

Saudi Students Who Are Deaf and Hard of Hearing in a US University: A Qualitative Case Study

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> تاریخ استلام البحث: ٥ / ١٠ / ٢٠٢٤م تاریخ قبول النشر: ١٣ / ١٢ / ٢٠٢٤م

المجلد الثامن عشر، العدد الثاني (مايو ٢٥٠٥م- ذو القعدة ٢٤٤٦هـ)

Saudi Students Who Are Deaf and Hard of Hearing in a US University: A Qualitative Case Study

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Abstract:

The current study investigated the experience of Saudi students who are deaf and hard of hearing (DHH) and were studying at the college level in a U.S. university. The investigation employed a qualitative case study approach, closely aligning with the study's requirements. Relevant data was collected through a semi-structured interview. The interviews were conducted by four DHH students. The results revealed a misunderstanding of deaf minority students' culture and communication modes at the college level. Additionally, this leads to the creation of gaps in interaction between international and non-international students. This study suggests the importance of early proactive programs on school campuses that assist students in making new friends and sharing experiences and cultures.

Keywords: college, deaf, hard of hearing, international student, university.

الطلاب السعوديون الصم وضعاف السمع في الجامعات الأمريكية: دراسة حالة نوعية عبدالله منصور القحطان

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المستخلص:

هدفت الدراسة الحالية إلى التعرف على تجربة الطلبة السعوديين الصم وضعاف السمع في الجامعات في الولايات المتحدة الأمريكية. وقد تكونت عينة الدراسة من (4) طلبة صم وضعاف سمع، وقد استخدمت الدراسة منهج دراسة الحالة كأحد أنواع مناهج البحث النوعي حيث تم جمع البيانات من خلال المقابلات شبه المنظمة. وقد أظهرت نتائج الدراسة أن من أكبر التحديات التي واجهت الطلبة السعوديين الصم وضعاف السمع خلال مرحلة الدراسة الجامعية في الولايات المتحدة الأمريكية: 1) التحديات في التواصل باللغة الإشارية واللغة الإنجليزية معاً، 2) والتكيف مع الثقافات المتعددة داخل الحرم الجامعي. كما أظهرت النتائج أن الطلبة الصم السعوديين لديهم خبرة سلبية داخل الحرم الجامعي مثل سوء فهم ثقافتهم من قبل أقرائهم الصم الغير دوليين لخلفياتهم الثقافية سواء داخل القاعات الدراسية او الحرم الجامعي، مما أداء إلى خلق فجوات في التفاعل بينهم وبين الطلبة غير الدوليين (الطلبة الصم من نفس البلد والثقافة). وفي ضوء هذه النتيجة، توصي الدراسة على أهمية تفعيل البرامج الثقافية في الحرم الجامعي التي تساعد الطلبة الدوليين والغير دوليين على تكوين صداقات جديدة ومشاركة التجارب والثقافات المتنوعة داخل الحرم الجامعي.

الكلمات المفتاحية: كلية، صم، ضعاف السمع، طلبة، جامعة، الطلبة الدوليين.

Introduction

A growing number of international students are choosing to pursue their post-graduate studies in English-speaking countries, and among a small number of destinations that offer quality, the US is the most popular destination (IIE Open Doors Report, 2022; Spooner-Lane et al., 2009). This indicates a competitive edge among US colleges and universities in the global environment with respect to diversity, dynamism, and excellence (Evivie, 2009).

These students make a significant contribution to the revenues of US universities (Wilkins & Huisman, 2011) and, consequently, to the US national economy (Owens et al., 2011). International students are not only important for institutions economically; they contribute valuable insights to the campus environment and classroom discussions (Frederick, 1995), bringing their unique home country cultures, languages, and experiences in educational systems that are different from those of US students (Ku et al., 2008; Mori, 2000).

