

Deaf children from ethnic minority groups

A literature review by the National Deaf Children's Society

1. Scope of literature review

In terms of deaf children who are from ethnic minority groups¹, what does research say, if anything, on:

- a. the outcomes they achieve, particularly in terms of attainment and emotional wellbeing
- b. their experiences in accessing public services, particularly specialist services for deaf children. This aspect should also consider the experiences of parents/carers in accessing public services for their child.
- c. the impact or effectiveness of any interventions that have been targeted at this group to improve outcomes.

The aim of the literature review is to identify gaps in our knowledge and understanding of the experiences of deaf children who are from ethnic minority groups. The review is not limited to a specific area but has a broad scope (eg covering experiences of educational and medical services). We also look at attainment in school and, because attainment is often associated with emotional wellbeing, whether deaf children from ethnic minorities are particularly affected by difficulties with emotional wellbeing.

We include research involving any group that can be defined as an ethnic minority. For example, a group with different cultural or national traditions from the majority of the population and who experience disadvantages on the basis of their ethnicity (eg via racism or structural inequalities).

2. Executive summary

We included 19 papers, covering a range of ethnic minorities, in this review. Only three were from the United Kingdom and most studies were from the United States. Over half of the papers in this review were published between 2010 and 2020.

We identified the following key points regarding outcomes of deaf children who are from ethnic minority groups. However, it is important to recognise that while some of these issues may be relevant to all deaf children, deaf children from ethnic minorities are at risk of discrimination and stereotyping on the basis of both their deafness and ethnicity.

- Poorer language outcomes as well as later cochlear implantation rates have been reported for deaf children from ethnic minority families living in the United States and Norway.

¹ We use 'ethnic minority groups' throughout as a key term within this paper, rather than BAME or People of Colour. This is because the studies reviewed also focus on the experience of people from white minority groups. Where possible, however, we have talked about the experiences of people from specific groups, rather than making generalisations. We acknowledge that there are some difficulties and limitations connected to the terms used in this report. However, we felt it was important to share the findings of this literature review, while acknowledging the terminology used may need to evolve and change.

- US-based studies indicate that Black deaf children and young people are likely to report poorer educational outcomes compared to white deaf children and young people, leading to an employment gap in adult life.
- Three European studies have not found a link between ethnicity and lower emotional wellbeing.

Many studies focused on access to educational or health services, with issues concerning language and culture being key themes. The report identified the following key points around family access to services.

- Public services need to change to meet the requirements of a culturally diverse population.
- Professionals working within these fields may have limited understanding of the needs of ethnic minorities.
- Families may find public services inaccessible. Professionals may not share a common language with a family and appropriate language resources are not widely used. Families may therefore be unfamiliar with how services are organised and what to expect from them.
- The uneven distribution of services on a national level may contribute to health inequalities within ethnic minority groups.

Inaccessible services that are not sensitive to the needs of a culturally diverse population may lead to deaf children from ethnic minority groups being underserved by public services. For example, they may receive cochlear implants at a later age.

The remaining set of papers focused on deaf young people's educational experiences.

- Intensive language development is needed for children from multilingual backgrounds where the language used at home differs from the language used at school.
- Deaf young people value access to their culture but language barriers prevent them from accessing opportunities to do so at home.
- A biased curriculum and a lack of diversity within schools and universities means there are reduced opportunities for deaf young people to learn about their cultural heritage in educational settings.
- Deaf children from some ethnic minorities who may be the first in their family to go to university are not adequately prepared at school. For example, they are not challenged academically or may not have information or access to resources needed to succeed.

There are recommendations in Section 6 to address these issues, which focus on:

- improving language outcomes
- encouraging educational settings to integrate multiculturalism
- improving services
- promoting characteristics associated with positive outcomes.

As this review included a number of ethnic minority groups from different countries, caution is needed when generalising the findings and recommendations reported here. Different groups within different nations are likely to have unique experiences.

3. Methodology

This literature review is not exhaustive. We searched online databases (eg PubMed) using relevant terms (eg Black, deaf children, ethnicity, ethnic minority, Asian) and limited the search to papers published after 2000.

On the first pass, we selected papers based on an initial scan of titles and abstracts. We also supplemented our search by looking at previous issues of journals associated with deaf education (eg *Journal of Deaf Studies and Deaf Education*, *Journal of Deafness and Education International*, and the *American Annals of the Deaf*).

On the second pass, we then reviewed the papers to determine if they fell within the scope of this literature review. References cited in each paper were also reviewed to identify any key texts that did not appear in our initial search. This resulted in a total of 18 papers for this literature review. We have provided an overview of these papers in Table 1.

Table 1: List of papers included in review, organised by country and year²

Author, year, positionality	Focus	Method
United Kingdom		
Swanwick et al. (2019)	Educational experience of children who are deaf or hard of hearing from migrant Roma families.	Combined survey of local authority services and schools, with five case studies of local authority services and four case studies of Roma deaf children and their families.
*James (2000)	Identity in the British Black deaf community.	Qualitative analysis of interview data involving 21 Black deaf people (average age 28 years).
Turner and Lynas (2000)	Families of South Asian origin (eg Pakistan, India, Bangladesh) and their use of services.	Qualitative analysis of interview data involving 16 Teachers of the Deaf.
United States of America		
*Garberoglio et al. (2019)	Black d/Deaf Americans' educational and employment outcomes.	Quantitative analysis of census data.
*Torres (2019)	Successful strategies (at high school and college) leading to graduation for first generation Latino/a students.	Compared interview data from six students who graduated from college vs. five who did not.
*Stapleton and Croom (2017)	Undergraduate experiences of Black d/Deaf students at university.	Qualitative analysis of interview data involving six Black d/Deaf students.
*Stapleton (2016)	How Black d/Deaf students experience microaggressions at university.	Qualitative analysis of interview data involving six Black d/Deaf students.

