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<td>Abstract:</td>
<td>Five years ago, advice stated that regional Police Link Officer for the Deaf (PLOD) schemes (Walton, Morgan &amp; Wells, 2011) should be increased to enhance access for D/deaf people. This study investigated D/deaf awareness, attitudes towards D/deafness and awareness of PLOD schemes amongst Police Crime Commissioners (PCCs) and Police Officers. A general lack of awareness of PLOD schemes was revealed. Feedback from the D/deaf community also found differences between their communication preferences and those being used by the police. These findings highlight a need for further investigation into the awareness of and nature of services for the D/deaf.</td>
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Introduction

D/deafness

Action on Hearing Loss explain that 11 million people within the UK are affected by hearing loss and this is expected to rise to 15.6 million by 2035 (Action on Hearing Loss, 2016). This is in line with the ageing population. With this in mind, it becomes important to consider how we perceive deafness and hearing loss and the ways in which we approach working with people affected by it. Paijman-Baines created a visual diagram (Baines, 2007) conceptualising D/deafness on a continuum. On one end D/deafness is regarded as an identity (‘D’) whereas it is regarded as a medical condition (‘d’) on the other. This can be a useful tool when approaching D/deafness as it explains how differently the D/deaf community can perceive themselves and also how they can be perceived by others. For example, the disability model (‘d’) is medically focussed and regards D/deafness as simply being unable to hear whereas the cultural model (‘D’) regards D/deafness as a culture rather than a disability (O’Rourke & Grewer, 2005).

Predominantly using the disability model can produce and exacerbate problems for the D/deaf community as it disregards any additional educational needs, mental health needs (Paul & Quigley, 1990) and linguistic challenges.

D/deafness and Access

The Equality Act (2010) was implemented to tackle equality and access issues by overseeing the protection from discrimination for people with protected characteristics; age, gender, race, disability, gender reassignment, religion and belief, pregnancy and maternity, marriage and civil partnership, sex and sexual orientation. It aims to ensure
individuals who have protected characteristics are not discriminated against and are treated equally within society (Action on Hearing Loss, 2015). However, the general availability of services for the D/deaf community currently appears to be sparse and inconsistent.

The National Registers of Communication Professionals Working with Deaf and Deafblind People (NRCPD) documented a total of 883 registered sign language interpreters in 2013-14 (NRCPD, 2015) to provide for the needs of 800,000 severely/profoundly D/deaf individuals. When registered interpreters are not available, alternative methods are often used such as using family members to interpret information, even if young children are the only available family member. This can result in significant problems (Baines, 2007; Reeves, Kokoruwe, Dobbins, & Newton, 2003) due to increased risk of miscommunication or misdiagnosis because of limited understanding, as well as potentially breaching confidentiality.

Statistics from Action on Hearing Loss stated that 24,000 people across the UK use sign language as their preferred language (Action on Hearing Loss, 2016). This leaves the remaining D/deaf individuals primarily using other communication methods. Therefore, matching the communication needs of D/deaf individuals is not as simple as providing BSL interpreters.

Similarly, variations in language and dialect between the individual and interpreter will affect how much information is understood, as will the educational level of the individual. Some, not all, pre-lingual, profoundly D/deaf individuals may not have an established, formal method of communication due to minimal language access, or as a
result of using ‘home signs’ which may not be understood by others. Similarly, their understanding of English could be minimal. Underlying mental health issues or learning disabilities may not overtly present themselves; therefore understanding proceedings via interpreters is not always guaranteed. To overcome these difficulties and to ensure information is understood fully, an appropriately trained interpreter should be present who has the capability to comment on any uncertainties surrounding an individuals’ communication (Denmark, 1994).

The Charter for British Sign Language was proposed in 2003 in an attempt to improve access to services for D/deaf people and to improve D/deaf awareness (British Deaf Association, 2014). It incorporates five pledges that organisations and local authorities can choose to sign up to:

1. Ensure access for D/deaf people to information and services

2. Promote learning and high quality teaching of BSL

3. Support D/deaf children and families

4. Ensure staff working with D/deaf people can communicate effectively in BSL

5. Consult with the local D/deaf community on a regular basis.

Further to the Charter for BSL, in September 2015, Scotland passed the BSL bill. This was originally proposed in 2012 by Mark Griffin in an attempt to raise awareness of BSL as a language. The hope is to increase the profile of this language in order to allow its users to have an equal voice in how policies and services are delivered (Scottish
Parliament, 2014a). By passing this as a bill, it means the Scottish Government now have a duty to ensure BSL is promoted and its use becomes more widespread within policies and service delivery. There was some opposition as it was argued by some that hearing loss/D/deafness is already covered under the Equality Act (2010). However, it is not aimed at addressing specific needs of this community, rather ensuring that the profile of this language is equal to others such as Gaelic (Macpherson, 2015). The focus on language is a result of a divide within the D/deaf community with regards to how they perceive their hearing loss. Many see it as a cultural difference whilst others regard it as a disability requiring communication support (Macpherson, 2015). Regardless, like many other cultural minorities who do not use English as a first language, the D/deaf community should have access to information and services without having to refer to themselves as disabled.

Finally, an increase in technology has also impacted D/deaf communities across the country, seeing active membership of D/deaf clubs declining and, in some cases, closing completely (Austen & Crocker, 2004). Despite providing easy ways for younger generations to communicate, the increase of new technology is paving the way towards social isolation for many older members of the D/deaf community. This is due to limited opportunities for socialisation, as well as the challenge of familiarising themselves with the changing world of technology (Hawthorn, 2000).

