Psychotherapy for Culturally Deaf Individuals: Summarising Factors That Explain Low Access and Poor Execution. A Qualitative Evidence Synthesis

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Master Thesis

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March 2024

Abstract

Background: Culturally Deaf individuals are known to experience barriers concerning the access and execution of psychotherapy. Concurrently, an increase in mental health problems is observed within Deaf communities. Accordingly, an investigation of barriers is pertinent.

Objectives: The current study aims to describe factors explaining the observed barriers. In addition, the study aims to increase awareness of the challenges faced by the Deaf community concerning the access and execution of psychotherapy.

Search Methods: A literature search was performed on 30th September 2023 across the databases Web of Science, Scopus, PsycINFO (EBSCOhost), and PubMed.

Data collection and analysis: this study used a Qualitative Evidence Synthesis method with the reporting being based on the EPOC guidelines. Through a thematic analysis according to the guidelines of Braun and Clark (2006), final themes were identified.

Main Results: A final set of 11 papers were included out of which eight showed adequate Risk of Bias results. Seven themes were identified and labelled: *Communication barriers, Cultural factors, Availability, Confidentiality concerns, Diagnostic challenges, Discrimination, and Socioeconomic challenges.*

Conclusion: The current study provides comprehensive information on factors explaining barriers to the access and execution of psychotherapy for culturally Deaf individuals. Implications for working with Deaf clients for example arranging qualified interpreters and familiarising oneself with the Deaf culture are provided.

Keywords: Psychotherapy, Deaf, Barriers

Background

Hearing impaired individuals often grow up as part of a separate, Deaf community with a different language and a unique culture (NIH, 2021). It is well-researched that access to mental health care is limited for this community (Leigh & Pollard, 2003). In addition, poor quality of execution of psychotherapy is observed (Gill & Fox, 2012). Factors explaining this observation are analysed in the current study. Especially, for psychotherapy an investigation of this problem is relevant since Deafness is associated with an increase in mental health problems (Fellinger et al., 2012).

Description of the topic

Basic knowledge about Deaf individuals and communities is described to decrease stigmatization against the Deaf community and ensure an equal understanding of the results.

Defining deafness

Different definitions on the topic of deafness exist. One is the physiological point of view which is described by the World Health Organization (WHO). This definition of deaf people includes everyone with “profound hearing loss ranging from mild to severe, which implies very little or no hearing” (World Health Organization, 2023). It is further stated that deaf people “often use sign language for communication”. This physiological definition is differentiated from the definitions of ‘hard-of-hearing persons’ or “*A person who is not able to hear as well as someone with normal hearing*” (World Health Organization, 2023). In this definition, people with or without hearing aids are included. The assumptions made by hearing persons about Deaf individuals are often negative. Viewing deafness as a condition that results in loneliness and isolation. Especially medicals view deafness as a disability that needs to be healed through operations or hearing aids (Holcomb, 2023). It is estimated that 430 million people worldwide are physically deaf which equals over 5% of the world's population (World Health Organization, 2023). In the United States, two to three infants per 1000 live births are born with congenital hearing loss. Early detection is important to enable a normal development of language (Centers of Disease Control and Prevention, 2010). Furthermore, age is considered to be the most influential factor for decreased hearing abilities (World Health Organization, 2023). Possible consequences of unaddressed hearing loss are problems in communication or speech, cognition, education and employment, social life, society, and the economy (World Health Organization, 2023).

Additionally, Deaf people define themselves culturally. This point of view includes the unique features and opportunities that come with Deafness. The Deafness is then accepted by the individual as part of their identity. This results in a sense of belonging to the Deaf community (Kyle et al., 1988). This community is mainly defined by a separate non-speaking language named sign language (Stebnicki & Coeling, 1999). In addition, the Deaf culture is characterized by unique features including music, art and theatre opportunities often defined through an artistic use of sign language. This can come with specific educational and job perspectives (Holcomb, 2023). Deaf people are also known for their strong feelings of pride and their will to fight for their rights, independence and right to use sign language. Culturally Deaf people believe that deafness "is not a disabling condition, but a 'handicap' imposed by society because of communication and attitudinal barriers" (Holcomb, 2023). The advantages of belonging to the Deaf community are often a feeling of understanding and acceptance, and being surrounded by people who have similar psychosocial needs and a shared history and socialisation (Stebnicki & Coeling, 1999). The Deaf culture is shaped by historical events. One historic phase that has a lasting impact on Deaf people today is the strict oralism which was implemented in Deaf schools in 1880 and lasted until the late 20th century. During this time sign language was suppressed by society and Deaf children were forced to learn to speak.

During this time the access for Deaf people to sign language was limited (Gallaudet University, 2022). Due to the shared history and challenges associated with being Deaf, a higher prevalence of mental disorders is observed within this population (Øhre et al., 2016). This is assumed to be affected by the challenges that come with being Deaf. Members of the Deaf community struggle more than hearing people with social relationships, finances, and lower levels of independence which results in a lower perceived quality of life (Soltani, 2021). One dominant challenge that increases the development of mental disorders in Deaf individuals is the often-observed communication problem between hearing parents and deaf children (Margaret Brown & Cornes, 2015). Most often observed mental disorders in Deaf individuals are mood disorders (13%-47%), followed by neurotic disorders, somatoform disorders, and stress-related disorders (19%-23%), then alcohol and drug disorders (3%-28%), and psychotic disorders (8%-27%) (Øhre et al., 2016). The cultural definition of deafness can be identified by the uppercase D in the written word 'Deaf'. In the following report, this form of writing will be used for culturally Deaf people. Furthermore, this definition includes not only deaf but also hard-of-hearing persons (Stebnicki & Coeling, 1999). It is somewhat discussed whether the ability to speak sign language is necessary to be part of the Deaf community (Kyle et al., 1988). However, in the current study, the term 'Deaf' will be used for everyone who can communicate through sign language and identifies themselves as a member of the Deaf community. This includes physically deaf and hard-of-hearing persons. The decision to include only people who can sign is necessary for the current study since language is considered to be an influential factor in contact with psychotherapists (Meier, 2012).

Sign language

In sign language communication is performed through the use of hands, the body, and facial expression (NIH, 2021). It has similar properties as spoken languages including rules for pronunciation, word formulation, and word order. Therefore, many sign languages are legally recognised (Sangla, 2023). Each country has its own sign language with several dialects used in different regions of a country. However, there is no complete international sign language (NIH, 2021). To spell out names or single words, the fingerspelling is used. Here, every letter of the spoken language in a country equals a corresponding hand gesture (NIH, 2021). Sign language is mostly used by deaf or hard-of-hearing persons as a medium of communication. Besides, a lot of hearing people have adopted the sign language of their country to be able to communicate with Deaf persons. Sign language is adapted naturally by Deaf children who are born in Deaf families. This process is comparable to the language development of spoken languages. However, 90% of Deaf children are born in families with hearing parents who do not speak sign language. In these situations, the early detection of the hearing impairment is important to secure a normal development of language. This often turns out to be complicated for parents who quickly need to learn sign language, as well as for children who struggle to communicate their needs (NIH, 2021).

How Deafness influences the interaction with the health care system

The interaction between the Deaf community and health professionals is an important topic of research since it is essential for 430 million deaf individuals worldwide. Most healthcare professionals are hearing and not fluent in sign language or familiar with the Deaf community. This results in language barriers perceived by Deaf individuals who need to attend doctors' appointments (Hommes et al., 2018). The best solution to overcome the barrier between health professionals and clients who do not speak the same language is the use of interpreters. In the United States, the American with Disability Act (ADA) required health institutions to provide interpreters for Deaf patients. However, this is not always possible due to a shortage of interpreters, specifically those who specialise in medical interpretations

(Harmer, 1999). Another often-used form of communication is written notes. Depending on the socialisation, education, and the age of hearing loss of Deaf individuals they might however not be able to understand written language (Shuler et al., 2013). Further, family members or poor signing skills are used as a form of conversation (Shuler et al., 2013). Poor communication results in misdiagnoses, wrong treatment decisions, or different healthcare outcomes for the patient (Shuler et al., 2013). Next to communication barriers, Deaf people experience problems accessing the right healthcare professionals for their problems. Reasons for this are geographical, educational, awareness-related, or system-related. In addition, in the USA the issue of low economic status is often observed in Deaf people. Consequently, in this country, there is an additional financial barrier for Deaf people to access health care (Harmer, 1999). The perceived barriers further result in an inability to access proper services which leads to a restriction to seek help. Next, the risk of non-compliance is higher due to the patient's poorer understanding of what is expected. The level of compliance generally seems to be related to the level of understanding between health professionals and clients. Furthermore, the language barriers are time-consuming (Harmer, 1999).

Due to the observed increase in mental health problems of Deaf individuals, access to specifically trained psychotherapists is important. However, as well as in other areas of health care, several barriers inhibit Deaf people from accessing and receiving adequate psychotherapy. One barrier concerns service issues which describe the availability of psychotherapists for Deaf people and the ability of Deaf people to locate them (Gill & Fox, 2012). Next, communication issues are perceived. These concern not only the communication with the psychotherapist but also other instances like offices at which therapists work. Therapists who lack knowledge about sign language might use words that cannot be directly translated to sign language. (Gill & Fox, 2012). Furthermore, a lack of knowledge of the therapist about the Deaf culture is observed. This includes certain behaviours and gestures Deaf people do, specific values of this community, discrimination within the community, Discrimination from hearing persons and daily issues associated with being Deaf. Some therapists might perceive Deafness as an issue that needs to be healed. This results in a lack of understanding and makes the establishment of a therapeutic relationship difficult (Gill & Fox, 2012). In addition, Deaf clients report perceiving their therapist's feelings and attitudes negatively. This results in negative emotions in the clients and makes the establishment of a functioning relationship more difficult (Gill & Fox, 2012). Last, the presence of interpreters affects the therapy. Having a third person in the room raises concerns about confidentiality, patients hold back their feelings, and the therapeutic relationship cannot develop adequately. Overall, it was found that psychotherapy with interpreters is not as effective as if both client and therapist speak the same language (Gill & Fox, 2012). Often psychotherapists are overwhelmed with the needs of Deaf patients and deny them as a result (Schröder & Vereenooghe, 2020). In addition to the perceived barriers to Deaf people accessing mental health care, a higher vulnerability to mental health problems is observed. Due to the high number of barriers often only patients who suffer from severe mental disorders are treated. In the Deaf population, a higher amount of comorbid psychiatric and substance use disorders is observed. Less than 2% of mentally ill Deaf people receive the treatment (Leigh & Pollard, 2003). This expresses the importance of offering adequate mental health care to Deaf people.

