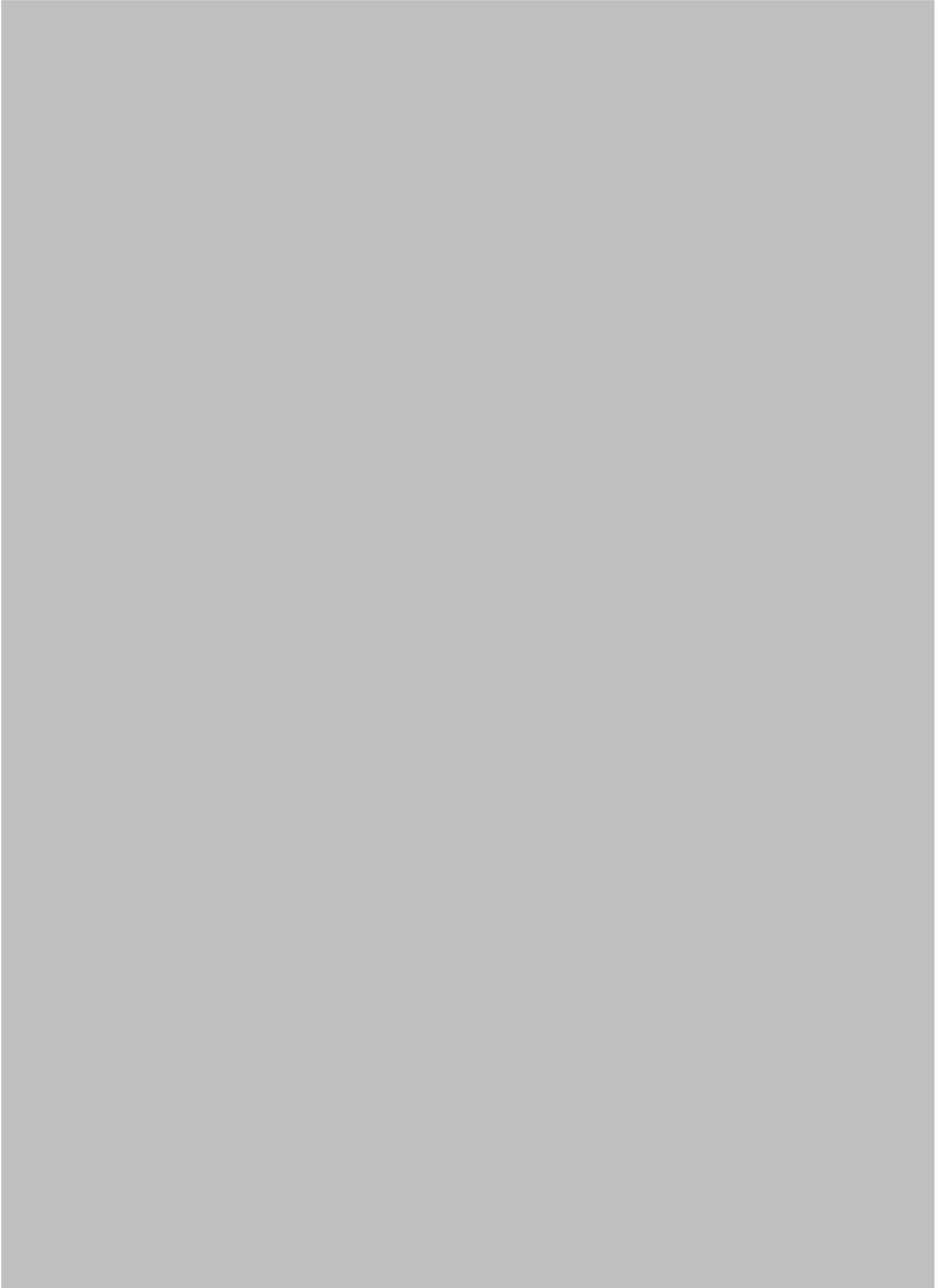
Methodological Score	Methodological Quality	Risk of Bias
19-26	Good	Low risk
11-18	Moderate	Moderate risk
0-10	Poor	High risk