**D/deafness and Access to the Police**

In 2011, a Strategic Command Course was published for Sign Health stating that services for D/deaf people within the criminal justice system needed improving. This advised
increasing the number of regional PLOD schemes within police forces (Walton, Morgan & Wells, 2011). PLOD schemes provide D/deaf awareness and basic sign language skills for police officers in an attempt to ensure D/deaf people can communicate when they enter a police station or contact the police. The PLOD scheme was initially established in Hampshire in 1999 as a way to link the D/deaf community and the police (Hampshire Constabulary, 2014). It also suggested that Sign Health should incorporate specific sections in their website for criminal justice related issues and how to communicate with local police forces. A number of police forces throughout the UK have also signed up to the Charter for British Sign Language. Leicestershire police were the first force to sign the charter agreeing to make improvements within their force (Leicester Mercury, 2014) and Nottinghamshire police have followed (British Deaf Association, 2015).

Similarly, research has advised that police forces should receive D/deaf awareness training to avoid miscommunication or misunderstandings relating to behaviour such as being uncooperative, rude or insulting (LaVigne & Rybroek, 2011). To expand on this, it is generally acknowledged within research that language deficits can negatively impact social interactions within children, resulting in difficulties initiating and maintaining conversations (LaVigne & Rybroek, 2011).

These can manifest throughout adulthood and can be mistaken for a learning disability, mental illness, or general rudeness. This highlights how imperative D/deaf awareness is and how it could reduce misunderstandings and lead to better working relationships between the police and the D/deaf community. Previous research by Hogue and Race (2012) found that D/deaf awareness training was linked to more positive attitudes towards D/deafness in mental health professionals, though the cause and effect remains
unclear.

PCCs were introduced to bridge the gap between the police and the public with the aim of providing a voice in which the public can be heard (Green, 2013). A provision such as this is especially important for minorities such as the D/deaf community because of existing vulnerabilities regarding potential social isolation (Arlinger, 2003). An example of bridging the gap comes from Leicestershire, where PCC Sir Clive Loader uploaded a BSL video to the website explaining the police crime plan. This video included both BSL and subtitles to ensure optimum accessibility.

In line with the Equality Act (2010), regional police forces distribute yearly equality reports including specific references to hearing loss and D/deafness. Reports include having PLOD schemes, signposting to appropriate services (Avon and Somerset Police, 2013), providing BSL DVDs to explain rights and procedures, organising conferences to liaise with the D/deaf community (Avon and Somerset Police, 2014) and asking PCCs for specific funding (Essex Police, 2015). Now, we begin to see a hierarchy emerging with regards to service provision and implementation, with PCCs having power over police officers and the D/deaf community.

Moving on from 2011, there remains improvements to be made, especially with regards to understanding the specific needs of the D/deaf community when accessing services. The JUSTSIGN project (Fitchett, 2016; Napier, 2016) gathered information from focus groups and interviews with police officers, interpreters and members of the D/deaf communities from the UK, Switzerland, Belgium and Ireland. Findings from this study indicated a lack of understanding from police officers with regards to specific needs of
D/deaf people and also that there are not enough interpreters to meet the needs of this population (Napier, 2016). One of the products of this project was the facilitation of classes and workshops for police officers and interpreters in relation to working with the D/deaf community (Napier, 2016).

This highlights why further study was needed, to assess the current awareness of specialist services and schemes such as the PLOD schemes and to assess existing D/deaf awareness amongst the police. Though this study covers some of the points raised by Napier (2016), it also looks at the priority of this area amongst PCCs which is important due to the influence they have over funding allocation and where resources can be focused.

**Method**

A National exploration was conducted in the form of an online questionnaire. It aimed to investigate current relationships between the D/deaf community and regional police forces within the UK. Using the existing literature as a base for exploration, it was important to research how factors such as communication and awareness of D/deaf related issues impacted on the services received by individuals. Similarly, it was important to assess the attitudes of police officers and police crime commissioners in relation to deafness. A hierarchical framework underpinned participant selection which related to the level of perceived influence over local police focus. Perceived influence was not investigated but a hierarchical underpinning resulted in Police Crime Commissioners, Police Officers and members of the D/deaf community being included in the study. It was important to investigate any differences between the groups in order to
obtain valuable data which can be used to inform future work practice.

Participants and questionnaires

Participants were grouped into three population samples: PCCs, Police Officers and members of the D/deaf community. There were three different questionnaires tailored to each population sample and were available online for 6 weeks (see appendices A, B & C for copies of each questionnaire).

An online link to the PCC questionnaire was sent via email to PCCs covering the 46 regions across England and Wales who were also asked to forward the link to the Police Officer questionnaire to Police Officers in their region. Members of the D/deaf community were recruited through social networking sites such as Facebook where a BSL video was uploaded, explaining the study and how to participate. Participants were also recruited via word of mouth and via D/deaf organisations; DeafVision, Carlisle Access Group, Eden Access Forum, British Deaf Association, InterpreterNow, and DeafHope.

