

“This is an Accepted Manuscript of an article published by Taylor & Francis Group in Deafness & Education International on 08/09/2020, available online: <http://www.tandfonline.com/10.1080/14643154.2020.1818044>.”

“I was isolated and this was difficult”: Investigating the communication barriers to inclusive further/higher education for deaf Scottish students

Abstract

Deaf students are no less likely than their hearing counterparts to obtain good grades and pass courses in higher education (Richardson, 2015). Despite this, under half the number of deaf pupils, compared to hearing pupils, go straight from school to university (O’Neill et al., 2014), and when there, face an array of challenges that hinder their HE experience (Sachs, 2011). The project reported on explored deaf students’ experiences of Further and Higher (FE/HE) education, with the aim of identifying the communication barriers to inclusivity being faced by deaf students. Sixteen interviews (face to face using British Sign Language or written responses over email) with current and former Scottish deaf students were conducted then analysed using thematic analysis, revealing themes of (1) A lack of deaf awareness, (2) The English language, and (3) Access to interpreters, as barriers to inclusive FE/HE for deaf students. The findings demonstrate specific ways in which deaf students are being excluded in and outside the classroom in FE/HE. It is crucial that FE/HE institutions are aware of these, and are prepared to support their deaf students more effectively.

Key words: deaf students; communication; barriers; qualitative research; inclusion; access; disability

Attending college or university is an exciting time as it marks a new chapter in life, learning about subjects that may open doors to careers that shape the direction our lives take. However, research has shown that when accessing Further and Higher education (henceforth, FE/HE) disabled people face a number of barriers and challenges (e.g. MacLeod et al., 2018; Perera-Rodríguez & Díez, 2019; Vickerman & Blundell, 2010). This is despite legislation such as the Equality Act 2010 which asserts that no FE/HE institution should discriminate against someone with a disability (Legislation.gov.uk, 2010). Nevertheless, we know that such discrimination is happening; not just in Scotland, but worldwide (e.g. Deuchert et al., 2017; Rillotta et al., 2019). Given that post-secondary education is a predictor of employment and thus future security (Getzel et al., 2001), it is important to explore why individuals with disabilities are still facing barriers to post-secondary education.

D/deaf and deafblind students¹ in FE/HE can face particular challenges. Within the Deaf Studies literature there is a widespread convention which makes use of a capital ‘D’ when referring to those people whose first or preferred language is British Sign Language (BSL). The lower case ‘d’ is used in ‘deaf’ when referring to people who have a hearing loss, but do not necessarily see themselves as belonging to a separate linguistic minority (Brennan et al., 2006). Deafblindness refers to a combination of sight and hearing loss that affects a person's ability to communicate, access information and get around (NHS, 2018). Deafness can be thought of as a hidden disability as it may not be immediately obvious, but it affects an individual’s ability to learn and interact in the ‘typical’ student way (requiring support from tutors, peers, support staff etc.). Deaf students, therefore, can have difficulty ‘fitting in’: being disabled, but without having physical evidence of it; an identity struggle reported by

¹ For the sake of brevity, all distinctions of hearing loss will be referred to as ‘deaf’ in this paper.

many individuals with hidden disabilities (Valeras, 2010). As such, it is important to explore the main challenges faced by deaf students in HE/FE, and consider how they can best be supported.

One of these challenges, according to past work in the area, is around inclusion. There is a growing emphasis on the inclusion of previously under-represented groups in FE/HE such as disabled students, with government backing from organisations such as European Disability Strategy 2010-2020 and the United Nations Convention on the Rights of Persons with Disabilities (Riddell, 2016). Despite this, we know that deaf students still face barriers to inclusion: for instance, due to their higher need for support, they are more vulnerable to marginalisation than their hearing peers (Tinto, 2002) and may never access all of a lecture even with (where necessary) interpreter (Napier & Barker, 2004) and note taking services (Marschark et al., 2005). Karchmer & Mitchell (2003) showed that students with significant hearing losses face falling behind their peers, with group work and seminars being identified as the most challenging academic arenas to engage with given the reliance on interactivity with others (Brennan et al., 2006). Poor literacy, oral, and time management skills have also been identified as factors that place challenges in a deaf student's way during their time in FE/HE (Chute, 2012), leading to the potential for exclusion.

However, deaf students face exclusion not only with educational and organisational aspects of student life, but also in terms of extracurricular activities (Boutin, 2008). In a longitudinal study spanning twenty years, Hyde and colleagues (2009) identified that the social aspects of university life constituted an area of particular difficulty and challenge, leading to social isolation for deaf students in a largely hearing group. Deaf students regularly do not feel part of a 'university family' in comparison to their hearing peers (Foster et al., 1999), while more recent work from

Norway has shown that achieving results demanded so much effort that little energy was left for social activities and interacting with hearing peers (Kermit & Holiman, 2018). Other work has shown that while the majority of respondents felt satisfied with the quality of teaching, levels of satisfaction dropped significantly for both the number of friends in class, and for the contact with other students outside the class (Powell et al., 2014), highlighting the impact of social interaction in FE/HE.

Research has identified high dropout rates for students who are deaf (Young et al., 2015), and that lack of support and increased social isolation can be a precursor to this (Rao, 2004; Sachs, 2011). Other work has shown that social interaction is one of the core factors determining the quality of FE/HE experience, affecting academic success and psychological integration within and outside the institution (Cheng & Zhang, 2017). The presence of social skills and friendships (Luckner & Muir, 2001) and communication and inclusion for learning and participation experiences (Powell et al., 2014) act as indicators for high academic achievement for deaf students, but while they may be able to engage with hearing students for educational purposes, deaf students still face exclusion within FE/HE.

The current study

This paper aims to identify the specific communication barriers to inclusion faced by deaf students, suggesting ways in which they can be tackled. The current project was established in September 2017, in response to the development of the British Sign Language (Scotland) Act 2015 following many years of campaigning led by Deaf people who wanted to see changes for better access to public services (for further discussion, see Lawson et al., 2019). The 19 universities and 29 colleges in Scotland were expected to develop plans in which there would be actions explaining how deaf

people who use BSL as their first or preferred language will be able to fully participate in all aspects of FE/HE. Consequently, former and current (at the time of data collection) deaf students (both those who use BSL and those who do not) from across Scotland were invited to share their experiences during their time in FE/HE in order to better understand the challenges faced within this environment and what FE/HE institutions could do to be more inclusive of and for deaf students. The current paper therefore explores this by asking the research question, *what are the communication barriers to inclusive further/higher education for deaf students?*

Method

Data Collection

Participants were invited to share their experiences of FE/HE. A BSL video explaining the project, along with an English transcript, was disseminated to disability officers in all Scottish FE/HE institutions with a request that it be shared with any current D/deaf and deafblind students, and was also shared on social media, via Facebook and Twitter, to reach former students. The inclusion criteria to take part were that individuals should identify as deaf, and be a former or current student of a FE/HE institution in Scotland. Twenty-five individuals consented to be interviewed, and were given the choice as to whether they wanted to meet in person or to answer questions via email. Of these twenty-five, fifteen took part in face-to-face video-recorded interviews in British Sign Language (BSL), which were translated and transcribed into written English for subsequent analysis by Author 2. The remaining ten interviewees sent their response via email in English. Questions for all interviewees were the same, focusing broadly on their FE/HE experience, and can be found in Appendix 1 online in Supplemental material. Data collection took place from September 2017 to March 2018.