Why this review is important

The current study summarises the factors that explain barriers that Deaf people experience in psychotherapy. Since Deaf people are more prone to mental disorders but receive less and inadequate treatment, this investigation is seen to be necessary. In addition, the investigation raises awareness and possibly brings about change. Several qualitative studies have been performed, which examine the experiences of Deaf people. However, these qualitative studies are only able to capture a certain situation, within a certain country at a certain time. Therefore, these studies are very limited in their ability to generalize their findings. A Qualitative Evidence Synthesis (QES) performed in this study is needed to make more valuable statements about the general situation.

How this review supplements what is already known

This research aims to examine factors that explain barriers Deaf people encounter when trying to access psychotherapy and factors that restrict a qualitative execution of psychotherapy. Factors that explain these barriers are summarized in themes. For this investigation, the unique culture of Deaf persons as well as sign language are seen to be important factors. Based on current literature it is already known that trained psychotherapists for treating Deaf people are limited and that even when a psychotherapist is available several system-related barriers need to be overcome to get access. During psychotherapy, language difficulties are known to lower the quality of therapy. Therefore, both areas of interest, access as well as the execution of psychotherapy, are known barriers for Deaf people and are therefore seen as important to include in the current study. Through a QES, the research question: *"Which factors explain low excess and poor execution of psychotherapy for Deaf people?"* will be investigated. Based on the previous literature, it is hypothesised that factors explaining low access include *low availability of trained psychotherapists, systematic barriers, and financial barriers*. Furthermore, it is hypothesised that factors that explain poor execution of therapy include the *therapist's lack of knowledge about sign language and the Deaf culture*.

Objective

The current study aims to summarise the factors that explain low access and poor quality of execution of psychotherapy for culturally Deaf people. Based on these findings the study aims to make implications for working with culturally Deaf clients. Next, the study aims to raise awareness of the barriers perceived by Deaf individuals in psychotherapy.

Methods

A QES, as a form of a Systematic Literature Review was conducted. The reporting was based on the Cochrane Effective Practice and Organisation of Care (EPOC) protocol and review template for QES. The guidelines were evidence-based and ensured a transparent reporting of Systematic Reviews (Glenton et al., 2023). In addition, the Preferred Reporting Items for Systematic Meta-Analysis (PRISMA) flowchart was used to systematically present the process of paper identification (PRISMA, 2015).

Qualitative Evidence Synthesis (QES)

The current study used a QES as the research method. The method is situated within the broader category of Systematic Literature Reviews. This approach, as noted by Lame (2019), prioritises systematic analysis to ensure replicability. Accordingly, the understanding of existing literature is deepened, empirical evidence is synthesised, or domains can be identified which need further investigation (Paré et al., 2015). In addition, Systematic Literature Reviews are considered to be an efficient scientific technique, which is quicker than collecting new information. The method can shape further research (Mulrow, 1994). Next, Systematic Literature Reviews are generalisable. Through the analysis of a large amount of literature, consistencies and inconsistencies among papers can be identified. Due to the larger data set, Systematic Literature Reviews further have high statistical power and precision in results. Consequently, a more accurate reflection of reality can be provided (Mulrow, 1994).

Specifically, the method QES which focuses on the systematic review of only qualitative papers was chosen since the available literature predominantly consists of qualitative studies like interviews or surveys with Deaf individuals, psychotherapists, and interpreters. Qualitative studies are able to capture valuable primary information about a certain situation in a certain context and within this context more in-depth results are provided (Creswell & Poth, 2016). However, qualitative studies are limited in their generalisability. Through a QES these qualitative insights can be combined to make more general statements (Flemming & Noyes, 2021). In this review, it is important to focus on qualitative studies using interviews or self-reports of Deaf individuals and stakeholders since they can describe the perspective of the Deaf community best. Research about a specific culture should always include authentic voices and experiences of individuals involved which is best presented in qualitative literature. Otherwise, doing research about another culture without including the individuals of this culture can be interpreted as cultural appropriation and misuse of the hearing privilege (Finkbeiner et al., 2023).

Eligibility criteria

For this review, clear inclusion and exclusion criteria were chosen and clearly stated in the report to make the study replicable. Based on the listed criteria decisions for including or excluding papers were made.

The inclusion criteria for the current study were:

1. *Primary studies with qualitative study designs* like phenomenological studies, ethnographic studies, grounded theory studies, historical studies, case studies, and action research studies
2. *Qualitative methods for data collection* like interviews, focus groups, and observations.
3. *Mixed-method studies* because they were assumed to provide valuable information for answering the research question.

4. *Deaf and Hard of hearing persons* because both can define themselves as culturally Deaf and struggle with similar problems concerning access and execution of psychotherapy (Stebnicki & Coeling, 1999).
5. *Papers written in German and English language* since these are languages that are understood by the researcher.
6. *Papers that describe the client's, interpreter's, or therapist's perspective* because all perspectives were available and seen as insightful.
7. *Papers concerning all countries* because the focus is not directed towards the situation in a specific country but rather to capture a general picture. In addition, a higher number of papers can be included.
8. *Papers focused on the access and papers focused on the execution of psychotherapy.*

The exclusion criteria were:

1. *Therapies that are specifically directed towards children and adolescents (age 0 – 18 years).* This exclusion criterion was chosen because these kinds of therapies often concern different approaches and therefore require a separate investigation (Kazdin, 2003).
2. *Participants who have hearing loss due to age.* This group of patients has a long life of hearing experiences which influences communication in psychotherapy since they often do not learn sign language, nor define themselves as culturally Deaf (Pendergrass et al., 2019).
3. *Papers about Deaf-blind participants.* Because they have different psychotherapeutic needs and a different language which is separated from sign language (Holmes & Rhinehart-Fernandez, 2023).
4. *Deaf participants with limited cognitive functions.* Because they have different psychotherapeutic needs (Glickman, 2008).

Search strategy

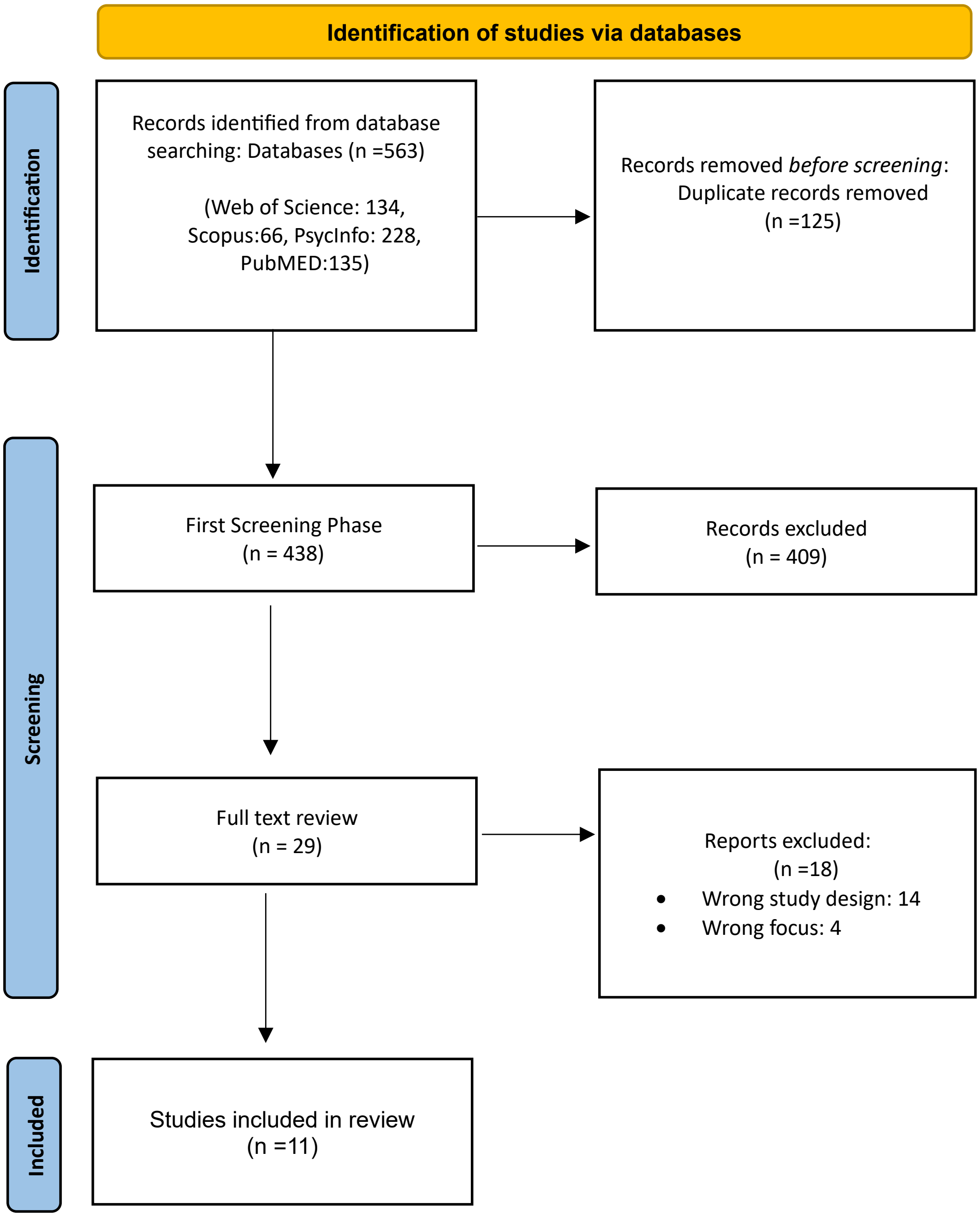
For the literature search the keywords: Deaf, Psychotherapy, Access, and Children, as well as synonyms, were used. The keywords were grouped through brackets and combined by boolean operators. As a result, the following search string was used: "(*Deaf OR "Hard of Hearing" OR "Hearing impaired") AND (Psychotherapy OR Psychiatry OR "Clinical psychology" OR Psychopathology) AND (Access* OR Problem* OR Issue* OR Challenge* OR Difficulties OR Complication*) NOT (children or adolescent* or teenager* or "young adults")*". For the search, the databases Web of Science, Scopus, PsycINFO (EBSCOhost), and PubMed were used. The date of data extraction was the 30th of September 2023.