Research Problem. Previous research pointed out that international students' transition to studying abroad is associated with anxiety, stress, and tension, which may result in academic failure or withdrawing from university (Kwon, 2009; Rabia, 2017). These students face specific issues in their new environment, including adapting to a new culture, separating from their families, English language acquisition, and succeeding academically (Ku et al., 2008; Wu et al., 2015). These issues directly influence their thoughts, decisions, and actions, which in turn impacts their academic performance (Furloger & Gencic, 2014; Tomasello, 2016). Indeed, the deaf community in each country differs in terms of sign languages, shared experiences, socialization, and deaf culture (Hole, 2007; Olatunbosun, 2020). These shared experiences shape deaf identity, which varies by nation depending on how deaf individuals balance their vulnerability and the empowering influences in their environment (Breivik, 2005; Goldstein & Keller, 2015; Campbell & Kean, 2016; Mesidor & Sly, 2016). Therefore, comprehending the experiences of DHH international students is a critical step in supporting their education, which is the essence of this study.

The purpose of the study. To ensure quality education for DHH international students, it is essential to understand their experience. The purpose of this qualitative study was to comprehend the experience of Saudi international students, who are DHH, face when studying in the US. university.

Research Question. The research question is: What are the experiences of Saudi international students who are DHH at the university level in the US? **Terminology.**

Deaf: "A hearing impairment that is so severe that the child is impaired in in processing linguistic information through hearing with or without amplification, that adversely affects a child's educational performance" (34 C.F.R. \$ 300.7 (c)(3)).

Hard of Hearing: "Means an impairment in hearing whether permanent or fluctuating, that adversely affects a child's educational performance but that is not included under the definition of deafness in this section" (34 C.F.R. \$ 300.7 (c)(5)).

Sign language: A natural language for children who are Deaf and Hard of Hearing (DHH) that is fully accessible to all individuals within the DHH community (Stokoe, 2005).

International Student: individuals who are temporarily residing abroad for educational purposes and are enrolled in courses at a university.

Literature Review

International students who are hearing. Research exists demonstrating the benefit of having international students in US universities and colleges. For example, international students provide a unique value for the US education system through speaking different languages, sharing different learning styles, and enriching the environment with varied cultural backgrounds (Yu, 2020; Fox & King, 2020). Also, international students attending American universities and colleges increase the diversity of student population, add new perspectives to classroom conversations, and increase student awareness and appreciation for other cultures and countries (Bevis, 2002; Harrison, 2002).

Although international students offer many benefits to US institutions, these students frequently encounter challenges in their new environment. For example, international students are prone to face more problems compared to American students, including financial, academic, and language difficulties, racial or ethnic discrimination, acculturative stress, and homesickness (Yang, 2018; Reverdito & St. John, 2019). According to Kwon (2009), international students tend to be silent and to not participate in

class discussions compared with native speakers, which might lead them to feel unimportant, isolated, and to suffer academic failure. Kwon's study worked with a sample of 165 international students enrolled in an urban university in the US and showed that the level of English proficiency had a strong impact on the feelings of isolation and intimidation in English speaking classrooms; a better perceived English proficiency led to a better adaptation to English-speaking classroom environments and lessened the feelings of isolation.

Language barriers among international students go beyond mastering day-to-day conversation; they also involve understanding academic terminology in their individual academic disciplines (Tait, 2010; Yang, 2018; Hrastinski & Wilbur, 2016), as well as potential problems with reading and writing for academic purposes (Erichsen & Bolliger, 2011; Hennebry et al., 2012; Knoors & Marschark, 2018). This can lead to instructors and faculty incorrectly assessing international students' knowledge and abilities. Robertson and his colleagues' (2000) study on international students' difficulties at Australian universities found that language ranked the highest among difficulties faced by international students, who might not ask help when needed due to the limitations of their ability to understand English and its often-confusing nuances. This study also indicated that faculty criticized international students for lacking the skill to apply critical thinking and not taking responsibility for their academic progression. Similarly, Hellsten and Prescott (2004) pointed out that international students feel that their professors disregard them or fail to make an effort to engage them in the classroom environment. This discourages students from striving to adapt to their new circumstances. Professors do not appear to understand that students have different backgrounds in regard to academia and culture. They also need to be made aware that improving their teaching methods is necessary in order to help students benefit from the learning environment. However, limited research has described how faculty can step in to help international students to be part of their classes by making their experiences more engaging and meaningful (Gopal, 2011). Consequently, some of these students might earn unsatisfactory grades and fail to achieve, which can force them to leave their institutions prior to the end of their program due to a limited Englishlanguage proficiency and a lack of faculty who take the time to understand such limitations.