Of the twenty-five participants who took part in the interviews, sixteen provided further consent for their data to be analysed, and so the data for the current paper comes from these individuals: sixteen current or former deaf students from across Scotland. The table below displays basic demographic information regarding the participants:

Table 1

Participants' demographic information

Participant ID	Educational type and status (years of study)	Age bracket	Sex	Data collection method
Participant 1	HE: Current student	Unknown	F	Email
Participant 2	FE: Current student	Late 20s	M	Face to face (BSL)
Participant 3	HE: Former student (1998-2015)	Late 30s	M	Face to face (BSL)
Participant 4	FE: Current student	Early 20s	M	Face to face (BSL)
Participant 5	HE: Former student (2012-2013)	Early 40s	F	Face to face (BSL)
Participant 6	HE: Current student	Early 20s	M	Face to face (BSL)
Participant 7	FE: Former student (2014-2015)	Early 20s	F	Face to face (BSL)
Participant 8	HE: Current student	Early 30s	M	Face to face (BSL)
Participant 9	FE then HE: Former student (2011-2017)	Mid 20s	M	Face to face (BSL)
Participant 10	FE: Former student (2003-2006)	Unknown	M	Email
Participant 11	FE: Former student (2004-2007)	Unknown	F	Email

Participant 12	FE: Current student	Unknown	F	Email
Participant 13	FE: Current student	Early 20s	F	Face to face (BSL)
Participant 14	FE then HE: Former student (2004-2014)	Early 30s	F	Face to face (BSL)
Participant 15	HE: Current student	Unknown	M	Email
Participant 16	HE: Former student (1986-1991)	Early 50s	F	Face to face (BSL)

Ethical Considerations

Ethical approval for the project was granted by Deaf Action, a charitable organisation which aims to improve the quality and conditions of life for deaf people (Deaf Action, 2020). An information sheet and consent form were created in BSL and English to explain the purpose of the project and to obtain participants' permission to take part and use the subsequent data.

Data Analysis

Braun & Clarke's (2019) reflexive thematic analysis was applied to the data, with the aim of investigating deaf students' experiences of FE/HE. Such an approach is used to generate analysis from the bottom-up, identifying patterns within the data which although is not shaped by existing theory, should be guided by some sort of theoretical or epistemological underpinning; in this case, with a focus on phenomenology in order to explore deaf students' direct experience of FE/HE. Reflexive thematic analysis can take the form of a number of different orientations. In the current project, an *inductive* approach was used where *coding and theme development are directed by the content of the data* (Braun & Clarke, 2019). This was deemed the most relevant to ensure that the

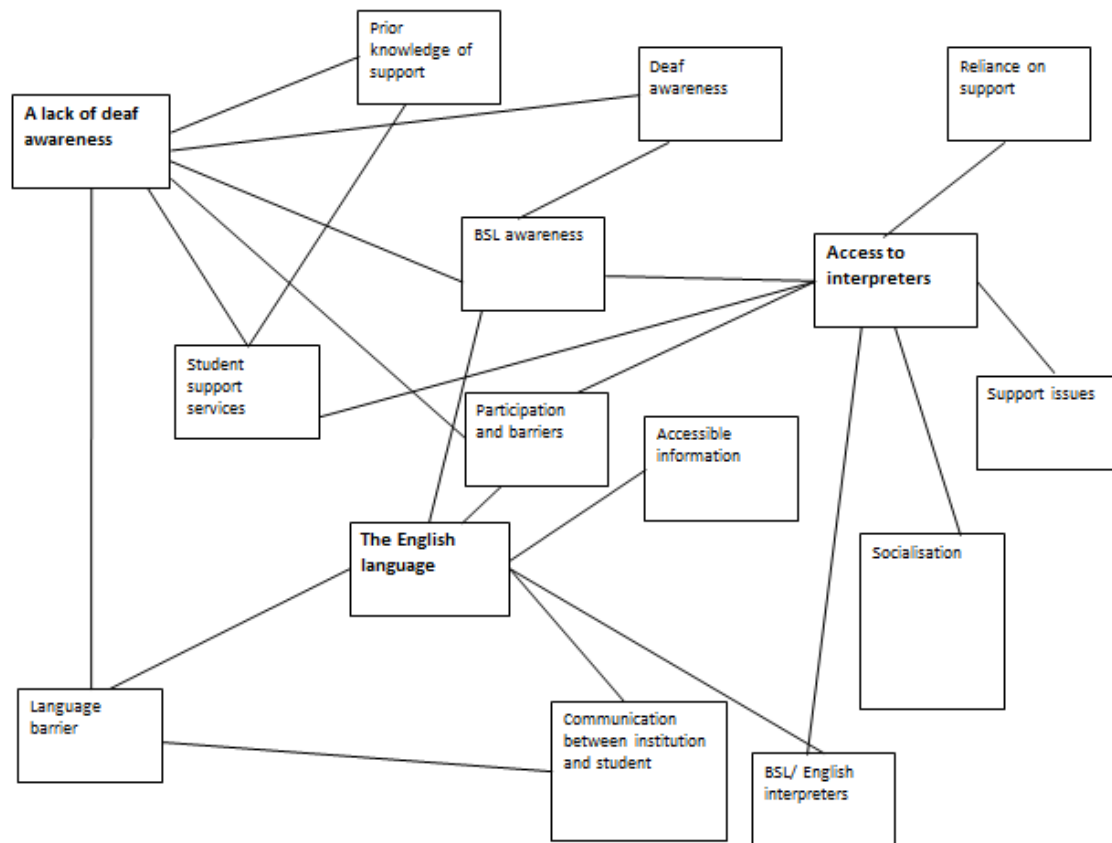
focus of the analysis remained on the data at all times. The same approach has been applied to similar research (e.g. Kritzinger et al., 2014; Smith, 2013).

The steps included in reflexive thematic analysis are as follows: (1) familiarisation with the data, (2) coding, (3) generating initial themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing up the analysis. Authors One and Two completed the first three steps individually in order to triangulate perspectives and make the data analysis process robust and rigorous (Yardley, 2007), though it is noted by Braun & Clarke (2019) that such dual coding does not necessarily result in more accurate or reliable coding. One of the clearest advances from Braun & Clarke's original (2006) thematic analysis process is their treatment of the establishment of themes; where themes were once considered to 'emerge' from codes, existing as something for the researcher to find, reflexive thematic analysis, instead, treats themes differently: as analytic outputs, created from codes through the researcher's active engagement with the data (Braun & Clarke, 2019).

From the initial 293 codes detailed, 12 thematic areas were identified (see Figure 1 below) with clear overlaps between those found by Authors 1 and 2, at which point the focus of the project moved away from a general exploration of deaf students' experiences of FE/HE, to a focus on ascertaining the communication barriers faced within education. Final themes were then identified to produce those detailed in the following section. At least one quote from all sixteen participants has been used in this paper, to demonstrate the relative breadth of themes.

Figure 1

Thematic map of data (final themes in bold)



Finally, it is important to note the backgrounds of the authors in order to acknowledge how their beliefs, values and experiences may have affected the research in terms of analysing the experience of being deaf in a specific environment. Authors Three and Four are hearing and have had little interaction with deaf people. Author One is hearing, and has had moderate interaction with deaf people throughout her life through growing up with a profoundly deaf sister and being involved with local family support groups. Author Two is profoundly deaf and bilingual, using BSL and spoken English.

Findings

In order to answer the research question, *what are the communication barriers to inclusive further/higher education for deaf students?* the following three themes were established, which will be discussed in turn below:

1. A lack of deaf awareness
2. The English language, and
3. Access to (BSL/English) interpreters

Theme 1: A lack of deaf awareness

This first theme focuses on the importance of academics, support staff and peers – everyone that students interact with on a daily basis – being deaf aware, identifying that there is currently a lack of this. Deaf awareness, in this sense, refers to introducing staff and students to an understanding of the various barriers that deaf people face in everyday situations, and how these can be resolved, through adapting to meet the individual needs of deaf people. Previous work has shown that a lack of deaf awareness, not unexpectedly, impacts negatively on inclusion (e.g. Majocho et al., 2018; Rao, 2004), and participants in the current study identified this lack of deaf awareness at both a personal and institutional level. To begin, participants pointed to teaching staff: “Lecturers (need) to be more deaf aware” (Participant 7). “Understanding teachers was very difficult for me; the teachers were not deaf aware” (Participant 4). The participants here highlight that the educators responsible for their learning were not meeting their learning needs, given that they could not be understood. This immediately positions deaf students as being excluded from the learning environment. In addition, there was mention of peers’ lack of deaf awareness: “About half of them would look down at their feet and mumble when talking to me” (Participant 12).