APPENDIX C: List of Papers used in the Literature Review

- Anderson, M., & Pezzarossi, C. (2011). Is it Abuse? Deaf Female Undergraduates' Labelling of Partner Violence, *Journal of Deaf Studies and Deaf Education*, 17, 273-286.
- Anderson, M., & Leigh, I. (2011). Intimate Partner Violence against Deaf Female College Students, *Violence against Women*, 17, 822-834.
- Kvam, M. (2004). Sexual Abuse of Deaf Children. A Retrospective Analysis of the Prevalence and Characteristics of Childhood Sexual Abuse among Deaf Adults in Norway, *Child Abuse and Neglect*, 28, 241-251.
- McCabe, P., Levi-Minzi, M., Van Hasselt, V., & Vanderbeek, A. (2011). Domestic Violence and Social Support in a Clinical Sample of Deaf and Hard of Hearing Women, *Journal of Family Violence*, 26, 63-69.
- Ohre, B., Uthus, M., von Tetzchner, S., & Falkum, E. (2015). Traumatization in Deaf and Hard-of-Hearing Adult Psychiatric Outpatients, *Journal of Deaf Studies and Deaf Education*, 20, 296-308.
- Pollard, R., Sutter, E., & Cerulli, C. (2014). Intimate Partner Violence Reported by Two Samples of Deaf Adults via a Computerised American Sign Language Survey, *Journal of Interpersonal Violence*, 29, 948-965.
- Schenkel, L., Rothman-Marshall, G., Schlehofer, D., Towne, T., Burnash, D., & Priddy, B. (2014). Child Maltreatment and Trauma Exposure among Deaf and Hard of Hearing Young Adults, *Child Abuse and Neglect*, 38, 1581-1589.

- Schild, S., & Dalenberg, C. (2012). Trauma Exposure and Traumatic Symptoms in Deaf Adults, *Psychological Trauma: Theory, Research, Practice and Policy*, 4, 117-127.
- Schild, S., & Dalenberg, C. (2015). Consequences of Child and Adult Sexual and Physical Trauma among Deaf Adults, *Journal of Aggression, Maltreatment and Trauma*, 24, 237-256.
- Sullivan, P., & Knutson, J. (1998b). Maltreatment and Behavioural Characteristics of Youth Who Are Deaf and Hard-of-Hearing, *Sexuality and Disability*, 16, 295-319.
- Sullivan, P., & Knutson, J. (2000). Maltreatment and Disabilities: A Population-Based Epidemiological Study, *Child Abuse and Neglect*, 24, 1257-1273.
- Titus, J. (2010). The Nature of Victimization Among Youths with Hearing Loss in Substance Abuse Treatment, *American Annals of Deaf*, 155, 19-30.
- Williams, L., & Porter, J. (2014). A Comparison of Deaf College Students' and Hard of Hearing College Students' Experiences and Risk Factors of Psychological and Physical Abuse, *Sage*, 1-17.
- Williams, L., & Porter, J. (2015). The Relationship Between Child Maltreatment and Partner Violence Victimization and Perpetration among College Students: Focus on Auditory Status and Gender, *Journal of Interpersonal Violence*, 30, 2304-2325.