PCCs were asked about their areas of priority with regards to police resources and funding to establish whether D/deafness would enter onto their radar. They were also asked about their awareness of general services such as D/deaf clubs and if they knew of any police officers who are trained specifically in D/deaf awareness. The final section addressed in this questionnaire focused on attitudes towards D/deafness and this was assessed using the Attitudes Towards Deafness Scale. The Attitudes Towards Deafness (ATD) Scale was originally created to assess the attitudes of mental health professionals in relation to D/deaf people (Cooper et al, 2004). The scale was based on previous reports
and lived experiences of D/deaf individuals. It was developed to ensure that it was
applicable to all professionals working with D/deaf individuals, not just specifically
within mental health settings. The scale consists of 22 items which are scored using a 1
(strongly disagree) - 5 (strongly agree) likert scale as used in Nagakura (2014).

Frontline members of staff (police officers) were asked about communication confidence,
contact frequency with the D/deaf community and reasons for contact with the D/deaf
community. Attitudes were also assessed in this questionnaire using the ATD scale.

The main focus of the questionnaire for the D/deaf community was to assess the
accessibility to services by asking questions surrounding the D/deaf awareness of police,
communication preferences and also, their awareness of PLOD and their overall
experience of contacting the police. As well as being available in written English, a
D/deaf sign language teacher translated this questionnaire including answer choices into
British Sign Language.

Other qualitative information was obtained via email and was used to support other
results and add depth to existing information.

**Data Analysis**

Data analysis was done using SPSS. T-tests were used to highlight any significant
differences between the PCCs and Police Officers with regards to attitudes. A pearson’s
correlation was performed to test the hypothesis that deaf awareness training would
correlate with attitudes towards deafness.

**Ethical Considerations**
This study passed through the University of Lincoln’s ethics procedure. In addition to confidentiality, informed consent, debrief, psychological distress and personal information, specific measures were implemented to account for communication barriers. As a D/deaf population was being recruited into the study, a British Sign Language version of the questionnaire had to be included. By including a BSL translation, this ensured the information relating to the content of the study was understood and meant informed consent was given prior to starting the questionnaire.

**Results**

**Demographics**

Eighteen PCCs, seventy five police officers and fifteen members of the D/deaf community were included in the data analysis for this study (see Table 1). Of the 46 regions across England and Wales, sixteen had representation from PCCs and twenty had representation from police officers. South Wales had the highest number of police officer respondents. An additional thirty-four participants consented to participate in the study but did not continue to answer any questions and were thus discounted from data analysis. A total of eight participants did not consent to take part in the study.

Respondents who answered ‘unknown’ for hearing loss were included in the ‘no hearing loss’ category due to the assumption that no hearing loss was present. For those within the D/deaf community sample it is possible that a hearing individual working within a D/deaf organisation (e.g. support worker) answered the questionnaire thus explaining the 7% (one participant) without hearing loss.

**Awareness and priority of services**
The reported areas of focus for PCCs included, victim focus, protection of vulnerable people, community engagement, better responses to the needs of victims and enhancing access to police services. The specific needs of D/deaf people were not addressed as an area of focus, though some may argue that they could come under ‘vulnerable people’ and/or ‘community engagement’.

63% of the PCC sample, 78% of the police officer sample and 64% of the D/deaf community sample were unaware of PLOD. In total, 74% of all participants were unaware of PLOD.

**Communication**

67% of PCC respondents thought that enough police officers were trained to communicate with the D/deaf community. Over half (67%) thought that D/deaf people are dealt and communicated with appropriately by the police. However, different opinions surfaced when PCCs were asked if individuals from the D/deaf community would feel confident when liaising with the police (see table 2).

The police were asked about their confidence levels when communicating with the D/deaf community. Only 15% of police officer respondents felt that they would be able to communicate with a member of the D/deaf community without any problems. 6% said they would not feel comfortable without an interpreter present. Other information obtained from email replies revealed that some forces were currently working towards improving access to information for the D/deaf community by adding BSL videos to websites, enforcing SMS text messaging services, signing up to the BSL charter and using existing links with the D/deaf community to disseminate information (Dyfed
Powys, South Yorkshire, Cumbria, Cambridgeshire and West Yorkshire).

The communication preference of this sample of D/deaf people was sign language which is different to what the police officers in this sample would choose to use. The difference in communication method reflects why none of the D/deaf people in this study had encountered a police officer who chose to use sign language. Unlike the D/deaf sample, the police officers would prefer to communicate by writing.

In terms of additional comments about service provision, one participant reported having to request a sign language interpreter, whilst others had to wait over 2 hours for an interpreter to arrive. Another individual commented:

‘Sometimes police can’t be bothered and speak to next person who may be able to understand better’.

**Attitudes**

Looking at the scores on the ATD, PCCs agreed the most with item 20 ‘I would like to see more D/deaf people at the clubs/societies I attend’ (mean=4.29) whereas police officers agreed more with item ‘More research should be done to find cures for D/deafness’ (M=3.79).

A series of t-tests revealed significant differences in attitudinal scores on items 2 ‘D/deaf children should learn to speak to communicate with hearing parents (R)’, 12 ‘D/deaf people should learn to lip read (R)’, and 20 ‘I would like to see more D/deaf people at the clubs/societies I attend’. PCCs scored significantly higher on these items.
The overall means for the ATD ranged from 65-98, which is indicative of neutral to positive attitudes. The results did not indicate any overall negative attitudes towards D/deafness. Police officers had more positive attitudes (M = 79.58, SD = 8.37) than PCCs (M = 78.14, SD = 7.03).