International students encounter other challenges as well. For example, they face a myriad of hardships adjusting to the new culture and academic environment that are completely different from past experiences (Wu et al., 2015). According to Bista (2012), other reasons behind international students' silence in the classrooms are related to the culture of silence that is rooted within home cultures. In many home countries, silence is perceived as a classroom requirement because of the teacher-centered pedagogies; the power to foster the ability to listen is required and, in Middle East culture in particular, it is a form of wisdom or respect. Because international students are used to a lecture-style class format, being in the US classes where discussion is expected can lead to dissatisfying educational experiences (Wadsworth et al., 2008). Hence, international students are required to confront the process of acculturation and familiarize themselves with the differences between academic cultures and ways of thinking and seeing the world (Erichsen & Bolliger, 2011; Dammeyer, 2014), because they do not have other options but to embrace the new culture fully. These processes of adjustment are difficult for international students, because they not only have to find their way in the host country's culture, they also have to change their mindset to facilitate a complete transition. In order to avoid ensuing misunderstandings, involving international students in their school decisions and educational process might help institution members to know more about their school's systems, with a view to transforming them in ways which will in turn deepen their own understanding, their educational practices, and the institution in which they work.

Moreover, a school's society plays an essential role in international students' academic life. Lee and Rice (2007) explored the nature of school communities and the social impact of international students' experiences within the US academic environment. For example, women students who wore saris or veils suffered unpleasant experiences and difficulties integrating with campus life, and they were treated like uninvited guests (Cole & Ahmadi, 2003; Bevis, 2002). Furthermore, Robertson et al.'s (2000) study discovered that among the most prevalent problems faced by international students were feelings of isolation. Perrucci and Hu (1995) considered this to be the most important predictor of international experiences in the US behind having extensive exposure to American culture, with less important predictors including grades and self-esteem. These challenges strongly hinder international students' social integrations, as well as their academic achievement. The authors suggested that a host society's educational practices should be questioned and changed rather than accepted as the status quo,

and US institutions should stop putting the burden on international students to adjust to or cope with the host culture.

Nevertheless, basic living arrangements and academic procedures, including residence life, registration, and food, should be considered as hindrances encountered by international students after arriving to their schools. These special needs are not well accommodated in many support services at American universities, although international students are identified as having a greater need for such services compared to native students (Kher et al., 2003). In a similar study of Australian universities, Lloyd (2003) explored basic problems faced by international students, including a lack of social support, housing accommodations, inadequate general support services, and confusing enrollment procedures. Citing my own experiences as an international student, when I arrived to US for the first time, I faced many difficulties without support from my school. I had to find place to live, get a cell phone, and open a bank account. Tasks that are hard even for some American students are that much more daunting for international students, who have no experience with basic American living requirements. To assist international students, there is a need to improve support services and orientation programs, such as explaining informal channels of communication and creating "buddy" programs that could guide them to complete such tasks (Schram & Lauver; 1988). Given the many benefits international students bring to American Universities, there is a need to be aware and address that these students deal with many challenges and difficulties that impact their education.