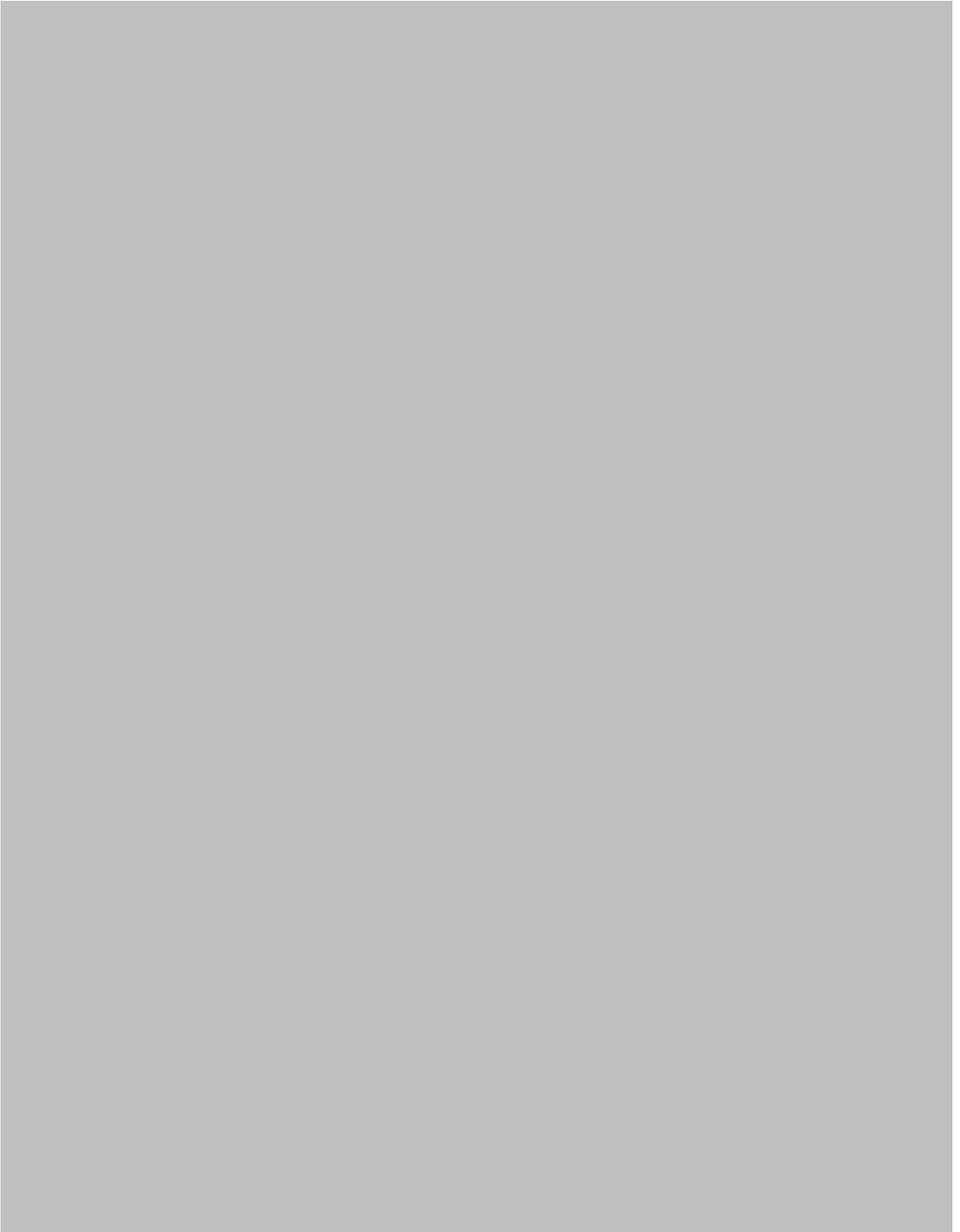
APPENDIX D: University of Birmingham Ethical Approval