Selection of Studies

All papers were scanned through the online tool Covidence, which provides a faster scan of articles and an easier selection of a final set of papers (Covidence, 2023). From the four databases study titles and abstracts were uploaded to Covidence. Duplicates were automatically excluded. Then, in the first screening phase, the tool was used to scan the papers and decide, based on the title and abstract whether to include or exclude papers. For the second screening phase, complete papers in PDF format were uploaded to Covidence. Then they were read in more detail and final inclusion, or exclusion decisions were made. All papers were read and scanned at least once. In the current study, only one person was responsible for the selection procedure. An overview of the data identification can be found in Figure 1.

Figure 1

PRISMA Flowchart identification of studies



Data synthesis

From the final set of papers that met the eligibility criteria variables of interest were extracted. In addition, results from German studies were translated into English. The data extraction was done through Covidence (Covidence, 2023). The online tool offers the possibility to make a data extraction template which was filled with variables of interest and completed for each study. Variables of interest about the study include the title of the study, the name of the authors, the year of publication, the country of interest, the study design, the method of assessment, the number of participants the perspective of the participants, whether the study aims to measure the access or the execution of psychotherapy, and the aim of the study. Variables of interest from the study were reported issues of access to psychotherapy and reported issues during the execution of psychotherapy.

For the data analysis, a thematic synthesis based on the guidelines by Braun and Clarke (2006) was performed. The guidelines consist of six phases. The first phase was familiarising with the data. This included active and repeated reading of the final articles. It was further advised to make notes about relevant aspects during this phase. In the second phase, initial codes were generated. Codes in this phase are the most basic elements in the text and therefore often specific. During phase three these codes were analysed more closely and grouped into themes. Phase four concerned the reviewing of identified themes. If necessary, themes were changed, and codes were regrouped during this phase. In phase five the final themes were defined and named. Last, in phase six the identified themes were reported (Braun & Clarke, 2006).

Quality assessment

For the assessment of quality, a Risk of Bias assessment was performed. To ensure a systematic assessment, the Critical Appraisal Skills Program (CASP) qualitative studies checklist was used (CASP, 2018). (Appendix A). The checklist specifically addresses qualitative studies. It included ten questions in total and considered three issues. The first six questions aimed to examine whether the results were valid. Questions seven, eight and nine considered what the results were about. And question ten examined whether the results helped locally. No scoring form for evaluating the results was provided. The CASP checklist intends to think about the quality of studies systematically (CASP, 2018).

Results

Overview of included studies

Countries in which the studies were conducted were diverse with most studies concerning the USA (n=5). The most used study design was grounded theory (n=6). The most used method of data extraction was interviews (n=7). All perspectives were included but mostly the client perspective was researched (n=7). Most studies were interested in the execution of the therapy (7). An overview of extracted data about the study can be found in Table 2.

Risk of Bias assessment

Results of the CASP checklist showed that most included studies do not have a high risk of bias. Out of all studies, eight seemed to be reliable having no more than three forms of bias in CASP questions of interest. However, the three studies by Taylor et al. (2020), by Felhofer et al. (2022), and by BinZubair et al. (2018) showed inadequate results in more than five questions of interest. The results of these studies need to be interpreted carefully. A full overview of the results of the CASP checklist can be found in Appendix B.

Table 2

Overview of extracted data

Author, Year	Country	Study Design	Method of Assessment	Number of Participants	Perspective	Accessibility or Quality of services	Aim of the study
Anderson et al., 2017	USA	Grounded theory	Semi-structured Interviews	16	Clients	Accessibility, Execution	Explore Deaf trauma survivor's help seeking experiences and elicit their recommendations for improving deaf behavioural health services in Massachusetts.
BinZubair et al., 2018	Pakistan	Case Study	Observations	1	Clients	Execution	Highlight the importance of accurately diagnosing and managing a rare mental disorder among physically handicapped people.
Boyd, 2007	England	Narrative study	Semi-structured questionnaire, Semi-structured interview, Observations	1	Clients, Health-care professional	Execution	Explore the difficulties encountered in counselling with a deaf client and the feelings of incompetence generated in the counsellor.
Denman, 2007	Australia	Grounded theory	Observations	10	Clients, Health-care professionals	Accessibility	Identify the accessibility barriers that deaf people from an Indigenous Australian or culturally and linguistically diverse background encounter when attempting to access public mental health services in Queensland.
Felhofer et al., 2022	USA	Case study	Interview, Observations	1	Clients	Execution	Explore the unique considerations and limitations of assessing a deaf/Deaf patient along with treatment and complications of alcohol use disorder.

Hoyt et al., 1981	USA	Grounded theory	Interview	10	Health-care professionals	Execution	Provide information to aid clinicians developing the special competencies required to work effectively with the deaf population.
McEntee, 1993	USA	Grounded theory	Self-reports	28	Health-care professionals	Accessibility	Evaluate the accessibility of mental health services to the deaf population in Rhode Island.
Neves et al., 2020	Brazil	Grounded theory	Semi-structured interview	6	Health-care professionals	Execution	Gaining insight in how deaf patients treat their psychological conflicts.
Schröder & Vereenooghe, 2021	Germany	Mixed methods	Interview, Self-reports	71	Health-care professionals	Accessibility	Explore how therapists in outpatient departments handle therapy enquiries from deaf individuals and what they consider the successful treatment to be.
Skøt et al., 2017	Denmark	Grounded theory	Semi structured Interviews	9	Clients	Accessibility	Explore barriers faced by Deaf and hard-of-hearing (D/HH) individuals in Denmark when accessing medical and psychosocial services following large-scale disasters and individual traumatic experiences.
Thylur et al., 2020	USA	Case study	Observations	1	Clients	Execution	Presents experiences of the psychiatry team with a patient suggestion for the effective and culturally appropriate assessment of deaf individuals.

Synthesized themes

Seven different themes have been identified through the thematic synthesis. The themes were labelled: *Communication barriers, Cultural factors, Availability, Confidentiality concerns, Diagnostic challenges, Discrimination, and Socioeconomic challenges.* Communication barriers were most often stated as a challenge in therapy. The themes are ordered hierarchically based on their strength, the number of papers they appear in. An overview of all themes and associated citations from the different studies can be found in Appendix C.

Communication barriers

The theme of *Communication barriers* is present in all 11 studies and is therefore the strongest theme in the current study. This theme addresses the access as well as the quality of psychotherapy. Communication was disrupted when the therapist or other staff members did not know how to communicate with Deaf people. Then, the information that needed to be given could not be properly explained: *"Service providers do not seem to be familiar with communication techniques used by deaf people.*" (Denman, 2007). This includes the use and knowledge about technology Deaf people can use for communication for example to be able to make phone calls. *"Less than half the respondents to the survey stated that their agencies had Telecommunications Device for the Deaf*" (McEntee, 1993). A lack of knowledge about ways to communicate with Deaf individuals does not only account for an inability of professionals to know sign language but also for different methods used for communication. Written notes were often used to explain the most important information. However, written language can be challenging for Deaf people since the grammar and individual words in spoken and written language can be different from sign language: "*Deaf individuals are less likely to be as skilled in written English as with ASL [American Sign Language]. Furthermore, ASL*

[American Sign Language] is distinct from English; it has its own linguistic history and grammatical structure" (Thylur et al., 2020). Especially during the COVID-19 pandemic, communication was difficult for Deaf people because face masks were used which decreased the ability to see lip movement and facial expressions, this was also the case when transparent masks were used: "*In general, with opaque mask materials, one loses the essential cues of facial expression, which is an important component of Deaf communication and ASL [American Sign Language].*" (Felhofer et al., 2022). Another observed problem in communication was the use of technical words, that were often not understood by the Deaf patient: "*The therapists described that the use of therapeutic jargon should be reviewed. It could come to difficulties in communication due to language barriers.*" (Schröder & Vereenooghe, 2021). This seems to be especially difficult for psychotic content: "*Concepts surrounding psychotic thought content can be especially difficult to convey in sign language*" (Thylur et al., 2020).