Participants suggested that this lack of deaf awareness may be established at an institutional level as opposed to a personal level: “(I am) Not sure if disability services in college/university are truly deaf aware” (Participant 16), implying that if such support services are not demonstrating deaf awareness, there is little hope for those teaching staff who have less interaction with deaf students. Research has shown that students with disabilities who seek support services earlier perform better academically than those who postpone seeking services (Lightner et al., 2012), and considering that disability services are generally the main point of contact for individuals with disabilities entering FE/HE, it is concerning that Participant 16 questions just how aware of her needs – or not – they may be. This perception is shared with other participants: “Their (the institution’s) awareness of deafness is poor; they told me their experience with deaf students is rare” (Participant 2). “I went to the open day to find out more about the environment but (there was) nothing about what support there could be in place for those with disabilities” (Participant 15). To be told, as a deaf student, that the institution to which they have applied to study is not used to interacting with individuals with similar needs must be disheartening. Classing such experiences as “rare” suggests that the institution may not have the knowledge or understanding as to how to best provide for a deaf student, which in turn suggests that the student’s FE/HE experience may be limited. Similarly, having no information available at an open day about the support that is on offer, seems at best disappointing, and at worst, discriminatory. It highlights the lack of inclusivity being faced by deaf students.

In recognising the lack of deaf awareness, participants identified ways in which the issue could be addressed; largely through increasing deaf awareness both directly and indirectly, locally one-on-one and more broadly across the institution. Of interest is the way in which participants conceptualised ‘deaf awareness’ in different ways:

consider the suggestions from Participants 13 and 5: “I would really like colleges and universities to have more deaf awareness. Maybe create posters or information to inform others” (Participant 13). “I think promoting deaf awareness is the most important thing, in general, to the whole university” (Participant 5). The participants here advocate the development of deaf awareness at an institutional level, something for other people to be informed about. Both have positioned this as advantageous for *other people*; being wide-reaching enough to cover the “whole university” and to “inform others”. However, Participant 6 appears to consider deaf awareness as something for *him personally*, as opposed to others:

“I think at the beginning it would have been good for the whole class to be informed that there is a deaf student within their peers. (To include) Some tips on how to communicate as this might give them a bit more confidence to approach me.” (Participant 6)

Acknowledging the lack of deaf awareness, Participant 6 frames this as being a barrier for his peers communicating with him rather than him communicating with them, demonstrating the social model of disability (Oliver, 1996). As Participant 9 noted, (other people) “Should adapt themselves to fit the needs of myself rather than me adapting”.

Participants also identified other ways of ensuring that they were getting the best and the most out of their educational experience: “It would be great if lecturers and tutors had regular one to one meetings with deaf students to ensure that students haven’t missed anything important” (Participant 1). Such a suggestion implies that deaf students recognise that they may be at risk of missing academic content and so may need some extra support to make sure that they are keeping up with the class. This is particularly

important given that for individuals with disabilities, uptake of such support can result in greater academic achievement (Lightner et al., 2012), so one way that inclusion for deaf students could be enhanced is through scheduled support meetings with academic staff.

Theme 1 has highlighted one communication barrier to inclusive FE/HE for deaf students as there being a lack of deaf awareness, evident both in the teaching environment, and institution-wide. The analysis now turns to the second theme, and second communication barrier to inclusion: The English language.

Theme 2: The English language

The second theme focuses on the communication barriers to inclusion for those deaf students who struggle with the English language. The majority of participants detailed how their first or preferred method of communication is BSL, but that FE/HE institutions lack provision of materials in BSL for deaf students who use it. For those students who can use English, there are still some barriers that hinder inclusion that are often taken for granted by hearing people, as exemplified in the following quote: “I didn’t get in touch with the university to learn more about the course as I can’t understand phone conversation with my disability” (Participant 1). This highlights the importance of alternative communication methods that must be available and made clear to students. However, this barrier of not speaking the English language was not restricted to just the educational environment: Participants 10 and 9 below highlight the difficulties deaf students can face in social groups:

“Nights out could be challenging: I missed so much information, maybe there would be a group conversation and I’d just miss it all, additionally the noisy

environment made it most difficult for me. It would have been beneficial if those involved learned basic BSL”. (Participant 10)

“Sometimes I had to think on my feet and adapt, even using my phone as a method of communication. I have to think about how to adapt, what is the best way or easiest for them to communicate with me, for example, writing it down or using my phone – a different path”. (Participant 9)

What is of interest here is the sense of whose responsibility it is in such a situation to ensure inclusion: whilst participant 10 indicates the responsibility is with others (i.e. they could learn basic BSL), participant 9 implies that it is his own (i.e. coming up with alternative communication approaches). This is similar to the focus in the previous theme with regard to addressing deaf awareness and where obligation lies: despite the differing perspectives, the focus is on achieving inclusion.

Participant 3 details the barriers he faced due to the focus on English: “I struggled, because people were all talking which made it hard to follow... everything was produced in English”. Like Participant 10 above, Participant 3 identifies the difficulties involved not only in following conversations, but also that there were no BSL alternative materials to refer to. He could not seek clarification with regard to learning from either peers or resources, thus demonstrating another communication barrier to inclusion.

The participants in this study, however, highlighted ways in which their time in FE/HE could have been improved by increasing inclusivity. Participants 2, 8 and 14 below suggest ways in which BSL could have been utilised to ensure deaf students who use BSL could engage both at course level and at the wider institution level:

“It would have been helpful to have BSL videos, as (the FE/HE institution) have no videos. It is all written in English: for me that is OK, but for other deaf people it would be difficult for them”. (Participant 2)

“I would hope that with the BSL (Scotland) Act 2015 in place, there will be BSL videos to allow for easier access to information. The prospectus seems very focused on a lot of English text: can someone whose first language is BSL access that? I’m not sure”. (Participant 8)

“When you fill out the application form, there’s other boxes to complete then the last page is personal statement... It’s difficult to write about yourself. It may be an idea in future if the individual is allowed to respond using BSL”. (Participant 14)

Participant 8 makes reference to the BSL (Scotland) Act, highlighting that this should (soon) be the norm, and indeed previous research has demonstrated the importance of engagement: Komesaroff (2005) identified that if there are modifications in the overall education provision for deaf students, this can positively reinforce engagement, highlighting a need for the reassessment of the education system for deaf students in FE/HE.

The second theme of the English language focused on the communication barriers to inclusion in FE/HE as a deaf student with regard to the focus on English. There appear to be two issues raised here: firstly that deaf students struggle within the English-speaking environment which impacts on their ability to interact with others and engage with learning. However, there is also the issue of assumptions: that although

deaf people may have difficulties hearing, they can still understand English (e.g. reading, writing) which is not necessarily the case. This is an important issue, as being unable to comprehend course material will obviously impact on education, but it can also hinder social relations with other students studying the same course. Whilst all courses cannot be expected to be delivered in BSL, institutions do have the scope to adapt the learning environment; recent work has suggested that engagement with educational content in sign language is correlated with better performance (Hashim & Tasir, 2020; Parvez et al., 2019). Such struggles with the English language highlight the reliance on interpreters in FE/HE, which the analysis now turns to.

Theme 3: Access to interpreters

The final theme focuses on the importance of deaf students having access to interpreters. In Scotland, disabled students can apply (with support from their institution) for Disabled Students' Allowance (DSA) if they are home students. Typically, this funding would cover the cost of any support required by the student for equipment and non-medical personal help (Student Awards Agency Scotland, 2020; also see Noble, 2010 for more detail about support available). For deaf students, this typically entails note-taking and sign language interpreters. A member of the student support service would apply for funding on behalf of the student to pay for these, based on the student's course and requirements. The number of hours' support requested and its use would vary between institutions, and would be dependent on the application written by the adviser and the institution's 'rules' regarding what the funding could be spent on: for instance, the Open University (2020) states that "DSA funds can only support compulsory study-related sessions, not optional or social events".

If this access is not available, it creates another communication barrier for a deaf student's inclusion in FE/HE in terms of being an active member both in the academic and social settings, as demonstrated by Participant 5: "It was so important to have an interpreter and/or note taker present so that there is access to information". Participant 5 highlights the importance of having access to interpreters as a source of information in her classes. Interpreters are also required within other facets of FE/HE: "It would be important to have (an) interpreter with the guidance tutors/ careers advice so the students can see further opportunity for the future" (Participant 10). "I did attend (open days/induction) but it was hard because there was no interpreter" (Participant 16). "It is so much better when an interpreter is present at the interview. When there isn't one, it is difficult to understand what they are saying/asking" (Participant 4). "I went to the open day just for a nose around and as expected, no BSL interpreters" (Participant 11).