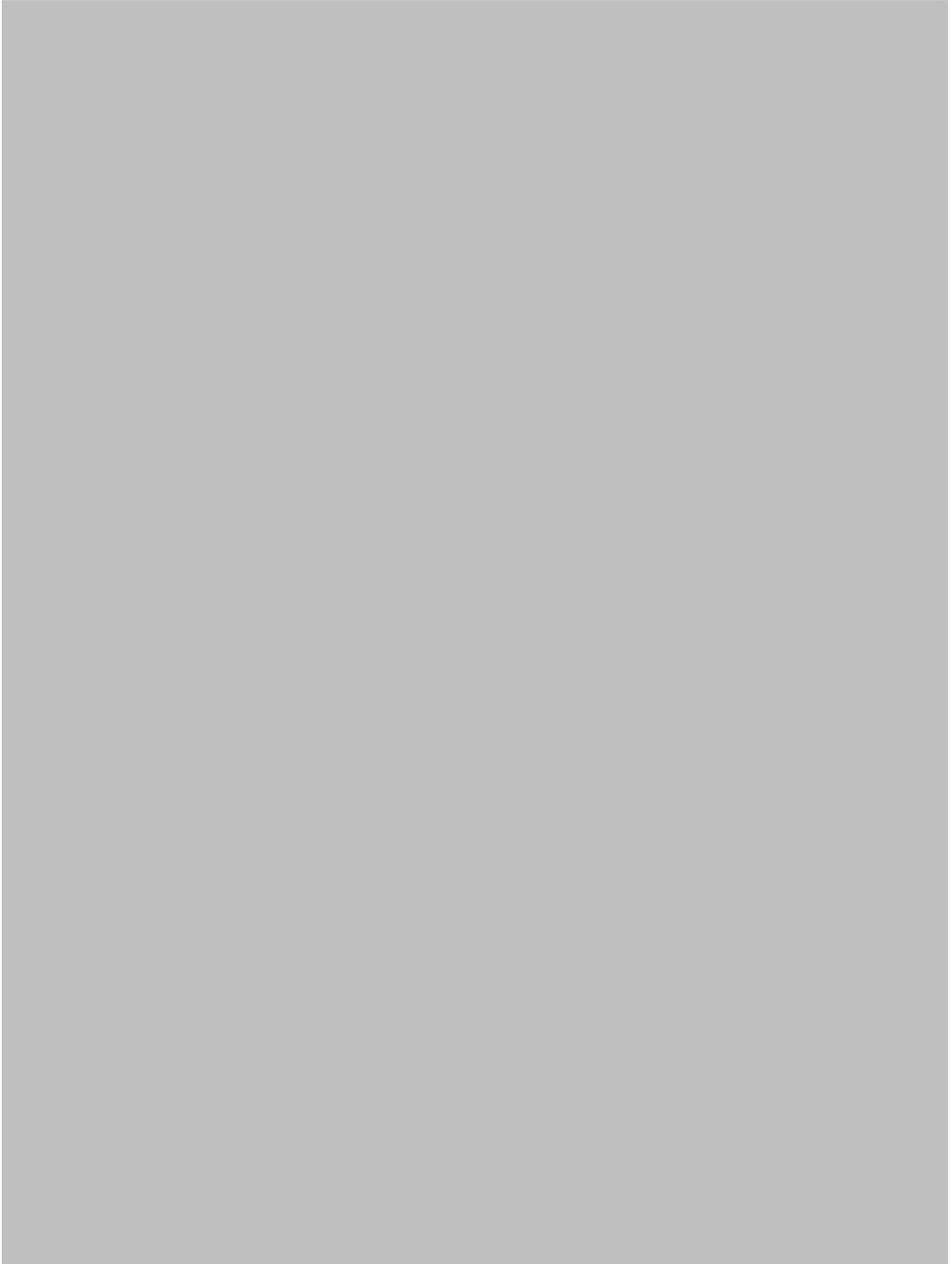
APPENDIX E: Participating NHS Trust R&D Approval Letter



APPENDIX F: Participating Police Force Approval Letter



APPENDIX G: Sponsorship form University of Birmingham



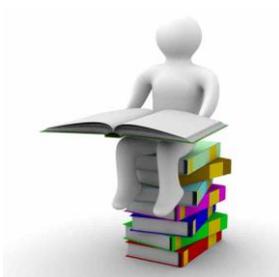
INTERESTED IN TAKING PART IN RESEARCH?