² We have indicated in our table (with an asterisk before the author names, eg *Stapleton, 2016) papers which also have a person from an ethnic minority as the lead author or co-author. This information, which was sometimes stated when discussing the positionality of the authors, was not always available for each study.

*Ayantoye and Luckner (2016)	How ethnic minority deaf students from diverse language backgrounds succeed at school.	Qualitative analysis of interview data involving four high school students (14–19 years old).
Baker and Scott (2016)	Educational experience of multilingual children.	Retrospective study of one deaf multilingual child emigrating from Mexico in 2001.
Wu et al. (2015)	Post cochlear implantation outcomes in non-English speaking, ethnic minority study groups.	Retrospective study comparing outcomes of 12 patients with a control group of 18 English speaking deaf patients.
*Borum (2012)	Communication choices by African American hearing parents of deaf children.	Qualitative analysis of interview data involving 14 parents.
*Simms et al. (2008)	Investigation of diversity in the workforce, focusing on deaf education programmes.	Quantitative analysis based on a survey of 3,227 professionals in 313 deaf education programmes.
*Foster and Kinuthia (2003)	Concept of identity in undergraduate students who belong to ethnic minorities.	Qualitative analysis of interview data with 33 deaf students of Asian American, Hispanic American and African American backgrounds.
Denmark		
Dammeyer (2009)	Emotional wellbeing in 334 deaf and hard of hearing children (6–19 year olds) with ethnicity included as a potential risk factor.	Quantitative survey of teachers using Strengths and Difficulties Questionnaire.
France		
Bedoin (2019)	Perception of identity in young deaf migrants (mostly from North Africa but including three from Asia, two from Africa and one from South America).	Qualitative analysis of interview data involving 18 students, 14 parents and 15 professionals, including five teachers.
Israel		
Goldblat et al. (2020)	Association between communication choice, ethnicity and place of residence in ultra-Orthodox and Arab families.	Quantitative analysis of government data from 1,210 young adults.
Netherlands		
Van Gent et al. (2007)	Emotional wellbeing in 70 deaf adolescents (13–21 year olds) with ethnicity included as a potential risk factor.	Quantitative survey involving teachers, parents and adolescents.
Van Eldik et al. (2004)	Emotional wellbeing in 238 deaf children (4–18 year olds) with ethnicity included as a potential risk factor.	Quantitative survey involving parents.
Norway		
Amundsen et al. (2016)	Impact of parental ethnicity on cochlear implantation in deaf children.	Retrospective study involving 278 children. 31% of dataset had parents from ethnic minority groups. Compared rate of implantation in white children and children from ethnic minority groups.

Table 1 indicates that 10 papers are based on studies conducted in the United States. Only three papers report findings from the United Kingdom. The remaining six papers are from Denmark, France, Israel, Netherlands and Norway.

Our literature review covers a range of racial and ethnic groups. The diverse mix of ethnicities therefore needs to be considered and we should be cautious about generalising the findings of this review. Studies based in the United States focus primarily on Black African Americans but also include Latino/a individuals as well. One study in the United Kingdom focused on the Black deaf community, while the two remaining UK studies focus on families with South Asian or Eastern/Central European backgrounds. Similarly, the French, Israeli and Norwegian studies focus on migrants from a range of backgrounds.

Aside from six papers, most of the studies were conducted in the last 10 years. Suggestions made by older studies have been incorporated into this review, although we have not been able to take into account any changes to the relevant services since publication.

The studies listed cover a range of methodologies. The majority of studies are qualitative and report findings from interviews with a small number of participants. Some studies focus on perceptions of ethnic minority groups by professionals, while some interviewed ethnic minority groups directly (eg either the child, young person, or their parents).

4. Outcomes: attainment and emotional wellbeing

Information on outcomes in relation to ethnicity are difficult to locate across a variety of disciplines. In their review of 57 cochlear implantation studies, Belzner and Seal (2009) find that limited attention is given to ethnicity. Numbers are also likely to be inaccurate for some groups.

Swanwick et al. (2019) report that deaf education services are likely to under-report the number of deaf children in Roma families, since services are either not collecting this information or deafness is not being diagnosed.

Garberoglio et al. (2019) use 2012–2017 census data based on 194,000 deaf people, to examine post-secondary outcomes in Black deaf people living in the United States. Of their final sample, 16,600 people were Black.³ As with their hearing counterparts, the findings indicate that Black deaf people generally report lower educational outcomes.

- Comparing outcomes for Black deaf people with that of white deaf people shows that there is an attainment gap. For example, 12% of Black deaf people have an undergraduate degree compared to 29% of white deaf people.
- Black deaf women report slightly higher rates of attainment than Black deaf men.
- Black deaf people with additional disabilities have much lower rates of educational attainment. 8.4% reported having an undergraduate degree compared to 17.8% of Black deaf people without disabilities.