Students who are deaf and hard of hearing (DHH). Providing postsecondary educational opportunities to students with such special needs as those who are DHH has grown significantly, as the number of DHH students who are enrolled in universities and colleges has increased (Scherer et al., 1987; Garberoglio et al., 2019). According to Rosica et al. (2001) and Rosica and Kelly (2002-2006), deaf students' goal at the National Technical Institute for the Deaf (NTID) was to earn a bachelor's degree. For those intent on earning a graduate degree, 20% were students who are DHH, while the overall rate of students who are DHH graduating with an associate degree was 49% (Rosica et al., 2001; Rosica & Kelly, 2002-2006). However, comparing the rate of graduating with a college degree between students who are DHH and students who are hearing, there was a clear gap (Marschark et al., 2002). For example, approximately 35% of students who are DHH graduated from a 2-year program compared to about 40% of their hearing peers. Additionally, about 30% of students who are DHH graduated from a 4-year program, compared to about 70% of their peers who are hearing.

As a review of the research literature related to persistent students who are DHH in US institutions, the high school grade point average (GPA), standardized achievement test score—such as The American College Test (ACT)—and academic skills are used as the only important factors predicting DHH students' retention in universities and college (Albertini et al., 2011; Convertino et al., 2009). However, around 80% of DHH students who are at Rochester Institute of Technology (RIT), for example, left the university without obtaining a degree, despite their 9th-12th grade reading skill range, which is associated with college readiness and graduation (Kelly, 2003). Such findings show that predicting the graduation of DHH students using only academic preparation is clearly insufficient.

There are other factors that play a role in leaving a university or college. For example, family attitudes and support, social class, ethnicity, language, and finances contribute strongly to students dropping out (Lehmann, 2007; Goldstein & Keller, 2015; Wu et al., 2015). Furthermore, institutional factors such as academic support, ratio of students to staff members, and financial aid were identified as affecting the number of students who opt to drop out (Bailey et al., 2005; Lau, 2003). Kersting's (1997) qualitative study investigated social interactions and experiences in a mainstream college setting from the perspective of fifteen students who are DHH. The phenomenal study approach was applied. The findings suggested that there is a need to continue investigating the experiences of students who arrive on campus without knowledge of deaf culture or sign language and evaluate currently existing programs and services designed to meet these students' needs. Because society and culture play important roles in international students' experiences within US universities and college environments, there is a need to continue explore DHH students' experiences from their perspective lens in order to achieve a greater understanding.

International DHH students. The current literature on deaf higher education provides ample evidence of the experiences that international DHH students have had in US universities. In particular, DHH international students have experienced difficulties learning a new language. For example, Guiberson (2014) conducted an investigation into the challenges faced by international DHH students

from Spain, with a particular focus on issues related to bilingualism for students who identify as DHH. Although the bilingual abilities of DHH students were superior to those of their monolingual peers, their proficiency in the second language (L2) was not as high as that of monolingual students whose L2 served as their L1. In fact, the language skills of international DHH students vary widely from person to person based on their country of origin, their educators, resource availability, and other comparable variables (Almotiri, 2017; Guiberson, 2014; Knoors & Marschark, 2018). According to Knoors and Marschark (2018), providing remedial English studies to international DHH students could enhance their cognitive foundation for language comprehension, but the decision ultimately rests with the institution.

Furthermore, cultural differences among nationalities can cause culture shock in deaf populations worldwide. For example, Kuster's (2015) study found that the beliefs and lifestyles of individuals who are DHH resulted in culture shock. International DHH students from such populations studying in American universities and colleges may experience culture shock due to their deaf beliefs and livelihoods (Kuster, 2015). Furthermore, Marschark et al.'s (2017) study found that cultural identification among deaf participants encompassed a sense of equality, a concept that was less prevalent in the hearing population. Given this knowledge of what deaf acculturation means, it is fascinating to learn about the cultural identity experiences of international DHH students within the deaf and hearing population and how the idea of deaf acculturation might manifest itself in the instance of these students.