The most effective method of communication when the client and therapist do not speak the same language would be through interpreters. However, interpreters were not always available or provided: "*Indeed, 70% that stated they provided interpreters did not provide certified interpreters. Fifty percent stated that they did not know if the interpreters they used were certified.*" (McEntee, 1993). In addition, insisting on getting an interpreter can be distressing for Deaf patients: "*Having to insist on getting a sign language interpreter creates extra stress for D/HH [Deaf/ Hard of Hearing] individuals who are already in a crisis situation.*" (Skøt et al., 2017). When no certified interpreter was available, often friends and relatives of the patient were used to assist in the communication. However, this can be problematic for the patient: "*Significant others are sometimes used as interpreters. This is a two-fold problem in that often the significant others do not explain everything to the Deaf person as they themselves may not understand everything that is being said; and this does not* *allow the Deaf person any privacy*“ (Denman, 2007). If an interpreter is present, the roles of each person present need to be defined clearly: “*Even if an interpreter is used, the roles and responsibilities of each person present must be clear to avoid transference and countertransference issues from blocking the therapy process.*” (McEntee, 1993). This is further explained by Hoyt et al. (1981): “*The involvement of an interpreter does create a triangular arrangement... may result in diluting and distorting the usual dyadic therapeutic relationship... therapist and patient may both have to direct their attention toward the interpreter, who may come to be seen as the center of authority and the one who truly “understands” the patient*”.

The experienced communication barriers resulted in difficult experiences for the Deaf clients and the inability to be independent: “*They feel unable to advocate on their own behalf because they do not share a common language with service providers, do not know what to except and do not understand what their consumer rights are*” (Denman, 2007). In addition, the therapist might experience frustration: “*Therapists will also experience various frustrations. Not being able to communicate easily, the therapist commonly experiences his or her sudden loss of articulateness with initial shock followed by frustration. The frequent slowness of the work can be discounaging, especially if the therapist does not have adequate backup support systems*” (McEntee, 1993). Boyd (2007) described in his case study about a Deaf patient of his that the topic of communication became the centre of his attention: “*From the beginning, I could see a danger that the counselling would become dominated by the ‘how’ not the ‘what’ of communication*”.

Cultural factors

The second most mentioned theme was cultural factors. It was mentioned in 10 out of 11 studies. Cultural factors can be a barrier to access to psychotherapy as well as a factor for bad execution. There are several cultural differences between a hearing psychotherapist and the Deaf culture. It is mentioned in the article by Neves et al. (2020) that the perception of Deaf people is different from what a hearing person notices. It is described in the article, that: "*They have a perception of the world that is different from ours. Our world is oral and auditory and their world is visually sensitive. This makes a difference*". As a psychotherapist one needs to be familiar with the unique aspects of the Deaf community to be able to understand the patient fully. "*Subjects are structured by the social representations of the community they belong to. It would therefore seem very difficult to listen to the unique individual demands of a deaf patient without being familiar with their overall environment.* " (Neves et al., 2020). The focus on visual aspects was described by a psychotherapist in the study of Denman (2007) to be uncomfortable. "*I also feel more exposed, under scrutiny from the 'seeing skills' so necessary to Elaine's communication. As such I feel a constant reminder or challenge to my genuineness which is very demanding and I am struggling with ... a sort of ... defensiveness, a desire to 'hide'*". Psychotherapists who treat Deaf patients need to be aware of this and find a way to deal with it. Another cultural factor that might influence the relationship between hearing psychotherapists and Deaf clients is the involvement of the therapist in the deaf community. "*The missing involvement of psychotherapists in the Deaf culture makes the establishment of a relationship more difficult.*" (Schröder & Vereenooghe, 2021). The relationship is then further influenced by the past experiences the Deaf patient had with hearing persons. If the patients hold negative presumptions about hearing people, this might influence the development of a good therapeutic alliance. "*A situation that may be much influenced by the deaf patient's sense of trust based on experiences with hearing people.*" (Hoyt et al., 1981).

One important cultural factor when assessing influences on the access to psychotherapy for Deaf people is education about mental health. It was stated that Deaf patients are "*unaware of treatment options or how to access these options ("I didn't know about treatment because I was Deaf")*" (Anderson et al., 2017). Next to that, it was reported that stigma within the Deaf community can be a restriction to seeking mental help. "*Participants reported issues with stigma surrounding trauma in the Deaf community ("We did not talk about domestic violence at that time")*." (Anderson et al., 2017). It was further stated that problems are not easy to admit: "*We don't like to admit our problems; we feel like we always have to prove that we can do it*" (Anderson et al., 2017). In addition, there seem to be not many role models for seeking help within the community: "*Lack of available mentors in the Deaf community to support survivors in their own recovery from trauma ("I needed a leader in ASL [American Sign Language], but there was no model there I needed someone like me to show up. Someone who had lived it, to recognize it quickly, but there was no one")*." (Anderson et al., 2017).

Availability

It was expressed in seven out of 11 studies, that the availability of mental health services that serve Deaf clients is limited. The theme of availability mainly concerns access to psychotherapy. This was described to be a topic of concern for some individuals. "*Participants' concerns about the limited availability of Deaf-specialized services and long wait lists for the services that do exist ("There are not enough services in the whole state"; "I prefer a Deaf provider, but I'm currently on waitlist for counseling")*" (Anderson et al., 2017). This seems to account especially for services specified in an area of mental health: *"Areas of crisis, such as sexual assault, battery, and depression and suicide, were found to be only partially accessible in these results. Substance abuse areas remained inaccessible in the survey results*." (McEntee, 1993). In addition, the first instances for hearing people to seek help seem not to be equally accessible to the Deaf population. "*Although three of four people in the general population seeking mental health services did so at community mental health centers, the centers are still largely inaccessible to deaf people.*" (McEntee, 1993). The issue of availability results in long travel distances to get to a specified psychotherapist or clinic. "*Mental or general health service* *may be a long way from community.*" (Denman, 2007). Psychotherapists and staff members confirmed that their services are often not accessible for Deaf people. "*29% stated flatly that their agencies were inaccessible to deaf people*" (McEntee, 1993). Even when Deaf people were able to access help, they seemed to reject them in most cases: "*Most therapists would reject Deaf people (n= 46, p= 64,8 %)*" (Schröder & Vereenooghe, 2021). In the study by Skøt et al. (2017), concerning the situation in Denmark, it was found that no trauma support groups are available for Deaf people. However, finding support groups for only Deaf people is important to ensure a shared language and accordingly the ability for exchange. "*In Denmark, there are no all-Deaf or hard-of-hearing support groups for trauma victims and their relatives. D/HH [Deaf/ Hard of Hearing] individuals have to settle for trying to find a hearing support group. One participant reported being rejected by a hearing support group*" (Skøt et al., 2017).

Confidentiality concerns

Confidentiality concerns were mentioned in six studies. For many respondents in these studies, confidentiality concerns were an issue that restricted seeking psychological help. However, it also influences the quality of psychotherapy. It was reported that one reason for this concern is the fact that the Deaf community is small. Accordingly, people involved in the treatment might also treat other people in the same community. "*Many participants reported that they did not seek professional help after trauma due to small community dynamics, fearing that their providers, ASL [American Sign Language] interpreters, or group therapy members would violate confidentiality ("The Deaf community is so SMALL"; "All the therapists know my mom it's a small Deaf community. I didn't want people to gossip. I didn't want my ex to find me"; "I didn't want to work with interpreters there's no privacy")*" (Anderson et al., 2017). As mentioned in this quote, group therapy can be an issue for Deaf people who have confidentiality concerns. This was further elaborated in the same study: *"A few participants reported* *preference for individual treatment over group treatment, to avoid embarrassment and shame (“If Deaf people know each other, they are ashamed to share”)*” (Anderson et al., 2017). Since the Deaf community is described to be small, some Deaf patients prefer a hearing over a Deaf psychotherapist due to confidentiality concerns. “*In principle everybody [in the Deaf community] knows everybody. There would be a chance of meeting one's psychologist at a party. I know that they [psychologists] have a duty of confidentiality, but it is wrong. It is better to go to a hearing psychologist who is more neutral.*” (Skøt et al., 2017). In addition, a topic of concern was the fact that the interpreter who is attending the therapy session will know very intimate details about a person. Therefore, Deaf participants prefer to have different interpreters for different duties. “*I didn't want to use an interpreter from the center where I usually book one from because I use that center in connection with my work. I wanted to keep things separate. I know that interpreters have a duty of confidentiality, but it would always be in the back of my mind – that they [the interpreters] would know something about me.*” (Skøt et al., 2017). This however further increases the effort to get to therapy. Next, it was reported that professional interpreters were not always available. On different occasions, friends and family members needed to translate the therapy session. This can lead to confidentiality issues: “*Significant others are sometimes used as interpreters. This is a two fold problem in that often the significant others do not explain everything to the Deaf person as they themselves may not understand everything that is being said; and this does not allow the Deaf person any privacy*” (Denman, 2007).

Diagnostic challenges

Diagnosing Deaf patients was perceived to be challenging in six out of 11 studies. This theme mainly influences the execution of psychotherapy. Due to language differences, the usual routine examinations can get difficult as described in the study by BinZubair et al. (2018): “*The* *patient could not hear or speak, so the presentation was atypical. Routine methods of history taking and mental state examination could not be applied for her evaluation. These limitations made this case a diagnostic challenge for the psychiatric team.*". It is described that the differences in language need to be considered when diagnosing patients, since certain normal behaviours in sign language might come across as distorted for the hearing psychotherapist. "*The syntax of American Sign Language (ASL), the language used by most prelingually deaf adults, is quite different from that of English. This is an important fact to bean in mind when one is assessing possible thought disorder, because what may appear to be unusual or distorted thinking may actually be a normal and appropriate locution in ASL [American Sign Language[.*" (Hoyt et al., 1981). Besides the language differences that were problematic for correct diagnosing, the availability of standardised tests seemed to be a problem as well. Most standardised diagnostic surveys are made for hearing individuals and written in the dominant spoken language. This might be problematic for Deaf individuals. "*Diagnostic surveys are not made for Deaf people*" (Schröder & Vereenooghe, 2021). In addition, Deaf individuals are not often confronted with standardized tests and might have problems interpreting them correctly and filling them out accordingly. "*Psychological tests can enable value, but they require special skill in administration and interpretation because most are not designed on standardized for the deaf and are often not part of their usual experience.*" (Hoyt et al., 1981).