**D/deaf Awareness**

Being the bridge between the police and the community meant it was important to assess how many PCCs knew of local deaf clubs. Over half (63%) of PCCs were aware of regional D/deaf clubs. Due to the emphasis of providing officers with D/deaf awareness training, police officers were asked if they had taken part in a course before. 26% of police officer respondents had participated in a D/deaf awareness course (see table 3). There was a significant negative correlation between police officers who had participated in a D/deaf awareness course and scores on the ATD (τ(62), - .442; < 0.001). The results show that those participating in D/deaf awareness courses displayed more positive attitudes towards D/deafness which supports earlier recommendations.

Following on from this, 89% of participants from the D/deaf community said that the police had not displayed any D/deaf awareness when engaging with them. It was important to investigate this to see how the D/deaf community felt about police engagement. Under half (44%) of the respondents stated that their hearing loss had been recognised by the police. 8 out of 15 (53%) respondents reported using aids such as hearing aids or cochlear implants which are usually visible to others. Of this sample, one person reported that their hearing loss had not been recognized by the police despite wearing a visible hearing aid.
Contact Frequency

Half of respondents from the police officer sample reported that they come into contact with a member of the D/deaf community less than monthly. Only 5% reported never having come into contact with members of the D/deaf community as part of their job. The most common reason for coming into contact with members of the D/deaf community was reported to be individuals seeking information from the police. This was followed by 29% being victims of crime. Whereas, the D/deaf community reported the most common reason for contacting the police was to report a crime in addition to reporting information and lost property.

Other Information

All six PCCs who answered the question ‘More could be done to support the D/deaf community in relation to crime prevention and the reporting of crimes’ agreed with the statement. Suggestions included providing accessible information, targeting support, raising awareness and developing online reporting systems. One individual revealed they would seek assurance and ask questions regarding access for the disabled.

Overall Experiences

The overall experiences of the D/deaf community found that 44% reported a ‘somewhat poor’ experience, with 11% reporting a ‘good’ experience. Other experiences were reported during the distribution of the questionnaire but could not be included in the analysis due to a lack of informed consent.

Discussion
As mentioned previously, the D/deaf community can be perceived as suffering from a medical condition, or as a cultural/linguistic minority. Regardless of which end of the continuum they lie, the barrier remains unchanged: access to services and information. Limited D/deaf awareness amongst the police can lead to an increased chance of mistreating individuals due to misunderstandings, a lack of appropriate processing of potential crimes and a lack of trust in the police. The barriers to access are not invisible and this is evidenced through the implementation of policies and legislations which attempt to guide the police within their roles and ensure fair and equal access to services. Like many other cultural minorities who do not use English as a first language, the D/deaf community should have access to information and services without having to refer to themselves as disabled. This is why PLOD schemes were introduced, as an attempt to ensure easy access to the police.

**Links with the D/deaf Community**

This study found that 63% of PCCs, 78% of police officers and 64% of the D/deaf community were **unaware** of PLOD schemes. The schemes are clearly advertised on the police websites and information can be obtained via a Google internet search. Similarly, it is possible that specially trained officers exist but the region lacks a recognised PLOD scheme, explaining low awareness levels. Regardless of the reasons, it is important to raise the awareness and publicity of these schemes whilst highlighting their purpose as recommended in the Strategic Command Course (Walton, Morgan & Wells, 2011). These schemes provide opportunities for the D/deaf community to access the police and give information using BSL. Whilst not every D/deaf person will use BSL, it does support other findings from this study relating to communication preference and is a step towards
improving relations between the two groups. Another recommendation would be that police officers who are trained in D/deaf awareness and sign language should receive recognition by gaining the additional title ‘PLOD’.

**Communicating**

Another prominent finding within this study was the vast difference in communication methods being used by the police and those preferred by members of the D/deaf community. The most common choice of communication method for the D/deaf community within this study was sign language. The study did not specifically indicate BSL as a choice on the questionnaire but used ‘sign language’ in a more general sense to highlight the separation from other communication sources such as writing or lip reading.

Of the 11 million people with some degree of hearing loss, there are approximately 24,000 BSL users across the UK who prefer BSL as a language option. Though this is a fraction of the total population of people experiencing hearing loss, it still indicates a need to recognize it as a language choice for people. This is in vast contrast to the methods that would be chosen by the police, such as writing. This difference could be used to argue a lack of D/deaf awareness in our police forces. However, to make such a sweeping statement would be unfair. Other police officer respondents reported using interpreters to communicate which shows a level of awareness and adherence to policies such as the Equality Act. What these findings can provide us with is the justification for increasing the number of D/deaf awareness training courses being provided and also to enhance the profile of PLOD schemes.

The inconsistencies between communication methods that would be used, are currently
used, and those preferred by the D/deaf community requires further investigation. The results from this study indicate that contact frequency for this sample with the D/deaf community is usually less than monthly and is predominantly to report crimes to the police. Though the frequency of contact is low, it still highlights that the police should be equipped to communicate basic information to this community and be aware of cultural differences. Basic information should be provided in an accessible format, or individuals should be equipped to signpost if necessary. This suggestion is strengthened by the fact that we already know of the scarcity of available interpreters (NCRPD, 2015; Reeves et al, 2003) and the length of time it could take for an appropriately trained one to arrive. It may not always be financially viable to obtain an interpreter for short contact periods where an individual is seeking information, therefore it would be more appropriate to create collections of staff with basic signing skills in order to communicate simple information to or those seeking information and to provide appropriate contacts if necessary. These recommendations could be met with development of further PLOD schemes.