The quotes here identify that institutions are not ensuring that interpreters are incorporated into other aspects of FE/HE such as counselling sessions, open days, induction, and interviews as standard, even though the Equality Act (2010) expects educational institutions to make reasonable anticipatory adjustments for students with disabilities. Such sessions are vital so that students can learn about FE/HE as a whole, but it would appear that these non-academic activities are overlooked when it comes to ensuring the availability of interpreters.

An additional aspect, potentially with greater emotional significance, is meeting new people and building a good network of contacts, as well as simply having fun and taking part in leisure activities. For the most part, supporting such socialising is not covered in the interpreter's remit, (Student Awards Agency Scotland, 2020), as detailed in the following quote:

“I did go to one or two informal nights out, but communication was always difficult. I look back and wish that the university DSA (to fund an interpreter) covered events as well, not just learning sessions. University is not just about learning, it is about networking; making new friends”. (Participant 8)

Participant 8 here references difficulties in communicating and fitting in, highlighting the importance of having access to interpreters throughout and across the different aspects of the FE/HE journey. Despite having access to interpreters in classroom settings, deaf students are left without a way of joining in extracurricular activities, which is a fundamental part of student life, making them extremely susceptible to social exclusion, isolation and loneliness (Brice & Strauss, 2016).

However, it is important to note, too, that participants raised the issue of ensuring that interpreters were sufficiently qualified to be doing the job. DSA criterion posits that sign language interpreters must “hold a qualification in BSL” (Student Awards Agency Scotland, 2020, p. 13), however, this guidance is vague given that there are different levels of qualifications, and different levels of interpreting, as explained by Participants 3 and 9: “During the first course... most of them (interpreters) were CSWs (communication support workers), expected to become interpreters” (Participant 3). “A fully qualified, registered interpreter knows how to meet the needs of the deaf person; a CSW doesn’t. University uses a lot of jargon in the language so it’s important to have an interpreter of a high standard” (Participant 9).

Several conclusions have emerged from this third theme. Firstly, students identified a need for FE/HE institutions to put more effort into enabling them access to interpreters. On the basis that deaf students need constant communication support in their student lives, it is of utmost important that interpreters are incorporated into all

academic settings: not just the classroom. Secondly, participants felt that insufficient communication support created difficult situations where they felt excluded from social interactions. This in turn made social integration in extracurricular activities particularly challenging. Consequently, social exclusion has been shown to have serious consequences on deaf students' mental health as evidenced by Participant 11's summation that, "despite the lack of interpreters and the huge stress it caused me, I passed". Finally, the importance of interpreters being employed only when they are officially qualified was noted. Providing deaf students with anything less than a fully qualified interpreter can impact on learning, and undermine deaf students' contributions to their academic experience.

Discussion

In answer to the research question, *what are the communication barriers to inclusive further/higher education for deaf students?* the analysis established themes of (1) A lack of deaf awareness, (2) The English language, and (3) Access to interpreters.

Theme 1 demonstrated that there is a lack of deaf awareness in FE/HE, both at a personal and at an institutional level. This impacts on inclusion in that if teaching staff, peers and the wider FE/HE community are not aware of the needs of deaf students, they will continue to be marginalised with potentially negative consequences (Brennan et al., 2006; Tinto, 2002). There is therefore a need to promote deaf awareness, as highlighted by participants as beneficial for all: for deaf students themselves, but also for those they interact with (Hyde et al., 2009). Recent work argues for governmental and professional initiatives to increase deaf awareness in mainstream education (Berry, 2017), so this is one way in which this first barrier could potentially be addressed.

Theme 2 centred on the difficulties faced by deaf students with regard to communicating in English. Research has demonstrated that ease of communication is strongly related to student engagement and academic achievement: when students feel at ease with their communication with peers and teachers, they see themselves as having control in the academic setting and are more likely to engage and become an active student (Foster et al., 1999). Conversely, other work has shown that deaf students' communication problems are amplified when they attend FE/HE institutions which do not have facilities which cater to their needs (DeWitt et al., 2015). Specialist teaching has been shown to make a difference for academic attainment for deaf students (Powers, 2011), highlighting the importance of effective communication. With the passing of the BSL (Scotland) Act 2015, it is expected that "inequalities experienced by D/deaf and deafblind BSL students are being addressed" (Scottish Government, 2017, p. 15), and so while (as of yet) the whole curriculum cannot be delivered in BSL, smaller steps can be taken to facilitate inclusion in terms of reasonable adjustments.

Theme 3 was focused on the importance of access to interpreters for deaf students in FE/HE. Research has reported that deaf individuals' meaningful interactions with the 'hearing world' are rare (Hyde et al., 2016), made even rarer if there is no support in place for them to communicate. Given that research has identified the potential severity of social isolation (e.g. Boutin, 2008; Brice & Strauss, 2016), these findings highlight the importance of ensuring interpreter support is available not just in the classroom but in other aspects of academic life. Of pertinence too, is the provision of properly qualified interpreters who often are the bridge between deaf students and the 'hearing world' (Schick et al., 2005). Participants in the current study noted that often the interpreting support they received was from trainees which could be less than

adequate, with potential to impact on their learning and have broader implications for the value placed on students' needs.

Implications

The current findings are not necessarily new. Indeed, they almost completely overlap with a 2010 study based on reflections of inclusion with a Portuguese deaf student population (Bisol, 2010). However, they provide insight into the current environment within Scottish FE/HE, and support other similar work that is campaigning for more focus on and funding for supporting deaf students (e.g. Powell et al., 2014). As such, we suggest the following as ways in which FE/HE institutions can facilitate the inclusion of deaf students more consistently:

- Availability of deaf awareness training for staff (both academic and central services staff) and students, in terms of basic communication practices, interacting with deaf students and best practice for delivering both academic content and accessible information.
- Discussions with deaf students regarding alternative delivery of some course materials (e.g. in BSL).
- More consideration of non-academic interpreter support for social engagements and functions.

Limitations

There are some limitations to the current study. Responses from sixteen individuals are not representative of every deaf person in FE/HE. In addition, some of the participants experienced FE/HE as far back as 1986, and so it is likely that practices have changed. However, participants in the study had relevant experience to expertly answer the

questions being posed and nothing was highlighted in the data that suggested that any participant's experience was deviant, and therefore the in-depth knowledge that has been obtained on the topic provides a rich understanding of recent and current practice in Scotland (Yardley, 2007).

Given that some of the participants' responses were translated from BSL into English, there is the possibility that perspectives and opinions have been misconstrued, resulting in inaccurate representations of the topic, and even though this translation was conducted as carefully as possible, it should be noted that there are methodological, epistemological and ontological issues around the translator being part of the research team (see Temple & Young, 2004). The study recognises examples of good practice which is encouraging, but it is clear that more needs to be done to ensure that deaf students are being included in FE/HE to the same extent as their hearing peers.

Conclusion

Despite minor improvements in the last decade or so in supportive infrastructure for deaf students in FE/HE, the way in which they navigate such settings is still not gaining enough attention (Woodcock et al., 2007). Considering the fact that deaf students are more dependent than hearing counterparts on communication support from FE/HE, their chances to be successful in both academic and social situations are significantly hindered (Majocha et al., 2018). Irving King Jordan, former first deaf president of Gallaudet University, the world's only university with all programmes and services designed specifically for deaf students famously stated, 'deaf people can do anything hearing people can do, except hear' (Gallaudet University, 2013). It is therefore our responsibility – and privilege – as educators to support those students who face extra challenges in their academic pursuits in whatever ways we can.

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Disclosure of interest

The authors report no conflict of interest.

“I was isolated and this was difficult”: Investigating the communication barriers to inclusive further/higher education for deaf Scottish students

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The authors would like to thank all participants who contributed to this project.