The diagnostic challenges can lead to mistrust in some patients. In the study of Anderson et al. (2017), a patient stated her negative experiences with wrong diagnoses in the past: "*She decided to diagnose me as Borderline. I received many wrong labels"; "Diagnoses, labels, medications—lousy!".* A similar experience was reported in the study by Ayala-Hernandez et al. (2021): "*I questioned the correctness of the diagnosis and treatment of course*".

Discrimination

Four articles described discrimination of therapists and staff members against Deaf patients. This theme mainly influences the execution of psychotherapy. It was described, that "*assumptions are made in regard to their hearing loss (e.g. "they are wearing a hearing aid/I'm using an interpreter, they can understand what I am communicating").*" (Denman, 2007). Furthermore, a patient described in the article by Denman (2007) his fear of being locked up because of his Deafness: "*Fear of being admitted to a psychiatric unit and not being released because they are deaf*". The negative attitude towards Deaf clients seems to trigger negative reactions in the client: *"Some staff have negative attitudes, bad facial expressions, and act inappropriately. This triggers clients to blow up, but it's really the staff person's fault. They need to take trainings on how to use better facial expressions"* (Anderson et al., 2017). In the case study of Boyd (2008), the therapist described his observation of the negative attitude of a staff member of his: "*I can remember being shocked by the eye-rolling of one member of the reception staff (usually compassionateand caring) when referring to Elaine, and the referring GP's sympathetic noises, almost apologetic for sending her to me*".

Socioeconomic factors

In three studies socioeconomic factors were named to mainly restrict the access to psychotherapy and the ability to stay. Especially in countries where having health insurance is not obligatory, access to psychotherapy is not equal for everybody. Deaf people are known to have unfair access to education and accordingly to well-paid jobs. "*Very few deaf patients have had good schooling and get a good salary*" (Neves et al., 2020). Different social and economic factors explain this observation: "*Some deaf children are not inserted into a language at the right time. The process of learning often begins late. Some are rural town, they have to work, they give up studying. Accessibility for this group is bad, and welfare is also bad.*" (Neves, et al., 2020). This leads to an inability to pay for mental health services. "*Most patients are not able to stay in therapy if the full price is charged. N6 stated that the economic reality of deaf patients is not always very favourable*" (Neves et al., 2020). Due to the social and economic factors, more arrangements need to be made: "*As a perquisite psychotherapist described the contact via email, the supply of information about psychotherapy, the clarification of payment arrangements for interpreters, special training, and an increase of working hours for the treatment of Deaf people*" (Schröder & Vereenooghe, 2021). The socioeconomic situation of many Deaf people is seen to be a barrier to getting access to psychotherapy. "*Long distances to treatment, as well as insurance or financial problems.*" (Anderson et al., 2017).

Discussion

This QES aimed to summarize factors that explain barriers concerning the access and execution of psychotherapy for culturally Deaf patients. Accordingly, qualitative papers were identified, and a thematic synthesis was performed in which seven factors that explain the poor access and low quality of execution of therapy were established. Hence, implications for working with culturally Deaf people are aimed to be made. In addition, increasing awareness of barriers to psychotherapy for Deaf individuals is intended.

Principal findings and implications

In the following sections, principal findings and their implications for working with culturally Deaf individuals are described.

General findings

The findings of the current study answer the research question: *"Which factors explain low excess and poor execution of psychotherapy for Deaf people?".* It was found that factors explaining the low access and poor execution are *Communication barriers, Cultural factors, Availability, Confidentiality concerns, Diagnostic challenges, Discrimination, and Socioeconomic challenges*. The findings match partly with the hypothesised factors, which included low availability of trained psychotherapists, financial barriers, and the therapist's lack of knowledge about sign language and the Deaf culture. The hypothesised factor of systematic barriers could not be found in the current review. However, this barrier might be indirectly present in the theme of *Socioeconomic factors* since systematic factors like school curriculum, accessibility to adequate education, and funding for schools and interpreters inhibit Deaf people from receiving education and accordingly well-paid jobs (Khan et al., 2023). Factors that were not previously hypothesised but are present in the current study are *Confidentiality concerns, Diagnostic challenges,* and *Discrimination.*

The seven factors found in this study are marked by diversity, meaning that very different factors have been found that explain the observed barriers. This implies that many different changes have to be made to improve psychotherapy for Deaf individuals. This includes not only changes by psychotherapists but also changes in diagnostic surveys to match the needs of Deaf people and changes in the socioeconomic situation. These changes are however more complex and require further research to be accomplished.

The findings of the current study are in line with similar research in this area. In 2012, Gill and Fox conducted a qualitative meta-synthesis to examine factors that impact the therapeutic relationship. Although the topic of interest in that study is focused on the therapeutic relationship specifically, similar findings were made in comparison with the current study. The identified themes in the review by Gill and Fox (2012) included: "*Service issues*", "*Communication with other workers*", "*Communication between therapist and client*", "*lack of knowledge*", "*How the client perceives the therapist's feelings*", "*The use of an interpreter*", and "*The role of family and friends*". Similarities can be observed in the themes

“*Communication with other workers*”, “*Communication between therapist and client*”, and “*The use of an interpreter*” which are all present under the theme of *communication barriers* in the current study. The theme “*lack of knowledge*” is part of the theme of *socioeconomic factors* in this study, and the theme “*The role of family and friends*” describes partly the problems in the theme of *confidentiality concerns.* Only the theme “Service issues” could not be recreated in the current study. However, it was hypothesised to be an influential factor.

Distinction between access and execution of psychotherapy

Most analysed studies (n = 7) described the execution of psychotherapy for Deaf individuals. Less studies (n = 5) were interested in the access to psychotherapy for Deaf individuals. Out of all identified themes, only *Availability* is solely concerned with access. All other themes relate to both (access and execution) or just the execution. Reasons for this observation can be the study design of the included studies. Three case studies have been included, which all focused on the execution of psychotherapy. The design of case studies is written from a third-person perspective and focused on the description of a process which entails detailed information about a person (Van Lier, 2005). Hence, for this study design the description of the execution is a more fitting topic of interest. This could be a reason why all included case reports focused on the execution. In addition, this might be a reason why a slight focus on the execution instead of the access is observed in the included papers.

Although slightly more studies intended to research the execution of psychotherapy, an indirect impact of the execution on the access needs to be discussed. In the long, run negative experiences made in the execution of psychotherapy can result in a negative attitude which in turn affects the willingness to access psychotherapy. Especially, within the small Deaf community negative experiences made in psychotherapy might be shared leading to others not even trying to seek help because they expect to not receive qualitative care. Therefore, the execution of psychotherapy is also influencing access to psychotherapy. Accordingly, the distinction between the two phases is not strictly separated but continuous and interacting.

From the findings of the current study, it can be implied that both the access as well as the execution of psychotherapy are barriers for culturally Deaf people and are almost similarly present in the current study.

Strength of identified themes

Concerning the strength of the themes identified, variation is observed in how strong the different themes are present in the analysed studies. The strength of themes can be viewed as a hierarchical structure with communication barriers being reported in all studies and socioeconomic challenges being only reported in three studies. One reason for this observation could be the inclusion criteria of all countries. Especially socioeconomic factors are dependent on the countries. In countries without universal health insurance, access to health care is dependent on the financial situation of each individual (World Health Organization, 2023). Deaf people have a socioeconomic disadvantage and are therefore not able to access health care equally (Boss et al., 2011). However, in the current study only six analysed papers concerned countries that are affected by the disadvantage of no universal health insurance. These are the papers concerning the USA and Pakistan. All papers concerning England, Germany, Australia, Brazil, and Denmark describe a situation with universal health insurance (International Citizens Insurance, 2023). Since the economic situation is a barrier in only a few studies the theme of *socioeconomic factors* might have not been as strong in the current study.

Another important factor influencing the strength of the themes is the influence themes have on each other. In the current study, the theme of *communication barriers* influences several other themes. The theme of *Cultural factors* is influenced by the theme of *communication barriers* because culture is partly shaped by language (Reagan, 1995). The theme of *Availability* is influenced by communication barriers because services partly reject Deaf clients due to language differences (Schroeder & Vereenooghe, 2021). Next, *Diagnostic challenges* are influenced by *Communication barriers* because standard methods of assessment were difficult in sign language (Hoyt et al., 1981). Last is the theme of *Discrimination* because at least in one case assumptions were made by the staff about the ability of the client to communicate (Denman, 2007). In addition, the theme *Cultural factors* influences the themes *Communication barriers* again because sign language is part of the Deaf culture (Reagan, 1995), *Availability* because psychotherapists who are familiar with the Deaf culture are limited (Thomas, 2014), *Confidentiality concerns* because the culture of the Deaf is described to be small and talkative in sense on personal manners (Anderson et al., 2017), and *Discrimination* because stereotypes against a culture can be responsible for discrimination (Bodenhausen & Richeson, 2010).

The strength of the identified themes is influenced by the impact themes have on each other. If codes had been categorized differently the themes *Availability, Cultural factors, Diagnostic challenges, Discrimination, and Confidentiality concerns* could have had higher strengths. Generally, the identified themes should not be viewed as strongly independent but as a general categorisation to be able to simplify the high amount of information and make it manageable for further advice and implications.