Additional findings state 67% of PCCs felt the police communicated with the D/deaf community appropriately. As frontline staff, it was important to investigate the confidence levels of police officers surrounding communication, as well as the methods being used. Only 11% of officers felt they would be confident in communicating with the D/deaf community, contradicting the earlier statement from PCCs suggesting enough officers were appropriately trained. This supports the research conducted as part of the JUSTSIGN project which revealed how police officers hold a dearth of information surrounding the specific needs required by the D/deaf population (Napier, 2016). Low
confidence levels within the police are also alluded to in a comment from one of the participants when stating the ‘police can’t be bothered and speak to next person who may be able to understand better’. However, we cannot determine whether this was due to low confidence, or whether it was a general avoidance strategy. Regardless, the individual who experienced this clearly felt that the police were apathetic in this instance. This raises the issue of initial, first point of contact. Officers should not portray the impression they cannot be bothered.

So despite PCCs stating enough officers were trained to communicate with the D/deaf community and that the communication methods being used were appropriate, there exists a large discrepancy amongst respondents when asked if the D/deaf community would feel confident when liaising with the police. There should be no discrepancy if opinions are that the police are doing their jobs effectively and using appropriate communication methods.

This suggests that PCCs should also be a focus when implementing further training. Once training needs have been addressed, PCCs could then look at annual equality reports to ensure a consistent, appropriate approach is used when communicating with the D/deaf community. Moreover, PCCs could advocate the Charter for BSL (British Deaf Association, 2014) and encourage forces within their regions to sign up to various pledges in order to raise awareness of the issues faced by the D/deaf community. By signing up to this charter, improvements in access and relations between the D/deaf community and the police would be expected.

Attitudes and Cultural Awareness
Overall, police officers had more positive attitudes towards D/deafness though they were not strong attitudes. It is unclear why they had more positive attitudes but it could be hypothesised that if more police officers receive D/deaf awareness training as a result of previous recommendations (Denmark, 1994; LaVigne & Rybroek, 2011), this could contribute to an increase in positive attitudes towards D/deafness. Evidence to support this is encompassed within the results of this study and corroborate earlier findings by Hogue and Race (2012). These results can be used to justify existing rationale to increase the amount of deaf awareness training (Denmark, 1994) and could increase positive attitudes amongst forces and improve relationships with the D/deaf community.

Within this study, 19% of the police officer sample had participated in a D/deaf awareness course. As indicated in the responses received, only one force (Dyfed Powys) within this sample, provides training for its own officers. This is much lower than would be expected for frontline staff after the recommendations that have been made (Denmark; 1994; LaVigne & Rybroek, 2011). Therefore, it may not be surprising that results found that 90% of the D/deaf community within this sample had encountered police officers who had displayed no D/deaf awareness. Being D/deaf is not something that is always immediately obvious and combined with the reported lack of D/deaf awareness, this does not represent a good relationship between the police and the D/deaf community. Not only this but it raises questions about the levels of D/deaf awareness that exist in order to be able to appropriately manage a situation after hearing loss has been uncovered and also, how the individual is communicated with thereafter. The concern is that due to a lack of awareness, misunderstandings such as those mentioned by LaVigne and Rybroek (2011) will continuously occur and will continuously disrupt relationships between the police
and the D/deaf community.

The policies, legislations and guidelines being implemented to ensure equality (Equality Act, 2010, Green, 2013, Scottish Parliament, 2014e) have the potential to improve access to services for the D/deaf community. However, it is important that communities such as the D/deaf community are liaised with regarding the effectiveness of such policies and to highlight any areas of weakness.

As a cultural/linguistic minority, communication preferences should be recognised so needs can be catered for within services. Similarly, highlighting the variety of communication methods used and additional complexities that are associated (Paul & Quigley, 1990) would enhance access and understanding. These results provided evidence to show the differences in communication between the preferences of the D/deaf community and those that would be chosen, or are currently used by the police. This difference indicates a need to improve the awareness of communication preferences of the D/deaf community as well as methods that are not favoured. Other methods that were reported being used were SMS text messaging services and webcams, some of which do not always work. As mentioned previously, older members of the D/deaf community may struggle to use technology (Hawthorn, 2000) and therefore may be unable to contact the police in these instances. This may further exacerbate any negative feelings towards the police and also any pre-existing mental health problems due to an increase in social isolation (Arlinger, 2003). Another factor to consider is the health and safety of individuals. Only one respondent reported experiencing a police station with specialist alert systems for alerting individuals to an emergency. This is something that requires urgent attention, especially if D/deaf individuals are waiting in police stations.
without adequate communication.

The overall experiences of contacting the police were recorded by 44% as somewhat poor, with only 11% stating a ‘good’ experience. However, the means obtained often related to one participant from a particular region, therefore the results would not be replicable to the rest of the D/deaf community within the regions.

**Limitations**

The findings of this study offer valuable information about the current provision of services for the D/deaf community across England and Wales and suggestions about ways in which services might need to be improved. However, conducting the study as part of the requirements for an MSc created challenges which in turn affect the generalisability of the study’s findings.