HAVE EXPERIENCE OF DEAF OFFENDERS
WITH MENTAL HEALTH DIFFICULTIES?

WE WOULD LIKE TO TALK TO
YOU ABOUT YOUR
EXPERIENCES!



FOR FURTHER INFORMATION, PLEASE
E-MAIL ELIZABETH WAKELAND AT:

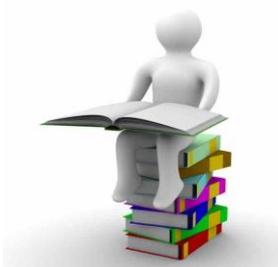


INTERESTED IN TAKING PART IN RESEARCH?

HAVE EXPERIENCE OF DEAF PEOPLE
WITH MENTAL HEALTH DIFFICULTIES
WHO DEMONSTRATE
CHALLENGING BEHAVIOUR?
WE WOULD LIKE TO TALK TO
YOU ABOUT YOUR
EXPERIENCES!



FOR FURTHER INFORMATION, PLEASE
E-MAIL ELIZABETH WAKELAND AT:



APPENDIX J: Participant Information Sheet

PARTICIPANT INFORMATION SHEET

Title of Project: *Deaf people with mental health difficulties who engage in challenging or offending behaviours: A professional's view*

Researchers: Elizabeth Wakeland, Dr Sally Austen and Professor John Rose.

My name is Elizabeth Wakeland and I am a Trainee Forensic Clinical Psychologist. As part of my training I am required to carry out a research project. I am particularly interested in the perception of deaf people within the mental health system, which includes the involvement of professionals. The project aims to examine professionals' perception of incidents that involve deaf people with mental health problems via interviewing participants. The interview will last approximately 30-60 minutes.

You are being invited to take part in this research project. Before you decide whether to take part or not, it is important for you to understand why the research is being done and what it will involve. Please take the time to read the following information carefully. Talk to others about the project if you wish.

- Part 1 tells you the purpose of this project and what will happen if you take part.
- Part 2 gives you more detailed information about the conduct of the project.

Ask us if there is anything that is not clear or if you would like more information. Take time to decide whether or not you wish to take part.

Part 1

What is the purpose of this project?

There has been limited research carried out regarding deaf people who have mental health difficulties. There has been even less involving professionals and deaf people with mental health difficulties. This leaves an important gap in research. This project aims to collect information from professionals who have some experience within their role of deaf people with mental health difficulties who have displayed challenging or offending behaviours. The information will be obtained through the use of interviews. It is hoped that information regarding professional's experience, knowledge, understanding and procedures will be collected. The researcher is interested in learning more about these experiences to create a starting point for further work.

Why have I been invited to take part in this project?

You were asked to participate in this research due to your experiences of managing situations within your role that have involved deaf persons with mental health difficulties. This is important as you have knowledge and experience of the factors involved when managing deaf individuals with challenging behaviour. You may also have formed a professional opinion regarding this group of people, which will be interesting and valuable to hear about.

Do I have to take part?

Participating in this project is entirely voluntary; you do not have to take part. If you chose to participate, but change your mind within two weeks of your interview, you are

free to withdraw from the project without providing a reason. Any information collected will then be destroyed.

Part 2

What happens if I agree to take part?

If you do chose to participate, you will be given this information sheet to keep, and be asked to sign a consent form. A time, date and place of your choosing will be arranged in order for the interview to take place. The interview will last between 30 – 60 minutes and will be recorded. This is to help with transcribing and analysing the content at a later date. All your personal information and data (e.g. interview recordings) will be anonymised and kept in a safe, secure environment. If, during the interview, you disclose something (e.g. an act of misconduct or poor professional behaviour), then the interviewer has a duty to report this to your manager/ supervisor. Your employer will not have access to the information collected during interview at any time.

What will happen to the results of the research project?