The report indicates some improvement in educational attainment over time, which appears to be led by Black deaf women. In 2017, nearly 80% of Black deaf people completed high school compared to 73% in 2008. Improvement was lower at undergraduate level: 10% in 2008 compared to 12% in 2017. The authors

³ Note that this report also grouped other ethnicities with the category of Black. A breakdown of figures according to ethnic groups is not available.

stress that further research needs to be conducted on the educational experiences of this group and the factors associated with successful attainment. We summarise recent research in this area in Section 5.

Garberoglio et al. (2019) also demonstrate that this attainment gap can lead to an employment gap between Black and white deaf adults in the United States. This gap widens when gender and additional disabilities are taken into account.

- Compared with white deaf people, Black deaf people have lower rates of employment (38% compared to 54%) and earn less money annually (reported difference is approximately \$14,000).
- Black deaf women are more likely to earn less money while Black deaf people with additional disabilities report lower rates of employment.

We have been unable to locate similar research on educational attainment and employment outcomes for Black deaf people in the UK. A recent Freedom of Information request to the Department for Education (England) by the National Deaf Children's Society shows lower educational outcomes at GCSE level for Black and Asian deaf children when compared to white deaf children (see Annex).

As with attainment data, few studies provide information on emotional wellbeing in children from ethnic minorities. European studies investigating risk factors linked with lower emotional wellbeing in deaf children have not found an association between ethnicity and lower emotional wellbeing (eg Dammeyer, 2009; van Gent et al., 2007; van Eldik et al., 2004).

Two studies in our review focus on outcomes following cochlear implantation in ethnic minority groups. Lower post-cochlear implantation outcomes have been reported for non-English speaking ethnic minority groups in the United States (Wu et al., 2015). Compared with English-speaking groups, children from non-English speaking ethnic minority families were implanted later (average age is 4.3 years compared to 2.2 years for English speaking groups) and had lower scores for speech perception at six and 12 months following implantation. Although a small study with 12 children, Wu et al. (2015) note that these families reported lower household incomes and were likely to be classed as being socioeconomically disadvantaged. They suggest that differences in speech perception scores may be related to wider issues associated with socioeconomic background in addition to late implantation.

Similar findings are reported in Amundsen et al. (2015) among deaf children with cochlear implants in Norway. Although children from ethnic minorities reported poorer outcomes on speech recognition tests⁴, children from ethnic minorities who were born in Nordic countries did better than those born outside of these countries. This is because children born in Norway are able to benefit from health systems that include free newborn hearing screening and that guarantee earlier access to cochlear implants.

⁴ The authors of both studies acknowledge that their language perception tests were not delivered in the child's native language. However, trained audiologists and standardised tests in minority languages are often not widely available.

5. Accessing public services

This section is divided into two parts:

1. Access to public services in general.
2. Educational experiences of deaf young people.

It should be noted that studies which focus on accessing public services often present findings elicited from professionals (ie there is limited data from ethnic minority groups themselves). Overall, these studies frequently refer to cultural and linguistic factors as having an impact on access to specialist services. They suggest that an understanding of these issues is crucial for improving outcomes.

Accessing public services

Issues with accessing public services are frequently associated with language barriers. Some deaf children may come from families where the preferred language at home differs from the national language. This is often the case with migrant families (eg Swanwick et al., 2019). Specific issues regarding access to a range of public services are listed below.

- Professionals have limited knowledge or understanding of a child's linguistic profile and limited experience in using the language themselves (Swanwick et al., 2019).
- Teachers of the Deaf can find it difficult to communicate with families who do not use English at home. They report uncertainty as to whether important information is being understood (Turner and Lynas, 2000).
- Access to sign language classes can be limited if tutors do not know the spoken languages used by parents (Turner and Lynas, 2000).
- Audio, video or printed resources in appropriate languages do not appear to be available or be widely used among local authorities (Turner and Lynas, 2000).
- Access to medical services (eg cochlear implant counselling for parents considering this option) in native languages is also reported to be an issue (Wu et al., 2015; Goldblat et al., 2020).

Measures can be taken to address the language barrier although they themselves can create additional issues. Turner and Lynas (2000) describe how careful consideration is required when choosing a spoken language interpreter. The interpreter needs to be well known to the professionals, familiar with the subject matter, and able to establish a good rapport with families.

Migrant families (families who have moved from one country to another) may also have a limited understanding of professional services and how they all relate to one another. Families may not be aware of the pathways available to them. These issues, which cause anxiety, are further exacerbated by language barriers. Examples from the literature reviewed include:

- Families appearing reluctant to engage with educational services or attend audiology clinics due to limited understanding of their role (Swanwick et al., 2019).
- Parents may decide against surgery because of doubts about effectiveness, or they may find the prospect of multiple hospital visits off-putting (Turner and Lynas, 2000).
- Professionals demonstrated limited understanding of how ethnic minority families experienced medical appointments (eg Swanwick et al., 2019).
- A history of racism from public services (whether from their country of origin or their current country of residence) may lead to increased scepticism regarding engagement with professionals (eg Swanwick et al., 2019).