The study was successful in obtaining feedback from 18 of the 46 PCCs in the regions surveyed but although 75 police officers (from 20 regions) responded to the survey, it is unclear what this number represents of the total police force across these regions. Future research would benefit from a longer timescale to ensure police officers have sufficient time to complete questionnaires and to disperse to other forces/colleagues.

Probably the main limitation of the study, however, surrounds the relatively low response rate from members of the D/deaf community. When initial contact was made with the D/deaf community via social media, comments about the police were largely negative. These negative experiences meant that individuals were reluctant to participate in the study rather that seeing it as a platform to share their opinions.
To address this difficulty, additional, qualitative methods such as focus groups could be used to obtain richer data sets, allowing free discussions, rather than choosing from a quantitative selection of answers. Such methods may also allow greater participation from older members of the D/deaf community who may not have access to computers, or the internet. This would also provide a wider range of responses from areas underrepresented within this study.

Moreover, the D/deaf community would benefit from an extended timescale as additional communication support may have been required.

**Conclusion**

To conclude, this study accomplished what it set out to do. It highlighted areas that may require further consideration such as levels of training and D/deaf awareness amongst our police forces and how this may impact on attitudes in relation to the D/deaf population. The confidence of our police when communicating with the D/deaf community should be investigated to assess what other support could be provided. This could be extended out to other non-English speakers.

Similarly, we should question how we advertise and share good practice such as the implementation of PLOD schemes. By raising the awareness, more people are likely to use them, more people will become aware and the less likely it will be that schemes will dissolve in the future.

Addressing these issues could begin by highlighting the presence of the Charter for BSL (British Deaf Association, 2014) and asking more forces to sign up to some of the
pledges, or if they are already signed up, to publicize this. As we have seen, progress is happening but there are many improvements to work towards.

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Table 1
Showing the demographic information collected from the Police Crime Commissioners, Police Officers and D/deaf Community.

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<tr>
<td>N</td>
<td>18 (17%)</td>
<td>75 (69%)</td>
<td>16 (15%)</td>
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<td>12 (67%)</td>
<td>40 (53%)</td>
<td>9 (56%)</td>
</tr>
<tr>
<td>Female (N)</td>
<td>6 (33%)</td>
<td>35 (47%)</td>
<td>7 (44%)</td>
</tr>
<tr>
<td>Age range (mean)</td>
<td>25-70 (47.9)</td>
<td>23-64 (42.6)</td>
<td>17-65 (36.5)</td>
</tr>
<tr>
<td>Hearing Loss (Personal)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>None</td>
<td>18 (100%)</td>
<td>74 (92%)</td>
<td>1 (7%)</td>
</tr>
<tr>
<td>Hearing Loss</td>
<td>0 (0%)</td>
<td>1 (8%)</td>
<td>14 (93%)</td>
</tr>
<tr>
<td>Hearing Loss (Know others with)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Yes</td>
<td>6 (75%)</td>
<td>59 (81%)</td>
<td>NA</td>
</tr>
<tr>
<td>No</td>
<td>2 (25%)</td>
<td>14 (19%)</td>
<td>NA</td>
</tr>
</tbody>
</table>

NA: Not Applicable
Table 2
Showing the mean scores for the individual items on the ATD for PCCs, Police Officers and overall. Significant differences between the results for PCCs and Police Officers are included in the last column.

<table>
<thead>
<tr>
<th>ATD Item</th>
<th>Means for Police Crime Commissioners</th>
<th>Means for Police Officers</th>
<th>Overall Mean Score</th>
<th>Significant Difference?</th>
</tr>
</thead>
<tbody>
<tr>
<td>1-D/deaf couples should receive genetic counseling to avoid having D/deaf children (R)</td>
<td>1.85</td>
<td>1.42</td>
<td>1.46</td>
<td>1.51</td>
</tr>
<tr>
<td>2-D/deaf children should learn to speak to communicate with hearing parents (R)</td>
<td>3.00</td>
<td>2.33</td>
<td>2.39</td>
<td>2.64</td>
</tr>
<tr>
<td>3-I would like to have more D/deaf friends</td>
<td>3.29</td>
<td>3.15</td>
<td>3.16</td>
<td>.60</td>
</tr>
<tr>
<td>4-D/deaf schools and D/deaf clubs create D/deaf ‘ghettos’ (R)</td>
<td>2.43</td>
<td>1.94</td>
<td>1.99</td>
<td>1.55</td>
</tr>
<tr>
<td>5-D/deaf people should learn speech rather than sign language (R)</td>
<td>2.14</td>
<td>1.82</td>
<td>1.85</td>
<td>1.15</td>
</tr>
<tr>
<td>6-D/deaf people are handicapped (R)</td>
<td>2.57</td>
<td>2.28</td>
<td>2.31</td>
<td>.64</td>
</tr>
<tr>
<td>7-More research should be done to find cures for D/deafness (R)</td>
<td>3.57</td>
<td>3.79</td>
<td>3.77</td>
<td>-.54</td>
</tr>
<tr>
<td>8-D/deaf children should be taught in sign language</td>
<td>3.29</td>
<td>3.39</td>
<td>3.38</td>
<td>-.31</td>
</tr>
<tr>
<td>9-Hearing children of D/deaf parents are at risk of emotional deprivation (R)</td>
<td>1.86</td>
<td>1.80</td>
<td>1.81</td>
<td>.25</td>
</tr>
<tr>
<td>10-D/deaf people are safe drivers</td>
<td>3.29</td>
<td>3.18</td>
<td>3.19</td>
<td>.34</td>
</tr>
<tr>
<td>11-I would like to have more D/deaf colleagues</td>
<td>3.29</td>
<td>3.14</td>
<td>3.15</td>
<td>.61</td>
</tr>
<tr>
<td>12-D/deaf people should learn to lip read (R)</td>
<td>3.43</td>
<td>2.58</td>
<td>2.67</td>
<td>3.68</td>
</tr>
<tr>
<td>13-Interpreters should be available for D/deaf</td>
<td>3.57</td>
<td>3.76</td>
<td>3.74</td>
<td>-.46</td>
</tr>
</tbody>
</table>
people at work
14-D/deaf people should automatically receive help in their home environment (R) 2.29  2.80  2.75  -1.69  .117
15-All D/deaf people should be offered corrective surgery (R) 2.43  2.74  2.71  -.81  .424
16-Training more mental health professionals to work with D/deaf clients would be a waste of time (R) 1.71  1.61  1.62  .39  .700
17-Having a D/deaf colleague would cause problems in the work place (R) 1.86  1.91  1.90  -.15  .884
18-D/deaf people are physiologically impaired (R) 2.43  1.83  1.89  1.46  .149
19-D/deaf people should not be viewed as 'impaired' 3.86  3.31  3.36  1.24  .219
20-I would like to see more D/deaf people at the clubs/societies I attend 4.29  3.47  3.55  2.77  .009*
21-Having a D/deaf friend would be difficult (R) 2.00  1.88  1.89  .35  .730
22-D/deaf people have their own culture 2.86  2.88  2.88  -.15  .961