The results of this project will be written up within a thesis. The thesis forms part of my doctorate qualification at the University of Birmingham. The thesis will be made available to subsequent students at the University. The project may also be published in a journal that can be publicly accessed. Within the write-up, quotes from interviewees are likely to be used. These will be anonymised, however they will be quoted verbatim therefore may be recognisable. The results will be summarised in an accessible summary, sent to your workplace, or to your e-mail if you wish.

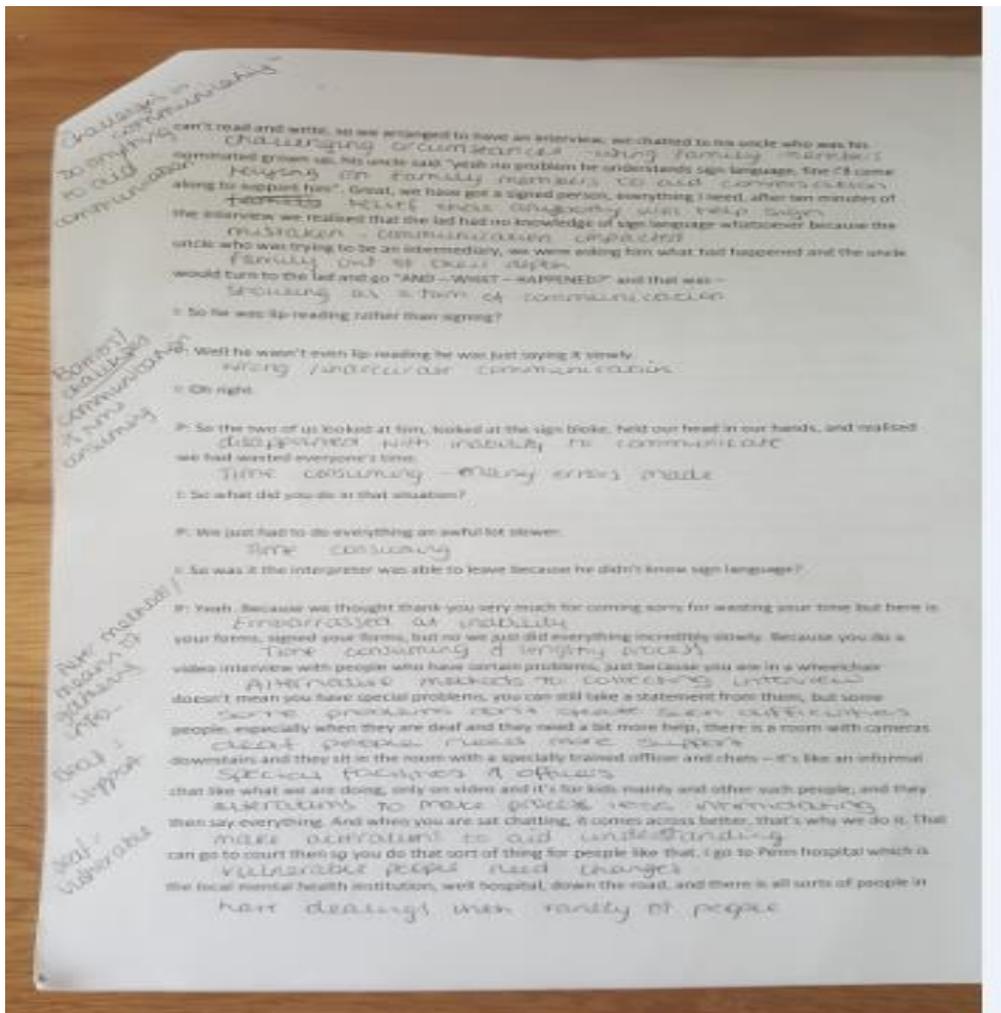
What happens if I have any further concerns?