Nevertheless, Friedner (2018) investigated the experiences of American Sign Language-English interpreting students as a distinct group within the deaf community. Future ASL interpreters often portray themselves and the deaf community in static ways, demonstrating a lack of understanding or trust (Friedner, 2018). Deaf identity and a strong Deaf society and culture likely lead to outsider status and prejudice, similar to that seen in mainstream society. Despite the need for fluent ASL interpreters, these outsiders received poor treatment (Friedner, 2018). The perceived enmity between deaf students and interpreters makes the workplace uninviting. Indeed, this is not only an illustration of how cultural conflict can arise from beliefs and attitudes about international DHH students; it also raises concerns about safeguarding the various adaptations and modifications that individuals and organizations have created to enhance their abilities in the context of international DHH students' education.

Given the issues associated with international DHH students at a US university, it appears that no previous study has specifically focused on the experiences and needs of these students. Neither do we have in-depth, documentary evidence of the students' own perspectives on the subject such as in communication, language, culture, and support needs. However, the related reviews are based on quantitative studies only and are designed to predict international students' achievement without considering students' experiences as important indices to evaluate and use as predictors (e.g., Almotiri, 2017; Friedner, 2018; Knoors & Marschark, 2018). In the course of researching Saudi international students who are DHH and studying in American institutions of higher education, I found no directly related literature available. Therefore, the purpose of this study is to investigate the experience of Saudi international students who are DHH attending universities in the US.

Methods

Research Design

The qualitative case study method was applied in this study, as this method is appropriate when researchers want to understand people's experiences in depth (Merriam, 2015; Yin, 2009). Further, this method facilitates a thorough investigation of a unit that is constrained by its people, environment, and experiences (Stake, 2010). This method was consistent with the goal of this research, which was to investigate the experience of Saudi international students who are DHH attending universities in the US.

The Participants

The study involved four DHH Saudi Arabian international students who were graduated from a university in the US. The participants were chosen specifically because of their rich and extensive experience as international students, because they had studied at the college level for nearly four years. They acquired their English language and American Sign Language (ASL) skills at the English Language Institute in US universities and pursued their undergraduate and graduate degrees subsequently at US universities.

Sampling and Human Subjects' Protection

The participants in this study were selected through purposeful sampling. Purposeful sampling is a common technique in qualitative research because it selects information-rich cases for in-depth study (Patton, 2023). The study involved four DHH Saudi Arabian international students who were

graduated from a university in the US. The participants were chosen specifically because of their rich and extensive experience as international students, because they had studied at the college level for nearly four years. They acquired their English language and American Sign Language (ASL) skills at the English Language Institute in US universities and pursued their undergraduate and graduate degrees subsequently at US universities.

Interviews were conducted with the four Saudi students who are DHH and were studying at US university. The researcher recruited participants via Saudi friends who are DHH, as well as the Saudi Deaf Organization in the US university, both of which each independently supplied me with contact information of students with whom I was looking to connect. Thirteen potential participants who are DHH and had graduated from a US university shared their phone numbers and personal emails to their Saudi leaders who are DHH and members at Saudi Deaf Organization in the US university. The researcher then invited each participant to participate in the interviews via emails and text message. Each participant received a package in the email that contained the recruitment letter, a copy of the informed consent from, and the interview procedure. The letter also listed the rational for choosing them as potential participants and summarized the objectives of the study. Further, they were informed that could refuse to participate or withdraw from the study at any time. In addition, the anonymity and confidentiality of the participants' responses were ensured. The Institutional Review Board (IRB # 46-047) at Taif University approved this study. The study selected four out of eleven participants for the interview. Others showed no interest, or they did not meet the study's criteria.

Setting

The study was conducted at a university located in the eastern US that admits both hearing and deaf students each year. The university also admits international students, particularly DHH students, from around the world each year. Approximately 1753 students attend the university. Further, the university offers undergraduate and graduate programs in the arts, sciences, humanities, human sciences, education, and business. The university supports its students by offering various services on campus, including the writing center, English language institute, library, speech pathology and audiology center, research center, student housing, cafeteria, fitness center, and free transportation. The university administration on campus also supports numerous American and international student organizations.