Migrant families are unlikely to have received adequate information on treatment and support options prior to arrival (Amundsen et al., 2015; Swanwick et al., 2019). It is possible that deafness was not diagnosed in the country of origin or that they have yet to benefit from technological support. Treatment may sometimes be delayed while families seek permanent residency. For example, children from families seeking refuge are more likely to receive a cochlear implant later (an average of seven months later in Amundsen et al., 2015). Migrant families may also lack an immediate family network that they can rely on for emotional and moral support (e.g. James, 2000). This is a critical issue in countries with an increasing number of migrants or refugees.

Access to services may also be problematic when service providers do not consider the personal and professional circumstances of each family. For example, James (2000) pointed out that peripatetic services in the UK involve home visits during the day. As many Black female migrants worked long hours within the public sector, it was difficult for this group to access these services regularly. James (2000) also reported that peripatetic services were not culturally sensitive and would not accommodate the needs of non-English speaking families or working migrants. Services providing hearing aids in colours that did not match the complexion of Black children were also described as a source of embarrassment.

Professionals, particularly in Turner and Lynas (2000), which focused on Teacher of the Deaf perceptions of ethnic minority groups, also reported a number of cultural issues which affect access to services.

- Meetings can be difficult to organise owing to cultural considerations (eg some South Asian women may not be allowed to travel on public transport unescorted, Fridays may not be suitable for meetings for Muslim parents) (Turner and Lynas, 2000).
- Teachers of the Deaf perceived some Asian families as having different long term aims for children, with less emphasis on progressing towards independence when compared with white British parents (Turner and Lynas, 2000).
- Teachers of the Deaf, with limited understanding of families' cultural backgrounds, can find it difficult to advise on how to facilitate language acquisition. Differing family hierarchies can also be at play (eg senior relatives and grandparents may have more authority in some Asian families) (Turner and Lynas, 2000).
- The mobility of families (eg Roma families in the UK) present challenges in offering consistent support (Swanwick et al., 2019).
- Families can frequently defer to the professional's judgement despite professionals seeking to form partnerships or encourage parental autonomy (Turner and Lynas, 2000; Torres, 2019).
- Cultural factors may also be behind negative attitudes towards disability and may lead to a preference not to use visible assistive devices (eg family status may be important in some Asian communities and evidence of disability may have a negative effect on perceptions) (Turner and Lynas, 2000).

The choice of language, whether a choice between two spoken languages or a spoken or signed language, may also be determined by cultural or situational factors. Understanding the underlying context in which these factors are made may be extremely informative for professionals working with these groups.

Borum (2012) describes how Black parents in the United States tend to adopt an Afrocentric world view. This is understood as viewing reality from a diunitual (ie both/and) rather than a dichotomous (ie either/or) view. For example, parents did not think they needed to select one communication approach but considered several in combination. They preferred to use speech with their child in environments related to their cultural heritage but wanted their child to speak and sign so they could communicate with other deaf signers in other contexts.

Other families may prioritise the national language at the expense of their native language because they consider it essential for the social and professional integration of their child (eg parents of deaf children in migrant families living in France, as reported in Bedoin, 2019). These views may conflict with their child's own desire to learn their home language. Similar studies, outlined in the following section, indicate that deaf children and young people value access to their cultural heritage and consider language as an important part of their cultural and ethnic identity.

Communication choices may also differ between ethnic minority groups in the same country (Goldblat et al., 2020). Ultra-Orthodox Jewish families, an ethnic minority in Israel, are more likely to use spoken language with their child. In contrast, Arab families, comprising a larger ethnic minority group, are more likely to use sign language or combined communication.⁵ Rates of implantation also differed between the two groups: children from Ultra-Orthodox families were much more likely to have a cochlear implant (60% compared to 18%).

These differences were attributed to a number of factors. For Ultra-Orthodox communities, fear of stigma within the community may be a factor for the choice of oral language. Parents will also defer to other members of the community (eg religious authorities) and may be encouraged to access doctors more likely to recommend oral communication. Goldblat et al. (2020) draw attention to the lack of availability of speech and language therapists who are native Arabic speakers as a possible factor explaining the low use of oral language among Arab participants. In addition, racial/ethnic disparities in child health were also found to be associated with geographic factors. Israeli Arabs living in remote areas were more likely to be vulnerable to greater differences in outcomes because they were located in areas where health provision was inadequate.

Educational experiences of deaf young people from different ethnic minority groups

In this section, we outline studies which have focused primarily on the child or young person and their educational experience. Similar themes, such as access to language and cultural heritage, were also frequent in this group of studies.

Poor literacy and language development are cited as key issues in the studies we reviewed; particularly for children from multilingual backgrounds. Baker and Scott (2016) describe how children from this group need intensive language immersion to develop a strong base in the language used at school. However, in their case study of one deaf multilingual child educated in the US after emigrating from Mexico, they found that this need was overlooked by teachers. Instead, they report low levels of literacy which they associated with an inconsistent exposure to English since it was not used at home. Teachers in Baker and Scott's study also stressed the lack of instructional strategies and assessments specifically designed for this group.