Implications for working with culturally Deaf clients

From the results of this study implications for psychotherapy with Deaf individuals can be drawn. Concerning the strongest theme, *Communication barriers*, a mutual understanding of all parties involved should be guaranteed. If the psychotherapist is not able to sign, that interpreters should be arranged. Interpreters are also seen as a requirement in psychotherapy for Deaf people in the article by Boness (2016). Boness goes further to advise that the psychotherapist is responsible for ensuring that the interpreter is qualified and capable of performing the job and does not engage in multiple relationships with the clients (Boness, 2016). Ensuring communication simplifies the establishment of a functional working relationship and decreases frustration for both parties (Gill & Fox, 2011). Since a shortage of interpreters was observed in the current study, it is advised to make the jobs and training of interpreters more attractive. In the USA a person is required to speak good levels of sign language already before starting the bachelor's program this can take years of taking courses. After graduation, it is advised to get a certificate. This process can be made more attractive by including more sign language courses in the bachelor's degree program so that people who have no prior experience with sign language can start the program as well (Indeed, n.d.). In addition, sign language interpreters have an average salary of $77,086 per year. A salary satisfaction survey based on 216 ratings showed that only 50% of sign language interpreters in the United States say that this covers the costs of living in their area (Indeed, 2024). Accordingly, the salary of sign language interpreters can be increased to make the job more attractive. Another implication concerning communication barriers is the knowledge of Deaf communication technologies. Results of the current study show that psychotherapists and staff members are not familiar with the communication services used by Deaf people (Denman, 2007; McEntee, 1993). Learning about preferred methods of communication as well as getting acquired with applications and services used by Deaf people is advised.

Concerning cultural factors, therapists should familiarise themselves with the Deaf culture, history, and language. Getting to know the Deaf culture is considered to be essential for strengthening the therapeutic relationship and building rapport (Boness, 2016). Learning about the Deaf culture includes the use of sign language, cultural pride and identity, characteristics of Deaf groups, and discrimination within the Deaf community (Boness, 2016).

To decrease diagnostic challenges, sign language should not be interpreted literally. Otherwise, answers can closely resemble schizophrenia (Misiaszek et al., 1985). Getting acquired with the Deaf culture might help to better interpret test results (Misiaszek et al., 1985). In addition, standardised diagnostic surveys can be developed specifically for sign-language users. Already some attempts have been made to adapt and develop diagnostic surveys and interviews for Deaf people (Guthmann et al., 2012). However, this does not cover the full range of diagnoses. Therefore, it is advised to create and adjust more standardised diagnostic surveys and interviews to the needs of Deaf people.

Therapists can do further education to become specialised in working with Deaf patients. However, these courses are limited. In the UK courses are offered at CSD Consultants (CSDConsultants, n.d.). In Germany, one course is offered by the DGVT for psychotherapists who treat hearing-impaired patients (*DGVT Fort- und Weiterbildung*, n.d.). Since the availability of these courses is limited, it is advised that further courses in all countries are offered. Theses courses should not only address the psychotherapists but also their staff members since this study shows that discrimination and language barriers are caused by staff members as well.

Strengths

In sum, four major strengths distinguish this review from other research concerning psychotherapy for Deaf individuals. First to mention is the advantage of a QES. Compared to other types of Systematic Literature Reviews, QES can provide a richer description of experiences and phenomena. Accordingly, QES can describe complex phenomena as human attitudes, perspectives, opinions and experiences (Lockwood et al., 2015). This way the complexity of mental health care experiences can be described more accurately and specific solutions can be discussed accordingly (Lockwood et al., 2015).

The second advantage concerns the screening of articles. The AI-based sorting of the used online tool Covidence automatically sorts articles according to their relevance based on previous decisions (Covidence, 2023). This usually would allow to skip articles at the end of the list to save time. However, it was decided that in the current study, all articles are scanned at least once to be more accurate and to guarantee the inclusion of all relevant articles. Hence, the entirety of all identified studies was reviewed, and no studies were skipped in the literature identification process.

The third advantage applies to the different perspectives included in the current study. Not only the views of Deaf patients but also the opinions and experiences of psychotherapists and interpreters were included. Including multiple perspectives increases the richness of results and provides a more comprehensive understanding of the matter (Vogl et al., 2018).

The fourth advantage is the inclusion Risk of Bias assessment of included articles through the Critical Appraisal Skills Program (CASP) checklist. Since it was found that eight articles show a low risk of bias the results of these articles can be interpreted as reliable. This simultaneously increases the reliability of the current study which is dependent on these articles.

Limitations

Next to the strengths, five limitations affecting the present study need to be discussed. First, it is important to notice that three of the included studies showed a higher risk of bias in the CASP checklist (CASP, 2018). Specifically, the three studies by Thylur et al. (2020), Felhofer et al. (2022), and BinZubair et al. (2018) showed insecure results in more than five questions in the checklist. Within all of these studies, it was not or not precisely stated in the report whether the research design and recruitment strategy were appropriate for the aims of the research if the data was collected in a way that addressed the research issue, whether the relationship between researcher and participant has been adequately considered, if ethical issues have been considered, and whether the data analysis has been sufficiently rigorous. Since these issues have not been named in the report it needs to be assumed that they were not considered in the study. Accordingly, their results are questionable and cannot be trusted entirely. Although within the current study, less than a quarter of the included studies are affected by these issues, the results need to be interpreted carefully.

Another limitation of the current study is the flexibility of the thematic synthesis. The method leaves room for interpretation of how themes are formed and labelled. Although in this study the seven themes have been found to be the best fitting description of barriers, in another study with different researchers other themes might have been identified. Accordingly, the thematic synthesis is not able to provide a perfect description of the situation but rather summary of a complex situation. Within the current study this issue can be seen in the influence themes have on each other. The theme *Communication barriers* has an impact on many other themes. In addition, there is no strict separation of codes that fit to themes. Some codes can fit into more than one theme. Therefore, the themes found in this study should not be interpreted as strict truth, but as a guideline to make further implications to improve the situation of Deaf individuals. Although the method of a thematic synthesis has been criticised for "not really being a particular or distinctive method, but as simply referring to a process for identifying patterns" (Terry et al., 2017). Terry et al. argue on this critique, that many thematic synthesis methods, like the one of Braun and Clarke (2006) used in this study, offer a systematic and robust analysis.

Although the chosen research method of a QES provides important advantages, it misses valuable insight into quantitative studies. Quantitative studies have the advantage of concerning large samples of test subjects, being more objective, and statistically evaluating findings (Goertzen, 2017). Including quantitative studies in the current review could have increased the generalisability further and added additional information.

The third limitation is the responsibility of only one person who was involved in the screening process. Although the tool Covidence entails features that allow several researchers to work together and check each other's decisions in the screening process, this function was not used in the current study (Covidence, 2023). The fact that only one researcher was responsible heightens the risk of wrong decisions and accordingly the possible exclusion of relevant papers. Accordingly, there is a risk that the current study misses important papers and therefore valuable information.

Another limitation is the inclusion of two older articles. Namely, the articles by Hoyt et al. (1981) and by McEntee (1993) have been published over 30 years ago. Accordingly, the findings of these two articles could be outdated and therefore should be interpreted carefully.

Conclusion

The present study presented comprehensive information on the factors explaining barriers concerning the access and execution of psychotherapy for culturally Deaf individuals. It was found that both access and execution are relevant barriers for Deaf people to receive psychotherapy. Accordingly, implications for working with Deaf clients were provided which have the potential to enhance access and the quality of execution of mental psychotherapy for this group. In addition, awareness of the barriers experienced by the Deaf culture is increased. For further research in this area, it is advised to perform a mixed-method systematic review to be able to include quantitative studies as well.

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Appendices

Appendix A

CASP Checklist

Section A: Are the results valid?

1. Was there a clear statement of the aims of the research?

- Yes
- Can’t Tell
- No

HINT: Consider

• what was the goal of the research

• why it was thought important • its relevance

Comments:

2. Is a qualitative methodology appropriate?

- Yes
- Can’t Tell
- No

HINT: Consider

• If the research seeks to interpret or illuminate the actions and/or subjective experiences of research participants

• Is qualitative research the right methodology for addressing the research goal

Is it worth continuing?

3. Was the research design appropriate to address the aims of the research?

- Yes
- Can't Tell
- No

HINT: Consider

• if the researcher has justified the research design (e.g. have they discussed how they decided which method to use)

Comments:

4. Was the recruitment strategy appropriate to the aims of the research?

- Yes
- Can't Tell
- No

HINT: Consider

• If the researcher has explained how the participants were selected

• If they explained why the participants they selected were the most appropriate to provide access to the type of knowledge sought by the study

• If there are any discussions around recruitment (e.g. why some people chose not to take part)

Comments:

5. Was the data collected in a way that addressed the research issue?

- Yes
- Can’t Tell
- No

Hint: Consider

• If the setting for the data collection was justified

• If it is clear how data were collected (e.g. focus group, semi-structured interview etc.)

• If the researcher has justified the methods chosen

• If the researcher has made the methods explicit (e.g. for interview method, is there an indication of how interviews are conducted, or did they use a topic guide)

• If methods were modified during the study. If so, has the researcher explained how and why?

• If the form of data is clear (e.g. tape recordings, video material, notes etc.)

• If the researcher has discussed saturation of data

Comments:

6. Has the relationship between researcher and participants been adequately considered?

- Yes
- Can’t Tell
- No

HINT: Consider

• If the researcher critically examined their own role, potential bias and influence during (a) formulation of the research questions (b) data collection, including sample recruitment and choice of location

• How the researcher responded to events during the study and whether they considered the implications of any changes in the research design

Comments:

Section B: What are the results?