* Statistically significant at the p <0.05 level.
(R) indicates items that have been reverse scored, thus agreement with the item indicates a negative attitude according to the Attitudes Towards Deafness Scale (Cooper et al, 2003).
Table 3  
*Showing responses from PCCs, police officers and the D/deaf community relating to questions about D/deaf awareness.*

<table>
<thead>
<tr>
<th></th>
<th>Yes</th>
<th>No</th>
</tr>
</thead>
<tbody>
<tr>
<td>PCC awareness of regional D/deaf clubs</td>
<td>5 (63%)</td>
<td>3 (38%)</td>
</tr>
<tr>
<td>PCC’s knowledge of specially trained officers</td>
<td>7 (88%)</td>
<td>1 (13%)</td>
</tr>
<tr>
<td>Number of police officers who have participated in a D/deaf awareness course</td>
<td>19 (26%)</td>
<td>54 (74%)</td>
</tr>
<tr>
<td>D/deaf respondents’ opinion surrounding the D/deaf awareness of police officers they have contacted</td>
<td>1 (11%)</td>
<td>8 (89%)</td>
</tr>
<tr>
<td>D/deaf respondents’ hearing loss was recognised by the police</td>
<td>4 (44%)</td>
<td>5 (56%)</td>
</tr>
<tr>
<td>Number of D/deaf respondents who informed police of their hearing loss</td>
<td>4 (75%)</td>
<td>5 (25%)</td>
</tr>
<tr>
<td>Number of D/deaf respondents using hearing aids/cochlear implants.</td>
<td>8 (53%)</td>
<td>7 (47%)</td>
</tr>
</tbody>
</table>

Table 4  
*Showing PCCs’ responses to questions about police contact with the D/deaf community.*

<table>
<thead>
<tr>
<th></th>
<th>Agree</th>
<th>Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>There are enough police officers trained to communicate with the D/deaf community</td>
<td>1 (17%)</td>
<td>5 (83%)</td>
</tr>
<tr>
<td>The D/deaf community are dealt with and communicated with appropriately by the police</td>
<td>2 (67%)</td>
<td>4 (33%)</td>
</tr>
<tr>
<td>Members of the D/deaf community would feel confident when liaising with the police</td>
<td>3 (50%)</td>
<td>3 (50%)</td>
</tr>
</tbody>
</table>
Figure 1. A graph showing the communication methods that would be chosen by Police Officers, the communication preferences of the D/deaf community and the reported communication methods used by the police as reported by the D/deaf community in this sample.
Appendix A – Questionnaire (PCC)

1. Age

2. Gender

   Male

   Female

3. Town/region of residency.

4. What has been your main area of focus since becoming Police Crime Commissioner?

5. What have been your main achievements since becoming Police Crime Commissioner?

6. Do you have any hearing loss?

7. No Hearing Loss

   Mild Hearing Loss (20-40dBHL)

   Moderate Hearing Loss (41-70dBHL)

   Severe Hearing Loss (71-95dBHL)

   Profound Hearing Loss (Over 95dBHL)

   Unknown

8. Do you know anyone with hearing loss?

   Yes

   No
9. Are you aware of any D/deaf clubs in your region?
   Yes
   No

10. Do you know of any police officers in your region that are specifically trained in D/deaf awareness or sign language?
   Yes
   No
   
   Yes (please state which region they are based and what they are trained in)?

11. Do you agree that there are enough police officers trained to communicate with D/deaf people?
   Strongly Disagree
   Disagree
   Agree
   Strongly Agree

12. More could be done to support the D/deaf community in relation to crime prevention or the reporting of crimes?

   Strongly Disagree
   Disagree
   Agree
   Strongly Agree

13. Videos providing information in British Sign Language should be available on every regional police forces' website.
14. Individuals with hearing difficulties are dealt and communicated with appropriately by the police

Strongly Disagree
Disagree
Agree
Strongly Agree

15. Individuals with hearing difficulties feel confident when liaising with the police

Strongly Disagree
Disagree
Agree
Strongly Agree

16. More could be done to support the D/deaf community in relation to crime prevention and the reporting of crimes? If you agreed with this question please state your own recommendations.