“I was isolated and this was difficult”: Investigating the communication barriers to inclusive further/higher education for deaf Scottish students

Abstract

Deaf students are no less likely than their hearing counterparts to obtain good grades and pass courses in higher education (Richardson, 2015). Despite this, under half the number of deaf pupils, compared to hearing pupils, go straight from school to university (O’Neill et al., 2014), and when there, face an array of challenges that hinder their HE experience (Sachs, 2011). The project reported on explored deaf students’ experiences of Further and Higher (FE/HE) education, with the aim of identifying the communication barriers to inclusivity being faced by deaf students. Sixteen interviews (face to face using British Sign Language or written responses over email) with current and former Scottish deaf students were conducted then analysed using thematic analysis, revealing themes of (1) A lack of deaf awareness, (2) The English language, and (3) Access to interpreters, as barriers to inclusive FE/HE for deaf students. The findings demonstrate specific ways in which deaf students are being excluded in and outside the classroom in FE/HE. It is crucial that FE/HE institutions are aware of these, and are prepared to support their deaf students more effectively.

Key words: deaf students; communication; barriers; qualitative research; inclusion; access; disability

Attending college or university is an exciting time as it marks a new chapter in life, learning about subjects that may open doors to careers that shape the direction our lives take. However, research has shown that when accessing Further and Higher education (henceforth, FE/HE) disabled people face a number of barriers and challenges (e.g. MacLeod et al., 2018; Perera-Rodríguez & Díez, 2019; Vickerman & Blundell, 2010). This is despite legislation such as the Equality Act 2010 which asserts that no FE/HE institution should discriminate against someone with a disability (Legislation.gov.uk, 2010). Nevertheless, we know that such discrimination is happening; not just in Scotland, but worldwide (e.g. Deuchert et al., 2017; Rillotta et al., 2019). Given that post-secondary education is a predictor of employment and thus future security (Getzel et al., 2001), it is important to explore why individuals with disabilities are still facing barriers to post-secondary education.

D/deaf and deafblind students¹ in FE/HE can face particular challenges. Within the Deaf Studies literature there is a widespread convention which makes use of a capital ‘D’ when referring to those people whose first or preferred language is British Sign Language (BSL). The lower case ‘d’ is used in ‘deaf’ when referring to people who have a hearing loss, but do not necessarily see themselves as belonging to a separate linguistic minority (Brennan et al., 2006). Deafblindness refers to a combination of sight and hearing loss that affects a person's ability to communicate, access information and get around (NHS, 2018). Deafness can be thought of as a hidden disability as it may not be immediately obvious, but it affects an individual’s ability to learn and interact in the ‘typical’ student way (requiring support from tutors, peers, support staff etc.). Deaf students, therefore, can have difficulty ‘fitting in’: being disabled, but without having physical evidence of it; an identity struggle reported by

¹ For the sake of brevity, all distinctions of hearing loss will be referred to as ‘deaf’ in this paper.

many individuals with hidden disabilities (Valeras, 2010). As such, it is important to explore the main challenges faced by deaf students in HE/FE, and consider how they can best be supported.

One of these challenges, according to past work in the area, is around inclusion. There is a growing emphasis on the inclusion of previously under-represented groups in FE/HE such as disabled students, with government backing from organisations such as European Disability Strategy 2010-2020 and the United Nations Convention on the Rights of Persons with Disabilities (Riddell, 2016). Despite this, we know that deaf students still face barriers to inclusion: for instance, due to their higher need for support, they are more vulnerable to marginalisation than their hearing peers (Tinto, 2002) and may never access all of a lecture even with (where necessary) interpreter (Napier & Barker, 2004) and note taking services (Marschark et al., 2005). Karchmer & Mitchell (2003) showed that students with significant hearing losses face falling behind their peers, with group work and seminars being identified as the most challenging academic arenas to engage with given the reliance on interactivity with others (Brennan et al., 2006). Poor literacy, oral, and time management skills have also been identified as factors that place challenges in a deaf student's way during their time in FE/HE (Chute, 2012), leading to the potential for exclusion.

However, deaf students face exclusion not only with educational and organisational aspects of student life, but also in terms of extracurricular activities (Boutin, 2008). In a longitudinal study spanning twenty years, Hyde and colleagues (2009) identified that the social aspects of university life constituted an area of particular difficulty and challenge, leading to social isolation for deaf students in a largely hearing group. Deaf students regularly do not feel part of a 'university family' in comparison to their hearing peers (Foster et al., 1999), while more recent work from

Norway has shown that achieving results demanded so much effort that little energy was left for social activities and interacting with hearing peers (Kermit & Holiman, 2018). Other work has shown that while the majority of respondents felt satisfied with the quality of teaching, levels of satisfaction dropped significantly for both the number of friends in class, and for the contact with other students outside the class (Powell et al., 2014), highlighting the impact of social interaction in FE/HE.

Research has identified high dropout rates for students who are deaf (Young et al., 2015), and that lack of support and increased social isolation can be a precursor to this (Rao, 2004; Sachs, 2011). Other work has shown that social interaction is one of the core factors determining the quality of FE/HE experience, affecting academic success and psychological integration within and outside the institution (Cheng & Zhang, 2017). The presence of social skills and friendships (Luckner & Muir, 2001) and communication and inclusion for learning and participation experiences (Powell et al., 2014) act as indicators for high academic achievement for deaf students, but while they may be able to engage with hearing students for educational purposes, deaf students still face exclusion within FE/HE.

The current study

This paper aims to identify the specific communication barriers to inclusion faced by deaf students, suggesting ways in which they can be tackled. The current project was established in September 2017, in response to the development of the British Sign Language (Scotland) Act 2015 following many years of campaigning led by Deaf people who wanted to see changes for better access to public services (for further discussion, see Lawson et al., 2019). The 19 universities and 29 colleges in Scotland were expected to develop plans in which there would be actions explaining how deaf

people who use BSL as their first or preferred language will be able to fully participate in all aspects of FE/HE. Consequently, former and current (at the time of data collection) deaf students (both those who use BSL and those who do not) from across Scotland were invited to share their experiences during their time in FE/HE in order to better understand the challenges faced within this environment and what FE/HE institutions could do to be more inclusive of and for deaf students. The current paper therefore explores this by asking the research question, *what are the communication barriers to inclusive further/higher education for deaf students?*

Method

Data Collection

Participants were invited to share their experiences of FE/HE. A BSL video explaining the project, along with an English transcript, was disseminated to disability officers in all Scottish FE/HE institutions with a request that it be shared with any current D/deaf and deafblind students, and was also shared on social media, via Facebook and Twitter, to reach former students. The inclusion criteria to take part were that individuals should identify as deaf, and be a former or current student of a FE/HE institution in Scotland. Twenty-five individuals consented to be interviewed, and were given the choice as to whether they wanted to meet in person or to answer questions via email. Of these twenty-five, fifteen took part in face-to-face video-recorded interviews in British Sign Language (BSL), which were translated and transcribed into written English for subsequent analysis by Author 2. The remaining ten interviewees sent their response via email in English. Questions for all interviewees were the same, focusing broadly on their FE/HE experience, and can be found in Appendix 1 online in Supplemental material. Data collection took place from September 2017 to March 2018.

Of the twenty-five participants who took part in the interviews, sixteen provided further consent for their data to be analysed, and so the data for the current paper comes from these individuals: sixteen current or former deaf students from across Scotland. The table below displays basic demographic information regarding the participants:

Table 1

Participants' demographic information

Participant ID	Educational type and status (years of study)	Age bracket	Sex	Data collection method
Participant 1	HE: Current student	Unknown	F	Email
Participant 2	FE: Current student	Late 20s	M	Face to face (BSL)
Participant 3	HE: Former student (1998-2015)	Late 30s	M	Face to face (BSL)
Participant 4	FE: Current student	Early 20s	M	Face to face (BSL)
Participant 5	HE: Former student (2012-2013)	Early 40s	F	Face to face (BSL)
Participant 6	HE: Current student	Early 20s	M	Face to face (BSL)
Participant 7	FE: Former student (2014-2015)	Early 20s	F	Face to face (BSL)
Participant 8	HE: Current student	Early 30s	M	Face to face (BSL)
Participant 9	FE then HE: Former student (2011-2017)	Mid 20s	M	Face to face (BSL)
Participant 10	FE: Former student (2003-2006)	Unknown	M	Email
Participant 11	FE: Former student (2004-2007)	Unknown	F	Email

Participant 12	FE: Current student	Unknown	F	Email
Participant 13	FE: Current student	Early 20s	F	Face to face (BSL)
Participant 14	FE then HE: Former student (2004-2014)	Early 30s	F	Face to face (BSL)
Participant 15	HE: Current student	Unknown	M	Email
Participant 16	HE: Former student (1986-1991)	Early 50s	F	Face to face (BSL)

Ethical Considerations

Ethical approval for the project was granted by Deaf Action, a charitable organisation which aims to improve the quality and conditions of life for deaf people (Deaf Action, 2020). An information sheet and consent form were created in BSL and English to explain the purpose of the project and to obtain participants' permission to take part and use the subsequent data.