7. Have ethical issues been taken into consideration?

- Yes
- Can’t Tell
- No

HINT: Consider

• If there are sufficient details of how the research was explained to participants for the reader to assess whether ethical standards were maintained

• If the researcher has discussed issues raised by the study (e.g. issues around informed consent or confidentiality or how they have handled the effects of the study on the participants during and after the study)

• If approval has been sought from the ethics committee

Comments:

8. Was the data analysis sufficiently rigorous?

- Yes
- Can’t Tell
- No

HINT: Consider

• If there is an in-depth description of the analysis process

• If thematic analysis is used. If so, is it clear how the categories/themes were derived from the data

• Whether the researcher explains how the data presented were selected from the original sample to demonstrate the analysis process

• If sufficient data are presented to support the findings

• To what extent contradictory data are taken into account

Whether the researcher critically examined their own role, potential bias and influence during analysis and selection of data for presentation

Comments:

9. Is there a clear statement of findings?

- Yes
- Can’t Tell

- No

HINT: Consider whether

• If the findings are explicit If there is adequate discussion of the evidence both for and against the researcher's arguments

• If the researcher has discussed the credibility of their findings (e.g. triangulation, respondent validation, more than one analyst)

• If the findings are discussed in relation to the original research question

Comments:

Section C: Will the results help locally?

10. How valuable is the research?

HINT: Consider

• If the researcher discusses the contribution the study makes to existing knowledge or understanding (e.g. do they consider the findings in relation to current practice or policy, or relevant research- based literature

• If they identify new areas where research is necessary

• If the researchers have discussed whether or how the findings can be transferred to other populations or considered other ways the research may be used

Comments:

Appendix B

Risk of Bias results

	BinZubair 2018	Denman 2007	Anderson 2017	Felhofer 2022	Skøt 2017	Boyd 2007	McEntee 1993	Hoyt 1981	Neves 2020	Thylur 2020	Schröder 2021
Was there a clear statement of aims of the research?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Is a qualitative method appropriate?	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes	yes
Was the research design appropriate to address the aims of the research?	No	Can’t tell	No	Can’t tell	Yes	Yes	Can’t tell	Can’t tell	Yes	Can’t tell	Yes
Was the recruitment strategy appropriate to the aims of the research?	Can’t tell	Yes	Yes	Can’t tell	Yes	Can’t tell	Yes	Can’t tell	Yes	Can’t tell	Yes
Was the data collected in a way that addressed the research issue?	No	Yes	Yes	Can’t tell	Yes	Yes	Yes	Yes	Yes	Can’t tell	Yes
Has the relationship between researcher and participants been adequately considered?	No	No	Yes	Can’t tell	Can’t tell	Yes	Can’t tell	No	Can’t tell	No	Can’t tell

Have ethical issues been Yes taken into consideration?	No	Can’t tell	Can’t tell	Can’t tell	Yes	Yes	Can’t tell	No	Yes	Can’t tell	Yes
Was the data analysis sufficiently rigorous?	No	Yes	Yes	Can’t tell	Yes	Yes	Yes	Can’t tell	Yes	No	Yes
Is there a clear statement of findings?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
How valuable is the research?	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes

Appendix C

Overview of Themes

Themes	Availability (7)	Confidentiality Concerns (6)	Socioeconomic Challenges (3)	Discrimination (4)	Communication Barriers (11)	Diagnostic Challenges (6)	Cultural Factors (10)
Codes	lack of awareness of Deaf culture and history (Anderson et al., 2017)	Significant others are sometimes used as interpreters. This is a two fold problem in that often the significant others do not explain everything to the Deaf person as they themselves may not understandeverything that is being said; and this does not allow the Deaf person any privacy (Denman)	long distances to treatment, as well as insurance or financial problems. (Anderson et al., 2017)	Fear of being admitted to a psychiatric unit and not being released because they are deaf (Denman)	They feel unable to advocate on their own behalf because they do not share a common language with service providers, do not know what to except and do not understand what their consumer rights are (Denman)	The Patient could not hear or speak, so the presentation was atypical. Routine methods of history taking and mental state examination could not be applied for her evaluation. These limitations made this case a diagnostic challenge for the psychiatric team. (BinZubair)	They have a perception of the world that is different from ours. Our world is oral and auditory and their world is visually sensitive. This makes a difference (Neves)
	Although three of four people in the general population seeking mental health services did so at community mental health centers, the centers are still largely inaccessible to deaf people. (McEntee)	I didn't want to use an interpreter from the center where I usually book one from because I use that center in connection with my work.I wanted to keep things separate. I know that interpreters have a dutyof confidentiality, but it would always be in the back of my mind – thatthey [the interpreters] would	most patients are not able to stay in therapy if the full price is charged. N6 stated that the economic reality of deaf patients is not always very favourable (Neves)	I can remember being shocked by the eye-rolling of one member of the reception staff (usually compassionateand caring) when referring to Elaine, and the referring GP's sympathetic noises, almost apologetic for sending her to me (Boyd)	Significant others are sometimes used as interpreters. This is a two fold problem in that often the significant others do not explain everything to the Deaf person as they themselves may not understand everything that is being said; and this does not allow the	Limited neuropsychological testing has been validated for ASL speaking patients, thus making attempts at neurocognitive testing difficult. (Felhofer)	Participants reported issues with stigma surrounding trauma in the Deaf community ("We did not talk about domestic violence at that time"). (Anderson et al., 2017)

		know something about me. (Skot)			Deaf person any privacy (Denman)		
	Areas of crisis, such as sexual assault, battery, and depression and suicide, were found to be only partially accessible in these results. Substance abuse areas remained inaccessible in the survey results. (McEntee)	Patients may often have concerns, expressed or not, about the confidentiality of their communications, especially if they must communicate with the therapist through a hearing friend on family memberrather than through a professional interpreter. (Hoyd)	Very few deaf patients have had good schooling and get a good salary (Neves)	lack sufficient case management support, lack appropriate education or provision of information (e.g., “The therapist never explained my diagnosis”) (Anderson et al., 2017)	The therapists described that the use of therapeutic jargon should be reviewed. It could come to difficulties in communication due to language barriers. (Schröder)	A disruption in communication could lead to poor assessments, misdiagnoses, unnecessary testing, and inadvertent harm to patients (Felhofer)	lack of available mentors in the Deaf community to support survivors in their own recovery from trauma (“I needed a leader in ASL, but there was no model there I needed someone like me to show up. Someone who had lived it, to recognize it quickly, but there was no one”). (Anderson et al., 2017)
	limited success with clinical interventions that lack a trauma focus (Anderson et al., 2017)	feelings of mistrust and fear that private information would gossiped about, spread through the “Deaf grapevine,” and tarnish their reputation (Anderson et al., 2017)	‘Some deaf children are not inserted into a language at the right time. The process of learning often begins late. Some are rural town, they have to work, they give up studying. Accessibility for this group is bad, and welfare is also bad’. (Neves)	“Some staff have negative attitudes, bad facial expressions, and act inappropriately. This triggers clients to blow up, but it’s really the staff person’s fault. They need to take trainings on how to use better facial expressions” (Anderson et al., 2017)	Inability of the patient to hear or speak was the biggest hurdle in completing the psychiatric evaluation. (BinZubair)	The syntax of American Sign Language (ASL), the language used by most prelingually deaf adults, is quite different from that of English. This is an important fact to bean in mind when one is assessing possible thought disorder, because what may appear to be unusual or distorted thinking may actually be	“We don’t like to admit our problems; we feel like we always have to prove that we can do it”) (Anderson et al., 2017)

						anormal and appropriate locution in ASL. (Hoyd)	
	Participants' concerns about the limited availability of Deaf-specialized services and long wait lists for the services that do exist ("There are not enough services in the whole state"; "I prefer a Deaf provider, but I'm currently on waitlist for counseling") (Anderson et al., 2017)	Especially the setup of an appropriate atmosphere for discussion of sensitive topics was described to be a big barrier (Schröder)	As a perquisite psychotherapist described the contact via email, the supply of information about psychotherapy, the clarification of payment arrangements for interpreters, special training, and an increase of working hours for the treatment of Deaf people (Schröder)	assumptions are made in regards to their hearingloss (e.g. "they are wearing a hearing aid/I'm using an interpreter, they can understand what I amcommunicating") (Denman)	From the beginning, I could see a danger that the counselling would become dominated by the 'how' not the 'what' of communication (Boyd)	Psychological tests can enable value, but they require special skill in administration and interpretation because most are not designed on standardized for the deaf and are often not part of their usual experience. (Hoyd)	Not aware of how, when or where to seek assistance.
	long distances to treatment, as well as insurance or financial problems. (Anderson et al., 2017) In Denmark, there are no all-Deaf or hard-of-hearing supportgroups for trauma victims and their relatives (Theme 1). D/HH individuals have	Many participants reported that they did not seek professional help after trauma due to small community dynamics, fearing that their providers, ASL interpreters, or group therapy members would violate confidentiality ("The Deaf community is so SMALL"; "All the thera-pists know my mom—it's a small		One of the major complaints that all participants had about first response and/or healthcare professionals was a lack of Deaf awarenes (Skot)	I was frightened and language became my defence and my focus (Boyd)	A barrier to the diagnostic of personality disorders are problems in communication. (Schröder)	The missing involvement of psychotherapists in the Deaf culture makes the establishment of a relationship more difficult. (Schröder)

	to settle for trying to find a hearing support group. One participant reported being rejected by a hearing support group (Skot)	Deaf community. I didn’t want people to gossip. I didn’t want my ex to find me”; “I didn’t want to work with interpreters—there’s no privacy”) (Anderson et al., 2017)					
	Concerns were expressed regarding the limited availability of crisis psychologists who are trained to service the specific needs of D/HH populations (Skot)	A few participants reported preference for individual treatment over group treatment, to avoid embarrassment and shame (“If Deaf people know eachother, they are ashamed to share”) (Anderson et al., 2017)		The whole [healthcare] system is not prepared to meet the needs of the hearing impaired. Children who are born deaf today are offered a CIoperation, and the system thinks that there are no more hearingimpaired people left. The fewer deaf and hard-of-hearing people there are, the less attractive it becomes to develop a system that can be used. (Skot)	Patients may not be literate in English. (Denman)	Diagnostic surveys are not made for Deaf people (Schröder)	unaware of treatment options or how to access these options (“I didn’t know about treatment because I was Deaf”) (Anderson et al., 2017)
	mental or general health service may be along way from community. (Denman)	In principle everybody [in the Deaf community] knows everybody. There would be a chance of meeting one’s psychologist at a party. I know that			Service providers do not seem to be familiar with communication techniques used by deaf people (Denman)	mistrust of providers due to harmful experiences of being over diagnosed or misdiagnosed (“She decided to diagnose me as Borderline. I received many	Very little culturally responsive early intervention and health promotion is provided in their communities