Another theme arising from this review is being unprepared for key transitions such as moving to post-secondary institutions. Torres (2019) describes how some first-generation deaf Latino students are educationally unprepared for college. They are unable to rely on parents' knowledge or educational resources in the same way as their white peers. These students reported not being held to the same high standards at school as their peers and that they were not encouraged to develop critical thinking skills prior to higher education. Although it is possible that deaf children in general may not be held to the same standards as their hearing peers, it is important to understand that deaf children from ethnic minorities may be at risk of double discrimination (Foster and Kinuthia, 2003; Swanwick et al., 2019). That is, they are discriminated against on the basis of both their deafness and their ethnicity.

⁵ This study did not include educational setting as a variable in their analysis which would have had a strong influence on communication choices.

Other studies have outlined how a group's minority status can be overlooked in educational settings, which can lead to stress. These incidents have been described as microaggressions, which are described by Stapleton (2016) as "unintentional behavioural and environmental slights and indignities toward any marginalised group". Stapleton and Croom (2017) and Stapleton (2016) outline how these microaggressions are experienced by Black deaf students in higher education:

- Students often feel isolated as a consequence of a biased curriculum which neglects multiculturalism (eg Black culture is not taught in schools).
- This issue is exacerbated by a lack of diversity in teaching and administration staff within universities (see Simms et al., 2008).
- Institutions do not always provide space for culturally relevant programming. Space here refers to physical space as well as space on the curriculum.
- Racially motivated incidents on campus were often downplayed or ignored. Educators were perceived to move on from incidents quickly, leaving underlying concerns unaddressed.
- Being educated in a predominantly white environment (eg white teaching staff, biased curriculum) gives white students an advantage over their Black peers.

To overcome these microaggressions, students relied on support from external resources such as family, and organisations such as the National Black Deaf Advocates for mentoring. These were important tools to build resilience from their community's cultural wealth. Unaddressed, these microaggressions are believed to impact upon Black students' academic progress and their overall sense of support and safety on campus.

Similar experiences in educational settings have been noted in the UK. Black deaf informants in James (2000) described how teachers appeared to have negative expectations of Black deaf students and treated them in a more restricted way than other pupils.

Access to cultural heritage and identity

An additional theme is an individual's desire to learn their cultural and ethnic heritage (eg Foster and Kinuthia, 2003).

Many felt opportunities were not accessible for a number of reasons and this was cited as a source of stress. Deaf children and young people may be unable to access cultural heritage at home due to language barriers (eg James, 2000). Educational policies may mean that students are educated separately from peers of similar cultural background (eg one Black participant described attending a different (predominantly white) school to his siblings, who attended a school with Black children, see Foster and Kinuthia, 2003). For those in mainstream programmes, attending schools with peers who shared their background, language barriers again prevented them from accessing information about their culture (via incidental learning for instance).

Access to cultural and ethnic heritage is important for the identity of deaf children and young people. Although some studies (eg Bedoin, 2019) suggest that, within ethnic minority groups, deafness may be assumed to be the most salient aspect of a child or young person's identity, others (eg Foster and Kinuthia, 2003) argue that identity is not fixed and needs to be understood in context.

Deaf young people may identify with different aspects of their identity depending on where they are and what they have access to. Black deaf respondents in Foster and Kinuthia (2003) described identifying primarily with deafness since they were unable to access their cultural heritage. Some described later identifying primarily with ethnicity once they attended a deaf college with a high percentage of students from diverse ethnic backgrounds. Some felt they identified with many aspects of their identity

simultaneously but according to the immediate environment (eg a respondent described themselves as Hispanic at home but deaf at school). Others identified with ethnicity primarily because they experienced being discriminated against in their everyday lives.

Similarly, James (2000) describes how informants can feel disconnected from their Black identity because of communication barriers in accessing the Black hearing community, and that they feel more immersed in the white deaf community as a result. Others felt that their combined experiences as a Black person on one hand and a deaf person on the other meant their experience was different from both the Black and deaf communities.

Studies like Foster and Kinuthia (2003) and James (2000) demonstrate the intersectionality of identities and systems as described in Stapleton and Croom (2017). Building on Crenshaw's theoretical framework, Stapleton and Croom describe how Black d/Deaf students "possess multiple intersecting social identities that are experienced and perceived in unique ways based on the convergence of systemic power, privilege, and oppression associated with each identity". It is therefore important to understand how these identities (along with others, eg gender) intersect and are experienced in different settings. This point is also raised by Swanwick et al. (2019), when discussing deaf children from Roma families.

6. Interventions: recommendations for the future

There has been little research on specific interventions that have been targeted at ethnic minorities to improve outcomes. Instead, most studies have highlighted factors associated with success and suggest recommendations on the basis of their findings. These recommendations have been organised according to five themes:

1. improving language development
2. developing diverse classrooms
3. improving preparedness for higher education
4. access to public services
5. promoting key characteristics.

Improving language development

Fostering language development is especially important for children whose home language differs from the language used at school. Parents and teachers can play a key role in this (Ayantoye and Luckner, 2016). Our review identified the following recommendations:

- regular screening and testing to monitor language and literacy
- providing small group instruction to students with difficulty in literacy and language development
- teaching academic vocabulary intensively
- scheduling regular peer-assisted learning opportunities
- integrating language instruction into content-area teaching
- providing regular structured opportunities to develop written language skills
- ensuring multilingual children have access to fluent language models
- providing accessible opportunities for parents to learn communication strategies to develop their child's language proficiencies
- academic staff receiving training on teaching strategies for children from multilingual backgrounds (eg cultural sensitivity, advocacy techniques, testing accommodations, bilingual teaching strategies).