Data Analysis

Braun & Clarke's (2019) reflexive thematic analysis was applied to the data, with the aim of investigating deaf students' experiences of FE/HE. Such an approach is used to generate analysis from the bottom-up, identifying patterns within the data which although is not shaped by existing theory, should be guided by some sort of theoretical or epistemological underpinning; in this case, with a focus on phenomenology in order to explore deaf students' direct experience of FE/HE. Reflexive thematic analysis can take the form of a number of different orientations. In the current project, an *inductive* approach was used where *coding and theme development are directed by the content of the data* (Braun & Clarke, 2019). This was deemed the most relevant to ensure that the

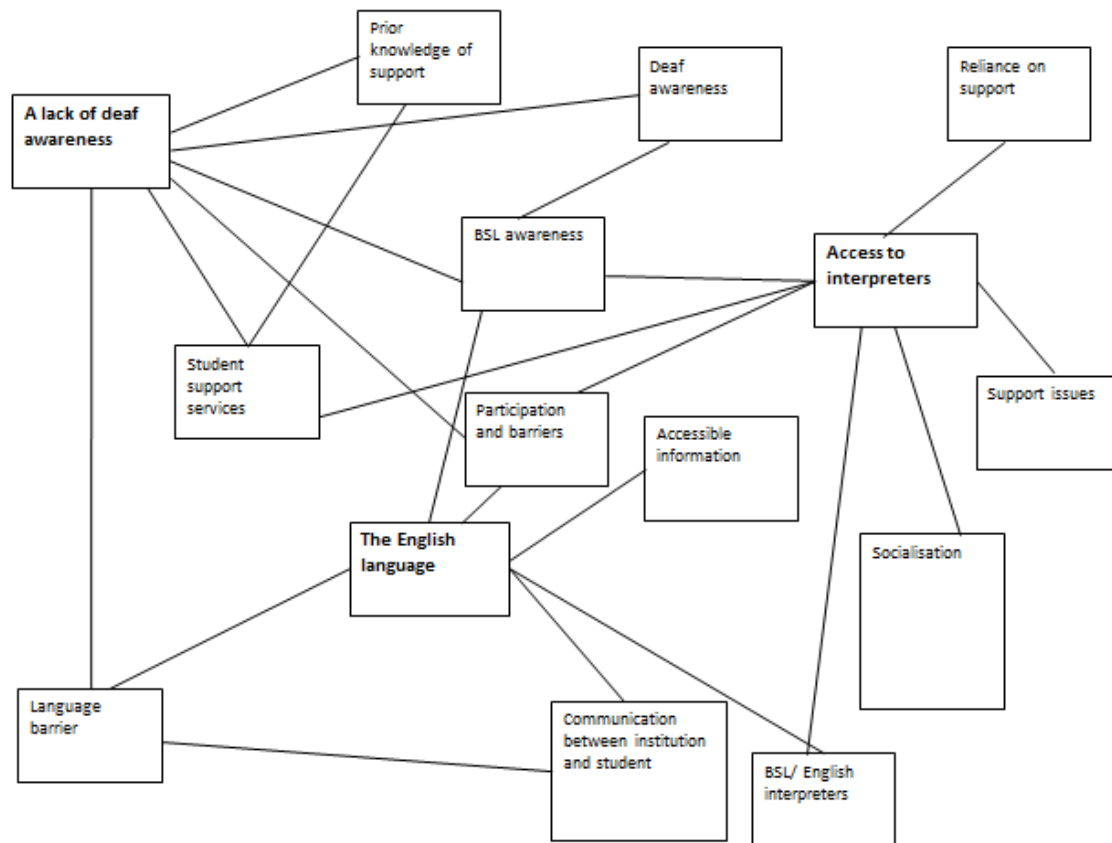
focus of the analysis remained on the data at all times. The same approach has been applied to similar research (e.g. Kritzinger et al., 2014; Smith, 2013).

The steps included in reflexive thematic analysis are as follows: (1) familiarisation with the data, (2) coding, (3) generating initial themes, (4) reviewing themes, (5) defining and naming themes, and (6) writing up the analysis. Authors One and Two completed the first three steps individually in order to triangulate perspectives and make the data analysis process robust and rigorous (Yardley, 2007), though it is noted by Braun & Clarke (2019) that such dual coding does not necessarily result in more accurate or reliable coding. One of the clearest advances from Braun & Clarke's original (2006) thematic analysis process is their treatment of the establishment of themes; where themes were once considered to 'emerge' from codes, existing as something for the researcher to find, reflexive thematic analysis, instead, treats themes differently: as analytic outputs, created from codes through the researcher's active engagement with the data (Braun & Clarke, 2019).

From the initial 293 codes detailed, 12 thematic areas were identified (see Figure 1 below) with clear overlaps between those found by Authors 1 and 2, at which point the focus of the project moved away from a general exploration of deaf students' experiences of FE/HE, to a focus on ascertaining the communication barriers faced within education. Final themes were then identified to produce those detailed in the following section. At least one quote from all sixteen participants has been used in this paper, to demonstrate the relative breadth of themes.

Figure 1

Thematic map of data (final themes in bold)



Finally, it is important to note the backgrounds of the authors in order to acknowledge how their beliefs, values and experiences may have affected the research in terms of analysing the experience of being deaf in a specific environment. Authors Three and Four are hearing and have had little interaction with deaf people. Author One is hearing, and has had moderate interaction with deaf people throughout her life through growing up with a profoundly deaf sister and being involved with local family support groups. Author Two is profoundly deaf and bilingual, using BSL and spoken English.

Findings

In order to answer the research question, *what are the communication barriers to inclusive further/higher education for deaf students?* the following three themes were established, which will be discussed in turn below:

1. A lack of deaf awareness
2. The English language, and
3. Access to (BSL/English) interpreters

Theme 1: A lack of deaf awareness

This first theme focuses on the importance of academics, support staff and peers – everyone that students interact with on a daily basis – being deaf aware, identifying that there is currently a lack of this. Deaf awareness, in this sense, refers to introducing staff and students to an understanding of the various barriers that deaf people face in everyday situations, and how these can be resolved, through adapting to meet the individual needs of deaf people. Previous work has shown that a lack of deaf awareness, not unexpectedly, impacts negatively on inclusion (e.g. Majocho et al., 2018; Rao, 2004), and participants in the current study identified this lack of deaf awareness at both a personal and institutional level. To begin, participants pointed to teaching staff: “Lecturers (need) to be more deaf aware” (Participant 7). “Understanding teachers was very difficult for me; the teachers were not deaf aware” (Participant 4). The participants here highlight that the educators responsible for their learning were not meeting their learning needs, given that they could not be understood. This immediately positions deaf students as being excluded from the learning environment. In addition, there was mention of peers’ lack of deaf awareness: “About half of them would look down at their feet and mumble when talking to me” (Participant 12).