		they [psychologists] have a duty of confidentiality, but it is wrong.It is better to go to a hearing psychologist who is more neutral. (Skot)				wrong labels”; “Diagnoses,labels, medications—lousy!”) (Anderson et al., 2017)	
	Communication aids and technology not used or available (Denman)	Since it is a relatively small community, many deaf people know each otherand have better chances of knowing and getting close to the real person of the therapist, and this can occasion a confusion of the roles of therapist/interpreter/friend. Since the therapist is a person who knows them deeply, they often ask you to take on other roles. (Neves)			Less than half the respondents to the survey stated that their agencies had Telecommunications Device for the Deaf (McEntee)	hallucinations are poorly understood in the d/Deaf, and the topic of auditory hallucinations experienced by d/Deaf patients is a subject of debate (Felhofer)	‘it is also a process of construction because the deaf person has to validate you in the community.The Deaf community, like many other minorities, is very closed. It’s very difficult to find a place, starting off at zero’.(Neves)
	Emergency health care in rural and remote areas often inaccessible as interpreters are not readily available or utilized and the only way to contact a service provider may be				In general, with opaque mask materials, one loses the essential cues of facial expression, which is an important component of Deaf communication and ASL. (Felhofer)	Deaf individuals are more likely to be misdiagnosed with psychosis, in part due to differences in the language used by deaf individualscompared with hearing individuals. (Thylur)	Subjects are structured by the social representations of the community they belong to. It would therefore seem very difficult to listen to the unique individual demands of a deaf

	via a telephone. (Denman)						patient without being familiar with their overall environment. (Neves)
	85% of these respondents stated they did not have or did not know of any staff member fluent in ASL (McEntee)				Especially in the case of a medical evaluation, it is not ethical to use family members to “translate.” (Felhofer)	Rapid signing might indicate mania, or signing may simply be occurring quickly because of frustration at not beingunder stood (Thylur)	A situation that may be much influenced by the deaf patient’s sense of trust based on experiences with hearing people. (Hoyd)
	29% stated flatly that their agencies were inaccessible to deaf people (McEntee)				written information is often too complex and is not always provided in their preferred language. (Denman)	Performing a mental status examination through an interpreter naturally makes the assessment of psychosis more difficult (Thylur)	Patients may also use their hearing impairment and dependence on visual cues as a resistance, attempting to control the communication by signing too rapidly for the therapist to follow on by either simply looking away or selectively not understanding the therapist when troubling material is being discussed. (Hoyd)
	Most therapists would reject Deaf people (n= 46, p=				No way of knowing if their name has been called in alarge,	An interpreter’s sign ability can have a significant impact on	Not familiar with the signs and symptoms of

	64,8 %) (Schröder)				noisy waiting room, and could be sitting there for a long time before someone realizes. (Denman)	how an interviewer might perceive the communication skills of the deaf individual (Thylur)	different mental illnesses and the impact of not seeking appropriate treatment in a timely manner (i.e.involuntary admission, longer recovery, etc).
	Deaf DSL participants reported preferring to work with a crisis psychologist who is proficient in DSL. However, when seeking a crisis psychologist, the reality forD/HH individuals who rely on DSL to communicate is that they often end up having to choose a hearing crisis psychologist who understands trauma but cannot sign (Skot)				Much time is often spent simply establishing mutual communication (Hoyd)	An interpreter who is not experienced with mental health may also have trouble identifying alterations in language patterns that could indicate athought disorder (Thylur)	“I need an interpreter for my family. We have no communication” (Anderson et al., 2017)
	Concern about going into hospital because there are no visual alarm systems. Afraid that there could be				The limits of the speakers’ fluency in sign language may result in exchanges becoming concrete, question-and-answer	and a C-L psychiatrist who is not familiar with sign language may make inaccurate	The behaviors are thought to be due to some d/Deaf children not having been exposed to the

	a fire somewhere in the building and they would not know about it because all alarm systems rely upon everyone being able to hear. (Denman)				Sequences rather than being expressive and open-ended (Hoyd)	conclusions about their patient's cognitive functioning and thought processes (Thylur)	same social and interpersonal interactions as hearing children, leading to a delay incertain functional skill acquisition. (Felhofer)
	Owing to the scarcity of mental health resources for the deaf, as well as their own reluctance and lack of knowledge about available resources, patients unfortunately maynot seek or be referred for psychiatric help until their problems have been multiplied and compounded to thepoint of causing social on legal difficulties. (McEntee)				'Many doctors have no idea of how to communicate and deaf patients don't always have someone to go with them'. (Neves)		I also feel more exposed, under scrutiny from the 'seeing skills' so necessary to Elaine's communication. As such I feel a constant reminder or challenge to my genuineness which is very demanding and I am struggling with ... a sort of ... defensiveness, a desire to 'hide' (Denman)
	Technology is also seen as important. More traditional psychotherapists have to adapt because it allows deaf patients to				it's difficult to identify a slip of the tongue, for example, because you have to think about signalizing in all the aspects of		No other deaf people to relate to as an inpatient or ingroup programs. (Denman)

	look for and come to treatment on their own, without the help of third parties (Neves)				construction and movement. In addition, what sometimes happens is to use a word that, in Portuguese, means one thing while deaf speakers may use it as another. So, in this case, they areusing it in the wrong context. (Neves)		
					provider’s lack of shared communication with the participant, failure or refusal to provide ASL interpreters (Anderson et al., 2017)		I find that 45-50 minutes with a deaf adult is exhausting. Anytime you are so highly dependent on constant visual contact for communication, it’s fatiguing you can’t take the little shift that comes with looking out the window.” (Hoyt)
					Deaf individuals are less likely to be as skilled in written English as with ASL. Furthermore, ASL is distinct from English; it has its own linguistic		It was the common impression of our interviewees that deaf patients often come to treatment not through selfreferral but rather because

					history and grammatical structure (Thylur)		someone (employer,school, rehabilitation agency) sent them. (Hoyd)
					Mr. B's deafness as well as sign language dysfluency secondary to thought disorder presented unique challenges that required careful liaising with ASL interpreters and Mr. B's family (Thylur)		Owing to the scarcity of mental health resources for the deaf, as well as their own reluctance and lack of knowledge about available resources, patients unfortunately maynot seek or be referred for psychiatric help until their problems have been multiplied and compounded to thepoint of causing social on legal difficulties. (McEntee)
					Another HH Speechparticipant (Sophie) expressed dissatisfaction with her psychologist because he had sat away from the light resulting in her having to use all her energy on trying to		the general sentiment (incorrect) that learning sign language ASL is an easy task that can be readily accomplished. Many respondents assumed that one course was

					hear what he was saying. (Skot)		sufficient to communicate fluently inASL (McEntee)
					The involvement of an interpreter does create a triangular arrangement… may result in diluting and distorting the usual dyadic therapeutic relationship... therapist and patient may both have to direct their attention toward the interpreter, who may come to be seen as the center of authority and the one who truly “understands” the patient. (Hoyd)		the contract ‘ends up being much more detailed with a deaf patient because they usually have no information about psychotherapy’. They also noted that ‘sessions are more tiring because, due to the language, they demand more attention’. (Neves)
					Thirtynine percent of respondents stated that their agencies did not provide interpreters for their deaf clients (McEntee)		Reasons for Deaf people to not seek help are: feeling overwhelmed due to being Deaf, The belief that mental problems are part of being Deaf, Shortage of experienced psychotherapists, Mistrust in psychotherapists, and negative

							experiences with hearing persons (Schröder)
					Indeed, 70% that stated they provided interpreters did not provide certified interpreters. Fifty percent stated that they did not know if the interpreters they used were certified. (McEntee)		
					Even if an interpreter is used, the roles and responsibilities of each person present must be clear to avoid transference and countertransference issues from blocking the therapy process. (McEntee)		Professionals lacked experience in dealing with D/HH individuals and were consequently unprepared to meet their heterogeneous communication needs (Skot)
					Problems reported by participants included “lack of chemistry” with the interpreter and “fear of being misinterpreted.” (Skot)		Having to rely on relatives to receive information can exacerbate feelings of dependency among D/HH individuals (Skot)
					One Deaf DSL participant (Jens)		I get really angry because I want us

					described working with an interpreter as a strange experience because it disrupted the flow in conversation and his ability tocommunicate directly with the psychologist (Skot)		hearing impaired to be able to fend for ourselves. I take pride in being able to fend for myself without having to ask for help.(Skot)
					Difficulty requesting or receiving ASL interpreter services. (Anderson et al., 2017)		He was experiencing an overwhelming sense of isolation that may have grown from the marginalization experienced by some deaf individuals (Thylur)
					Therapists will also experience various frustrations. Not being able to communicate easily, the therapist commonly experiences his or her sudden loss of articulateness with initial shock followed by frustration. The frequent slowness of the work can be discounaging,		

					especially if the therapist does not have adequate backup support systems (McEntee)		
					Due to misunderstandings, these professionals ignore the fact that signs function in the same way as spoken discourse does (Neves)		
					Having to insist on getting a sign language interpreter creates extra stress for D/HH individuals who are already in a crisis situation. (Skot)		