While the recommendations above focus on the language used at school, this should not be at the expense of the home language. There is a need to recognise the diverse language profiles of children who are deaf and multilingual. Promoting the home language within intersectional and multilingual classrooms would go some way towards addressing this. Educational professionals in Bedoin's (2019) study of young deaf migrants in schools expressed views that mastery of the native language would assist with learning a second language. These professionals suggested strategies such as teaching songs from the native language within the classroom. The following section suggests several recommendations which intend to move classrooms towards being a multicultural learning environment.

Developing diverse classrooms

Studies which have focused on the educational experiences of ethnic minorities highlight that much improvement is needed. Schools and universities are encouraged to use universal design principles within the classroom to address and recognise the diversity that is present within their students. The following recommendations are made by Stapleton (2016) and Stapleton and Croom (2017) with Black African Americans in mind.

- Teaching practices need to be adapted to become more intersectional/multicultural.
- Provide opportunities to learn about heritage languages and culture within the classroom.
- Academic staff need to address their own racial biases and understand how these biases may emerge within the classroom.
- Understand that even people with good intentions may perpetuate microaggressions within a college context in everyday situations.
- Parents from diverse backgrounds should be more involved in school events and programming (Foster and Kinuthia, 2003).
- Schools need to consider the unintended effects of educational policies which separate deaf children from their local communities (eg reduced access to cultural heritage).

Adopting a more diverse curriculum (eg using a wide range of cultural examples) increases the likelihood that students will relate to the curriculum and will share their own knowledge and lived experiences. These changes should not be confined to one class but should be embedded throughout courses. For example, university courses shouldn't have one class on ethnicity and consider the issue addressed. Such approaches, if implemented, will reduce the emotional harm caused by microaggressions such as invisibility.

It is important, however, that these changes are widely adopted. Stapleton and Croom (2017) caution that conversations regarding inclusivity must go beyond committee meetings, cultural celebration months, and mission statements. Instead, change needs to be on a wider and deeper level (eg people need to reflect upon and commit to social justice praxis).

As well as improving teaching practices, more action needs to be taken to diversify the workforce. Based on a survey of 3,227 professionals in deaf education programmes in the United States, only 21.7% of teachers and 6.1% of administrators are from ethnic minorities (Simms et al., 2008). They note that this does not reflect the diversity seen within the classroom, where 50% of deaf students are from ethnic minorities. Similarly, Turner and Lynas (2000) and Swanwick et al. (2019) stress that local education authorities need to address the low number of Teachers of the Deaf representing ethnic minority groups.

Improving preparedness for higher education

Torres (2019) makes several recommendations for improving preparedness for higher education, based on his study of first-generation Latino/a college students and the strategies used by those who graduated compared to those who did not.

- Schools need to promote critical thinking skills and provide more challenging classes targeted at ethnic minorities.
- To address lack of family support, schools need to provide students with information on transitions (eg curriculum planning, financing options, college application process).
- Post-secondary institutions need to clearly signpost support services early in orientation and during first year programmes via mentoring or seminars.
- Post-secondary institutions need to provide programmes to at-risk students prior to the start of the first year to help them make the transition from high school.

Improving attainment for ethnic minority groups is beneficial. Garberoglio et al. (2019) highlight that, for example, the employment and wage gap between Black deaf and Black hearing people appears to narrow with higher educational attainment (eg university degrees improve the chances of employment and higher earnings).

Access to health services

Studies investigating provision of health services to ethnic minorities have made the following recommendations.

- Provide further outreach for groups at risk of a late diagnosis of deafness, eg within Roma communities (Swanwick et al., 2019).
- Improve access to services in underserved areas via school systems and early intervention programmes (Wu et al., 2015).
- Policy makers should promote health education and adequate geographical distribution of services for diverse populations (Goldblat et al., 2020).
- Services need to be culturally and linguistically sensitive (eg Arab children should receive services in Arabic/by Arabic speaking professionals, Goldblat et al.).
- Professionals need to be aware of risk factors associated with ethnic minority groups eg impact of socioeconomic status on language outcomes in children receiving a cochlear implant (Wu et al., 2015).
- Services need to improve parental involvement where necessary. For example, inclusive post-operative cochlear implant programmes will encourage parents to become language models for their child (Wu et al., 2015).
- Services also need to collect and maintain ethnic data to ensure professionals are well informed of, for example, the language needs of a child (Swanwick et al., 2019).

The studies included in this review also stress the need to improve diversity within the workforce (Goldblat et al., 2020; Swanwick et al., 2019). Increased visibility within professional services will improve relationships between professionals and ethnic minority groups where needed.

Promoting key characteristics

Personal characteristics in young people with successful outcomes include good social skills, being involved in extracurricular activities within and outside school, high levels of self-determination, and exhibiting good organisational skills and a positive attitude towards studying (Ayantoye and Luckner, 2016; Torres, 2019).

Those who succeeded (ie those that had age-appropriate academic achievements and good social networks) also attributed their success to making use of technological resources such as hearing aids, radio aids and cochlear implants. Support from parents and family members were also important: students cited parental encouragement as the source of their self-determination (Ayantoye and Luckner, 2016). Steps taken to promote these characteristics and strategies in other deaf children should be encouraged.