Participants suggested that this lack of deaf awareness may be established at an institutional level as opposed to a personal level: “(I am) Not sure if disability services in college/university are truly deaf aware” (Participant 16), implying that if such support services are not demonstrating deaf awareness, there is little hope for those teaching staff who have less interaction with deaf students. Research has shown that students with disabilities who seek support services earlier perform better academically than those who postpone seeking services (Lightner et al., 2012), and considering that disability services are generally the main point of contact for individuals with disabilities entering FE/HE, it is concerning that Participant 16 questions just how aware of her needs – or not – they may be. This perception is shared with other participants: “Their (the institution’s) awareness of deafness is poor; they told me their experience with deaf students is rare” (Participant 2). “I went to the open day to find out more about the environment but (there was) nothing about what support there could be in place for those with disabilities” (Participant 15). To be told, as a deaf student, that the institution to which they have applied to study is not used to interacting with individuals with similar needs must be disheartening. Classing such experiences as “rare” suggests that the institution may not have the knowledge or understanding as to how to best provide for a deaf student, which in turn suggests that the student’s FE/HE experience may be limited. Similarly, having no information available at an open day about the support that is on offer, seems at best disappointing, and at worst, discriminatory. It highlights the lack of inclusivity being faced by deaf students.

In recognising the lack of deaf awareness, participants identified ways in which the issue could be addressed; largely through increasing deaf awareness both directly and indirectly, locally one-on-one and more broadly across the institution. Of interest is the way in which participants conceptualised ‘deaf awareness’ in different ways:

consider the suggestions from Participants 13 and 5: “I would really like colleges and universities to have more deaf awareness. Maybe create posters or information to inform others” (Participant 13). “I think promoting deaf awareness is the most important thing, in general, to the whole university” (Participant 5). The participants here advocate the development of deaf awareness at an institutional level, something for other people to be informed about. Both have positioned this as advantageous for *other people*; being wide-reaching enough to cover the “whole university” and to “inform others”. However, Participant 6 appears to consider deaf awareness as something for *him personally*, as opposed to others:

“I think at the beginning it would have been good for the whole class to be informed that there is a deaf student within their peers. (To include) Some tips on how to communicate as this might give them a bit more confidence to approach me.” (Participant 6)

Acknowledging the lack of deaf awareness, Participant 6 frames this as being a barrier for his peers communicating with him rather than him communicating with them, demonstrating the social model of disability (Oliver, 1996). As Participant 9 noted, (other people) “Should adapt themselves to fit the needs of myself rather than me adapting”.

Participants also identified other ways of ensuring that they were getting the best and the most out of their educational experience: “It would be great if lecturers and tutors had regular one to one meetings with deaf students to ensure that students haven’t missed anything important” (Participant 1). Such a suggestion implies that deaf students recognise that they may be at risk of missing academic content and so may need some extra support to make sure that they are keeping up with the class. This is particularly

important given that for individuals with disabilities, uptake of such support can result in greater academic achievement (Lightner et al., 2012), so one way that inclusion for deaf students could be enhanced is through scheduled support meetings with academic staff.

Theme 1 has highlighted one communication barrier to inclusive FE/HE for deaf students as there being a lack of deaf awareness, evident both in the teaching environment, and institution-wide. The analysis now turns to the second theme, and second communication barrier to inclusion: The English language.

Theme 2: The English language

The second theme focuses on the communication barriers to inclusion for those deaf students who struggle with the English language. The majority of participants detailed how their first or preferred method of communication is BSL, but that FE/HE institutions lack provision of materials in BSL for deaf students who use it. For those students who can use English, there are still some barriers that hinder inclusion that are often taken for granted by hearing people, as exemplified in the following quote: “I didn’t get in touch with the university to learn more about the course as I can’t understand phone conversation with my disability” (Participant 1). This highlights the importance of alternative communication methods that must be available and made clear to students. However, this barrier of not speaking the English language was not restricted to just the educational environment: Participants 10 and 9 below highlight the difficulties deaf students can face in social groups:

“Nights out could be challenging: I missed so much information, maybe there would be a group conversation and I’d just miss it all, additionally the noisy

environment made it most difficult for me. It would have been beneficial if those involved learned basic BSL”. (Participant 10)

“Sometimes I had to think on my feet and adapt, even using my phone as a method of communication. I have to think about how to adapt, what is the best way or easiest for them to communicate with me, for example, writing it down or using my phone – a different path”. (Participant 9)

What is of interest here is the sense of whose responsibility it is in such a situation to ensure inclusion: whilst participant 10 indicates the responsibility is with others (i.e. they could learn basic BSL), participant 9 implies that it is his own (i.e. coming up with alternative communication approaches). This is similar to the focus in the previous theme with regard to addressing deaf awareness and where obligation lies: despite the differing perspectives, the focus is on achieving inclusion.

Participant 3 details the barriers he faced due to the focus on English: “I struggled, because people were all talking which made it hard to follow... everything was produced in English”. Like Participant 10 above, Participant 3 identifies the difficulties involved not only in following conversations, but also that there were no BSL alternative materials to refer to. He could not seek clarification with regard to learning from either peers or resources, thus demonstrating another communication barrier to inclusion.

The participants in this study, however, highlighted ways in which their time in FE/HE could have been improved by increasing inclusivity. Participants 2, 8 and 14 below suggest ways in which BSL could have been utilised to ensure deaf students who use BSL could engage both at course level and at the wider institution level:

“It would have been helpful to have BSL videos, as (the FE/HE institution) have no videos. It is all written in English: for me that is OK, but for other deaf people it would be difficult for them”. (Participant 2)

“I would hope that with the BSL (Scotland) Act 2015 in place, there will be BSL videos to allow for easier access to information. The prospectus seems very focused on a lot of English text: can someone whose first language is BSL access that? I’m not sure”. (Participant 8)

“When you fill out the application form, there’s other boxes to complete then the last page is personal statement... It’s difficult to write about yourself. It may be an idea in future if the individual is allowed to respond using BSL”. (Participant 14)

Participant 8 makes reference to the BSL (Scotland) Act, highlighting that this should (soon) be the norm, and indeed previous research has demonstrated the importance of engagement: Komesaroff (2005) identified that if there are modifications in the overall education provision for deaf students, this can positively reinforce engagement, highlighting a need for the reassessment of the education system for deaf students in FE/HE.

The second theme of the English language focused on the communication barriers to inclusion in FE/HE as a deaf student with regard to the focus on English. There appear to be two issues raised here: firstly that deaf students struggle within the English-speaking environment which impacts on their ability to interact with others and engage with learning. However, there is also the issue of assumptions: that although

deaf people may have difficulties hearing, they can still understand English (e.g. reading, writing) which is not necessarily the case. This is an important issue, as being unable to comprehend course material will obviously impact on education, but it can also hinder social relations with other students studying the same course. Whilst all courses cannot be expected to be delivered in BSL, institutions do have the scope to adapt the learning environment; recent work has suggested that engagement with educational content in sign language is correlated with better performance (Hashim & Tasir, 2020; Parvez et al., 2019). Such struggles with the English language highlight the reliance on interpreters in FE/HE, which the analysis now turns to.

Theme 3: Access to interpreters

The final theme focuses on the importance of deaf students having access to interpreters. In Scotland, disabled students can apply (with support from their institution) for Disabled Students' Allowance (DSA) if they are home students. Typically, this funding would cover the cost of any support required by the student for equipment and non-medical personal help (Student Awards Agency Scotland, 2020; also see Noble, 2010 for more detail about support available). For deaf students, this typically entails note-taking and sign language interpreters. A member of the student support service would apply for funding on behalf of the student to pay for these, based on the student's course and requirements. The number of hours' support requested and its use would vary between institutions, and would be dependent on the application written by the adviser and the institution's 'rules' regarding what the funding could be spent on: for instance, the Open University (2020) states that "DSA funds can only support compulsory study-related sessions, not optional or social events".

If this access is not available, it creates another communication barrier for a deaf student's inclusion in FE/HE in terms of being an active member both in the academic and social settings, as demonstrated by Participant 5: "It was so important to have an interpreter and/or note taker present so that there is access to information". Participant 5 highlights the importance of having access to interpreters as a source of information in her classes. Interpreters are also required within other facets of FE/HE: "It would be important to have (an) interpreter with the guidance tutors/ careers advice so the students can see further opportunity for the future" (Participant 10). "I did attend (open days/induction) but it was hard because there was no interpreter" (Participant 16). "It is so much better when an interpreter is present at the interview. When there isn't one, it is difficult to understand what they are saying/asking" (Participant 4). "I went to the open day just for a nose around and as expected, no BSL interpreters" (Participant 11).