If you have any concerns, or wish to discuss any aspect of this research, during any point of this research project, feel free to contact me, or my supervisors. We can be reached using the following:

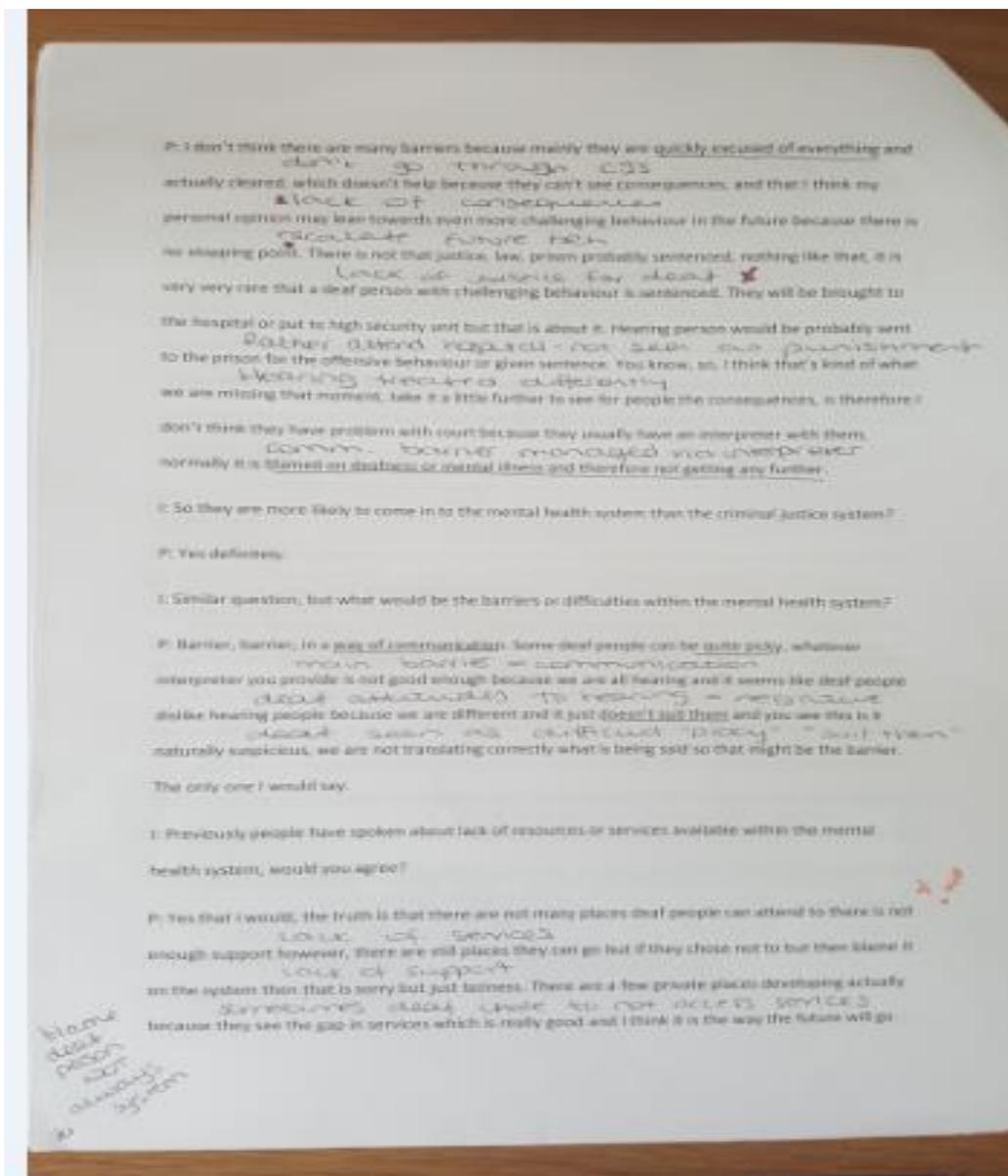
Email me at:

Email my university supervisor at:

APPENDIX K: Example of Line by Line Coding in a Police Officer's Transcript



APPENDIX L: Example of Line by Line Coding in a Mental Health Professional Transcript



APPENDIX M: Memo Writing Example