7. Conclusion

While this literature review was not limited to studies in the UK, the lack of research focusing on children from ethnic minority groups in the UK is notable. However, much of the advice, experiences and recommendations recorded in international studies may be relevant to the UK. Turner and Lynas, writing in 2000, outline that UK services are primarily designed for the white British majority and that there are insufficient resources, training and personnel to modify service delivery so that it is effective for ethnic minority families. It is unclear how much advancement has been made on these issues today.

Returning to the original questions put forth at the beginning of this document, our review has highlighted that deaf children and young people from ethnic minority groups are likely to report poorer educational outcomes, leading to an employment gap in adult life. We have not found an association between ethnicity and low emotional wellbeing in the three European studies included in this review. Poorer language outcomes following implantation as well as later implantation rates have been reported for deaf children from ethnic minority families living in the United States and Norway.

There is a clear gap in our understanding of the outcomes reported by this group which needs to be addressed by future research projects.

Studies focusing on the provision of services as experienced by parents, and deaf children and young people have highlighted both linguistic and cultural barriers which affect delivery of services. Deaf children in migrant families may not have had their deafness diagnosed in their country of origin and may not be well positioned to benefit from the advantages of early intervention (leading to, for example, late implantation). The uneven distribution of services on a national level may also (unintentionally) lead to some minority groups being underserved (eg as noted with Arab families living in rural areas of Israel in Goldblat et al., 2020). Families may also be unfamiliar with how services are organised and professionals working within health services are unlikely to be culturally and linguistically sensitive to the needs of ethnic minorities.

The literature review also uncovered studies focusing on the educational experience of deaf children from ethnic minority groups. Studies from the United States have described how the language needs of children from multilingual families can be overlooked at school. Since the language at home differs from the language used at school, this group needs intensive support in developing both their native and school languages. The use of their native language within educational settings can provide support in learning a second language and will form an important route to accessing their cultural heritage. However, while this group values their cultural heritage, they are frustrated when they encounter institutional or language barriers to learning about it. Educational institutions need to reflect on their teaching practices and curricula to address this.

Finally, studies have indicated that children from ethnic minorities may be unprepared for key transitions such as moving to higher education institutions. This may be due to lower expectations or because they come from families that have not accessed higher education historically (eg Torres, 2019).

Several recommendations were put forth in Section 6. More research needs to be done to determine the extent to which these recommendations have been implemented and their effectiveness. In planning

future research projects, Garberoglio et al. (2019) highlight that research has tended to focus on highlighting gaps and deficits with little progress. Instead, more strength-based research is needed to fully understand and support students from ethnic minorities. For example, they suggest that, “one approach is to focus on what the 8.4% of Black deaf students currently enrolled in higher education are doing well and to translate their successes into teachable skills for younger Black deaf children” (Williamson, 2007, in Gaberloglio et al., 2019). Strength-based research projects of this nature covered in this review include, amongst others, Torres (2019) and Ayantoye and Luckner (2016).

8. References

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National Deaf Children's Society note on Department for Education figures on attainment for deaf children in 2019 (England) – achievement of deaf children by ethnicity

This note summarises data on the GCSE achievement of deaf children by ethnicity. The data was provided to the National Deaf Children's Society following a Freedom of Information request to the Department for Education.

Please note:

- Figures for deaf children are for those where 'hearing impairment' has been identified in the School Census as the primary type of special educational need (SEN) and who are in state-funded schools.⁶ It excludes deaf children who have not been formally recorded as having a SEN and those where deafness is a secondary need (for example, children with complex learning difficulties). A very rough estimate would be that this captures around 80% of school-aged deaf children.
- This note focuses on achievement of deaf children whose ethnicity has been recorded as White, Black or Asian. The cohort size in 2019 for each was 1,276, 74 and 265 respectively. As a smaller cohort can lead to data being more volatile and less easy to interpret, we have not included data in this note for children whose ethnicity was recorded as Chinese, Mixed or Other. However, this data can be provided separately on request.
- Figures are for deaf children in England only. As attainment data is measured and collected differently in the other nations and as cohort sizes are much smaller, it is uncertain that any data by ethnicity from the other nations would be robust enough to use and interpret.

Key points

- Black deaf children have the lowest attainment scores compared to other ethnic groups.
- Figures also indicate that Asian deaf children have lower attainment scores than White deaf children. This is striking given that, among all children (ie including all children with or without any special educational needs), Asian children have higher attainment scores than other ethnic groups.
- Deaf children who are eligible for free school meals or who speak English as an additional language also underachieve. An assumption could be made that children from ethnic groups are more likely to be over-represented in groups of children who are eligible for free school meals and/or who speak English as an additional language.

Attainment 8

Attainment 8 measures, introduced in 2016, look at achievements in eight key subjects from a 1 to 9 scale.⁷ An Attainment 8 score of 40 would indicate that pupils were, on average, achieving a grade 4 in each subject – which is roughly equivalent to a grade C in the previous GCSE system.

⁶ State-funded schools include academies, free schools, city technology colleges, further education colleges with provision for 14 to 16 year olds and state-funded special schools. They exclude independent schools, independent special schools, non-maintained special schools, hospital schools and alternative provision (including pupil referral units, AP free schools and AP academies as well as state-funded AP placements in other institutions).