The quotes here identify that institutions are not ensuring that interpreters are incorporated into other aspects of FE/HE such as counselling sessions, open days, induction, and interviews as standard, even though the Equality Act (2010) expects educational institutions to make reasonable anticipatory adjustments for students with disabilities. Such sessions are vital so that students can learn about FE/HE as a whole, but it would appear that these non-academic activities are overlooked when it comes to ensuring the availability of interpreters.

An additional aspect, potentially with greater emotional significance, is meeting new people and building a good network of contacts, as well as simply having fun and taking part in leisure activities. For the most part, supporting such socialising is not covered in the interpreter's remit, (Student Awards Agency Scotland, 2020), as detailed in the following quote:

“I did go to one or two informal nights out, but communication was always difficult. I look back and wish that the university DSA (to fund an interpreter) covered events as well, not just learning sessions. University is not just about learning, it is about networking; making new friends”. (Participant 8)

Participant 8 here references difficulties in communicating and fitting in, highlighting the importance of having access to interpreters throughout and across the different aspects of the FE/HE journey. Despite having access to interpreters in classroom settings, deaf students are left without a way of joining in extracurricular activities, which is a fundamental part of student life, making them extremely susceptible to social exclusion, isolation and loneliness (Brice & Strauss, 2016).

However, it is important to note, too, that participants raised the issue of ensuring that interpreters were sufficiently qualified to be doing the job. DSA criterion posits that sign language interpreters must “hold a qualification in BSL” (Student Awards Agency Scotland, 2020, p. 13), however, this guidance is vague given that there are different levels of qualifications, and different levels of interpreting, as explained by Participants 3 and 9: “During the first course... most of them (interpreters) were CSWs (communication support workers), expected to become interpreters” (Participant 3). “A fully qualified, registered interpreter knows how to meet the needs of the deaf person; a CSW doesn’t. University uses a lot of jargon in the language so it’s important to have an interpreter of a high standard” (Participant 9).

Several conclusions have emerged from this third theme. Firstly, students identified a need for FE/HE institutions to put more effort into enabling them access to interpreters. On the basis that deaf students need constant communication support in their student lives, it is of utmost important that interpreters are incorporated into all

academic settings: not just the classroom. Secondly, participants felt that insufficient communication support created difficult situations where they felt excluded from social interactions. This in turn made social integration in extracurricular activities particularly challenging. Consequently, social exclusion has been shown to have serious consequences on deaf students' mental health as evidenced by Participant 11's summation that, "despite the lack of interpreters and the huge stress it caused me, I passed". Finally, the importance of interpreters being employed only when they are officially qualified was noted. Providing deaf students with anything less than a fully qualified interpreter can impact on learning, and undermine deaf students' contributions to their academic experience.

Discussion

In answer to the research question, *what are the communication barriers to inclusive further/higher education for deaf students?* the analysis established themes of (1) A lack of deaf awareness, (2) The English language, and (3) Access to interpreters.

Theme 1 demonstrated that there is a lack of deaf awareness in FE/HE, both at a personal and at an institutional level. This impacts on inclusion in that if teaching staff, peers and the wider FE/HE community are not aware of the needs of deaf students, they will continue to be marginalised with potentially negative consequences (Brennan et al., 2006; Tinto, 2002). There is therefore a need to promote deaf awareness, as highlighted by participants as beneficial for all: for deaf students themselves, but also for those they interact with (Hyde et al., 2009). Recent work argues for governmental and professional initiatives to increase deaf awareness in mainstream education (Berry, 2017), so this is one way in which this first barrier could potentially be addressed.

Theme 2 centred on the difficulties faced by deaf students with regard to communicating in English. Research has demonstrated that ease of communication is strongly related to student engagement and academic achievement: when students feel at ease with their communication with peers and teachers, they see themselves as having control in the academic setting and are more likely to engage and become an active student (Foster et al., 1999). Conversely, other work has shown that deaf students' communication problems are amplified when they attend FE/HE institutions which do not have facilities which cater to their needs (DeWitt et al., 2015). Specialist teaching has been shown to make a difference for academic attainment for deaf students (Powers, 2011), highlighting the importance of effective communication. With the passing of the BSL (Scotland) Act 2015, it is expected that "inequalities experienced by D/deaf and deafblind BSL students are being addressed" (Scottish Government, 2017, p. 15), and so while (as of yet) the whole curriculum cannot be delivered in BSL, smaller steps can be taken to facilitate inclusion in terms of reasonable adjustments.

Theme 3 was focused on the importance of access to interpreters for deaf students in FE/HE. Research has reported that deaf individuals' meaningful interactions with the 'hearing world' are rare (Hyde et al., 2016), made even rarer if there is no support in place for them to communicate. Given that research has identified the potential severity of social isolation (e.g. Boutin, 2008; Brice & Strauss, 2016), these findings highlight the importance of ensuring interpreter support is available not just in the classroom but in other aspects of academic life. Of pertinence too, is the provision of properly qualified interpreters who often are the bridge between deaf students and the 'hearing world' (Schick et al., 2005). Participants in the current study noted that often the interpreting support they received was from trainees which could be less than

adequate, with potential to impact on their learning and have broader implications for the value placed on students' needs.

Implications

The current findings are not necessarily new. Indeed, they almost completely overlap with a 2010 study based on reflections of inclusion with a Portuguese deaf student population (Bisol, 2010). However, they provide insight into the current environment within Scottish FE/HE, and support other similar work that is campaigning for more focus on and funding for supporting deaf students (e.g. Powell et al., 2014). As such, we suggest the following as ways in which FE/HE institutions can facilitate the inclusion of deaf students more consistently:

- Availability of deaf awareness training for staff (both academic and central services staff) and students, in terms of basic communication practices, interacting with deaf students and best practice for delivering both academic content and accessible information.
- Discussions with deaf students regarding alternative delivery of some course materials (e.g. in BSL).
- More consideration of non-academic interpreter support for social engagements and functions.

Limitations

There are some limitations to the current study. Responses from sixteen individuals are not representative of every deaf person in FE/HE. In addition, some of the participants experienced FE/HE as far back as 1986, and so it is likely that practices have changed. However, participants in the study had relevant experience to expertly answer the

questions being posed and nothing was highlighted in the data that suggested that any participant's experience was deviant, and therefore the in-depth knowledge that has been obtained on the topic provides a rich understanding of recent and current practice in Scotland (Yardley, 2007).

Given that some of the participants' responses were translated from BSL into English, there is the possibility that perspectives and opinions have been misconstrued, resulting in inaccurate representations of the topic, and even though this translation was conducted as carefully as possible, it should be noted that there are methodological, epistemological and ontological issues around the translator being part of the research team (see Temple & Young, 2004). The study recognises examples of good practice which is encouraging, but it is clear that more needs to be done to ensure that deaf students are being included in FE/HE to the same extent as their hearing peers.

Conclusion

Despite minor improvements in the last decade or so in supportive infrastructure for deaf students in FE/HE, the way in which they navigate such settings is still not gaining enough attention (Woodcock et al., 2007). Considering the fact that deaf students are more dependent than hearing counterparts on communication support from FE/HE, their chances to be successful in both academic and social situations are significantly hindered (Majocha et al., 2018). Irving King Jordan, former first deaf president of Gallaudet University, the world's only university with all programmes and services designed specifically for deaf students famously stated, 'deaf people can do anything hearing people can do, except hear' (Gallaudet University, 2013). It is therefore our responsibility – and privilege – as educators to support those students who face extra challenges in their academic pursuits in whatever ways we can.

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Disclosure of interest

The authors report no conflict of interest.

Appendix 1: Interview questions

- College / university course – where, when?
- Information about the course – how did you find out? Did you get in touch to find out more?
- Access to information – easy to understand or difficult?
- Induction days / open days – access to information, support in place?
- Disability Service – your experience? How did they engage? How was their attitude?
- Support in place for course – what did you have? How was it? Reliable?
- Peer support / social events – did you go?
- Graduation – did you have information? Support in place?
- Look back to your time at FE/HE, what would you have done differently? Comments / tips?
- Before you started at college / university, what do you wish you knew?
- What knowledge / skills do you wish you had before leaving college / university?
(e.g. what the next step is; looking for employment; more information about possible career choices and how to get support)
- If you had the option to learn BSL alongside your subject would you select this?