17. Are you familiar with the acronym PLOD?

Yes
No

*If yes, what does this mean to you and do you have any direct experience of it?*
18. If you would like to be informed about the outcome of this study, please provide a contact email address:

................................................................................................................................................
Appendix B – Questionnaire (Police Officers)

1. Age

2. Gender

   Male

   Female

3. Town/ region of residency.

4. What is your occupation?

   Police Officer

   Administrator

   PCSO

   Dog Handler

   Other (please specify)

5. Do you have any hearing loss?

   No Hearing Loss

   Mild Hearing Loss (20-40dBHL)

   Moderate Hearing Loss (41-70dBHL)

   Severe Hearing Loss (71-95dBHL)

   Profound Hearing Loss (Over 95dBHL)

   Unknown

6. Do you use any aids such as hearing aids or cochlear implants?

   Yes (Please state which aid you use)

   No

7. Do you know anyone with hearing loss?
8. Have you ever participated in a D/deaf Awareness Course?
   Yes
   No

   *If yes, who provided this?*
   Work
   Myself (please state which company you did this with)

9. Have you ever participated in a Sign Language Course?
   Yes
   No

   *If yes, who provided this?*
   Work
   Myself (please state which company you did this with)

10. If you answered no to both questions, would you take part on a course in the future?
    Yes (what has prevented you from doing this previously?)
    No (please explain why)

11. How often do you come into contact with a D/deaf person as part of your job?
    Never
    Less than monthly
    Monthly
    Weekly
    Daily

12. In what capacity do you come into contact with D/deaf individuals and how often?
They were a victim of crime

- Never
- Less than monthly
- Monthly
- Weekly
- Daily

They were reporting a crime

- Never
- Less than monthly
- Monthly
- Weekly
- Daily

They were being questioned about a crime

- Never
- Less than monthly
- Monthly
- Weekly
- Daily

They were arrested

- Never
- Less than monthly
- Monthly
- Weekly
- Daily
They were seeking information

Never
Less than monthly
Monthly
Weekly
Daily

Other (please specify)

Never
Less than monthly
Monthly
Weekly
Daily

13. Which is the most common reason for being in contact with them?

They were a victim of crime
They were reporting a crime
They were being questioned about a crime
They were arrested
They were seeking information
Other (please specify)

14. How effectively could you communicate with a D/deaf person?

Without problems
With a few misunderstandings
With difficulty
With great difficulty
I would not feel comfortable communicating with a D/deaf person without an interpreter present.

15. How would you communicate with them?

- Sign Language
- Writing
- Speech
- Other (please specify)

16. Are you familiar with the acronym PLOD?

- Yes
- No

If yes, please write the meaning.

..................................................................................................................................................

17. If you would like to be informed about the outcome of this study, please provide a contact email address:

..................................................................................................................................................
Appendix C – Questionnaire (D/deaf Community)

1. Age

2. Gender
   - Male
   - Female

3. Town/ region of residency.

4. What is your occupation?

5. Please state your degree of hearing loss
   - No Hearing Loss
   - Mild Hearing Loss (20-40dBHL)
   - Moderate Hearing Loss (41-70dBHL)
   - Severe Hearing Loss (71-95dBHL)
   - Profound Hearing Loss (Over 95dBHL)
   - Unknown

6. At what age were you informed about your hearing loss?

7. Do you use any aids such as hearing aids or cochlear implants?
   - Yes
   - No

   If yes, please state what aid you use.

8. What is your preferred method of communication?
   - Sign Language
   - Writing
   - Speech
9. Have you ever had to contact/communicate with the police?

Yes
No

If you have answered yes, why?

I was a victim of crime
I was reporting a crime
I was questioned about a crime
I was arrested
I was seeking information
I was being given information
Other (please specify)

10. Was your hearing impairment recognised by the police?

Yes
No

If yes, how long did it take for them to recognise this?


11. Did the police display D/deaf awareness?

Yes
No

12. How did they communicate with you?

Sign Language
Writing
Speech
Other (please specify)
13. Overall, how would you rate your experience with the police?

   Extremely Poor
   Poor
   Somewhat poor
   Somewhat Good
   Good
   Extremely Good

14. Have you ever been to a police station?

   Yes
   No

   If you have answered yes, why?

   I was a victim of crime
   I was reporting a crime
   I was questioned about a crime
   I was arrested
   I was seeking information
   Other (please specify)

15. Were you read your rights?

   Yes and I understood them
   Yes but I did not understand them
   No

16. Were there any D/deaf aids/adaptations?

   Flashing Lights
   Vibrating alert system
Loop System

Other (please specify)

None

17. Were you offered an interpreter?

Yes

No

18. Roughly how long did the interpreter take to arrive (most recent)?

Less than 1 hour

Over 1 hour

Over 2 hours

19. Are you familiar with the acronym PLOD?

Yes

No

If yes, please write the meaning.

....................................................................................................................................................

If you would like to be informed about the outcome of this study, please provide a contact email address:

....................................................................................................................................................