⁷ Attainment 8 measures the average achievement of pupils in up to 8 qualifications, including English (double weighted if the combined English qualification, or both language and literature are taken), maths (double weighted), three further qualifications that count in the English Baccalaureate (EBacc) and three further qualifications that can be GCSE qualifications (including other EBacc subjects) or any other non-GCSE qualifications on the Department for Education approved list. More information can be found at: www.gov.uk/government/publications/progress-8-school-performance-measure (accessed: 24 January 2019).

Table 1: Average Attainment 8 scores for deaf children, by ethnicity

Year	All deaf children	White deaf children	Black deaf children	Asian deaf children
2019	38.6	39.2	32.9	37
2018	39.2	40.1	33.3	34.8
2017	37.5	38.6	32.7	35.1
2016	42.5	43.5	37.5	40.1

The following table compares the different Attainment 8 scores in 2019 for children with different characteristics. It shows that deaf children who: are black; speak English as an additional language (EAL); or who are eligible for free school meals have the lowest Attainment 8 scores. An assumption could be made that there is an overlap between deaf children with these additional characteristics – however, the data is not published in a way that enables us to confirm this.

What is also striking is that all Asian children have the highest attainment compared to other children. However, among deaf children, this is not the case.

Table 2: Attainment 8 scores in 2019 by characteristics

Pupil characteristics	2019 Attainment 8 score
All children + Asian	51.2
All children + not eligible for free school meals	48.6
All children + who speak EAL	47.6
All children + White	46.1
All children	46.7
All children + who speak English	46.6
All children + Black	44.9
Deaf children + not eligible for free school meals	41.1
Deaf children + who speak English	40.0
Deaf children + White	39.2
All deaf children	38.6
Deaf children + Asian	37
All children + eligible for free school meals	34.9
Deaf children + Black	32.9
Deaf children + who speak EAL	32.0
Deaf children + eligible for free school meals	27.3

The following tables look more closely at Attainment 8 scores between all and deaf children, by ethnicity. They show that in all cases, all children achieve a higher Attainment 8 scores than deaf children of the same ethnic group. However, the gap between All Asian and Deaf Asian children, and between All Black and Deaf Black children is higher than the gap between All White and Deaf White children. In particular, deaf Asian children, on average, achieve two grades less per subject compared to their hearing peers from the same ethnic groups.

Table 3: Attainment 8 scores for all and deaf children, within ethnic groups

Year	All ethnicities		White		Black		Asian	
	All children	All deaf children	All White children	Deaf White children	All Black children	Deaf Black children	All Asian children	Deaf Asian children
2019	46.7	38.6	46.1	39.2	44.9	32.9	51.2	37
2018	46.5	39.2	46.1	40.1	45	33.3	50.4	34.8
2017	46.3	37.5	45.9	38.6	44.8	32.7	49.8	35.1
2016	49.9	42.5	49.7	43.5	48.7	37.5	52.5	40.1

Table 4: Gap in Attainment 8 scores between all and deaf children, by ethnicity

Year	Gap between all children + all deaf children	Gap between all White children and deaf White children	Gap between all Black children and deaf Black children	Gap between all Asian children and deaf Asian children
2019	8.1	6.9	12	14.2
2018	7.3	6	11.7	15.6
2017	8.8	7.3	12.1	14.7
2016	7.4	6.2	11.2	12.4

Progress 8

Progress 8 compares what progress children have made between the end of primary and secondary school compared to other children of the same prior ability. A Progress 8 score of 1.0 means pupils in the group make on average approximately a grade more progress than the national average; a score of -0.5 means they make on average approximately half a grade less progress than average.

The table below suggests that all deaf children fall behind as they move through secondary school. In the last two years, Black deaf children were least likely to make expected progress compared to other deaf children. Previously, White deaf children were least likely to make expected progress.

Table 5: Average progress of children in secondary school ("Progress 8") by ethnicity

Year	All deaf children	White deaf children	Black deaf children	Asian deaf children
2019	-0.16	-0.21	-0.3	0.15
2018	-0.04	-0.07	-0.16	-0.02
2017	-0.12	-0.17	-0.06	0.03
2016	-0.05	-0.08	0.06	0.06

Achievement in English and Maths

Looking at a different GCSE measure, the following tables again confirm the trends seen earlier. One notable finding is that the gap between a grade 4 and 5 is larger for Black deaf children (27 percentage points) than it is for White deaf children (18.9) and Asian deaf children (20.7).

Table 6: Percentage of children achieving a grade 5 or above (a “strong pass”) in both English and Maths

Year	All deaf children	White deaf children	Black deaf children	Asian deaf children
2019	29.3%	30.3%	17.6%	25.7%
2018	30.6%	31.8%	15.4%	25.5%
2017	28.6%	30.2%	22%	26.1%

Table 7: Percentage of children achieving a grade 4/C or above in both English and Maths

Year	All deaf children	White deaf children	Black deaf children	Asian deaf children
2019	48.2%	49.2%	44.6%	46.4%
2018	48%	49.6%	42.3%	39.7%
2017	46.1%	48%	33.9%	42.4%
2016	47%	45.7%	30%	37.9%
2015	44.6%	46.4%	30.2%	39.6%