Data Collection

In qualitative research, the researcher is the primary instrument who conducts observations, interviews, and creates documents (Marriam, 2015). People serve as the primary subjects for data collection and analysis in qualitative research, and their interviews influence our understanding of reality directly (Marriam, 2015). Therefore, the researcher collected the data for this study through interviews. The data were collected by using the Zoom platform. The length of each interview was 45 minutes. Arabic, English, and American Sign Language (ASL) were the primary languages of use in the interviews.

Interviews

Semi-structured interviews were conducted with the four participants to answer the research question. The interviews covered several areas of their experiences studying in US universities and colleges: satisfaction with services; friendship and social contacts, and general degree of personal comfort (Stinson & Walter, 1992). The data were collected with Zoom video recording using the Zoom platform and then were transcribed into a Word document. The time of the interviews were according to each participant's convenience. The participants' feedback was used to verify the accuracy of the data collected.

Data Analysis

The data were analyzed using analytical coding (Merriam, 2015). First, the entire transcribed text of the interviews was examined to identify any aspect of the data that might help address the research question. Second, the meaning of the data was interpreted and reflected upon before they were categorized and codes were assigned to the categories. Rather than pre-identifying the codes, the data redefined them consistently during the analytical process (Tesch, 1990).

After all of the data from the interviews were categorized, similarities and differences among the categories were identified to help organize them into final classifications. Further, a comparative method was used (Stake, 2010) to validate the conclusions by comparing the interview data. Overall, the interviews about the experiences of Saudi international students who are DHH in US university were analyzed.

Trustworthiness

A variety of strategies that ensure the trustworthiness of data are employed in qualitative research. First, a member check at the end of the interview was used that helped assess the accuracy of the interview's information and what the interviewee said (Merriam, 2015). Therefore, the researcher wrote all of the information obtained from the participants in the interviews. Then, this information was emailed to the participants to verify the accuracy of our collective experiences and ensure that no crucial elements were overlooked.

Second, a detailed description (Geertz, 1973) was written that described the participant, the context, and quoted what the participants said exactly to help the reader understand each participant's experiences. The description was employed as another indicator of trustworthiness. It allows others to make informed judgments about data transferability based upon the depth of the material presented (Stake, 2010). Ultimately, a peer debriefing strategy was employed with a deaf faculty member at the same college. The debriefed peer's role involved reviewing all of the data collected, including the transcripts of the interviews, to determine whether the interpretations of the findings were acceptable and logical and supported the study's purpose thereby (Merriam, 2015).

Findings

The findings from the interviews showed meaningful categories that could be organized into several themes: (a) culture and language, categorized into the cultural misunderstandings, and cultural competency in classrooms; and (e) supports, categorized into the supports from instructors and from the schools' departments of study in the US university.

Demographic information. At the beginning of the interviews, I asked each international student who is DHH about their background, using the phrase "*Tell me about yourself*."

One of the participants is hard of hearing, and others have been deaf since birth. One participant prefers total communication, and the others prefer sign language when communicating with them. Additionally, the participants had varying degrees of education. Two of the participants were undergraduate students, and two were graduate students at the same university in the United States. One of the participants studied a bachelor's degree in accounting, and another student studied in education. For the graduate students, one participant majored in deaf education, while the other participants focused on sign language linguistics and deaf education. Table 1 provides demographic details about the participants.

Table 1 Demographic information of the participants

Demographic information	Total Number and Percentage
Hearing loss (N=4)	
Deaf	2(50%)
Hard of hearing	2(50%)
Communication (N=4)	
Sign language	3(75%)
Total communication	1(25%)
Level of Education (N=4)	
Bachelor	2(50%)
Graduate (MA)	2(50%)
Major (N=4)	
Deaf Education – Elementary School	1(25%)
Linguistics and sign language interpretation	1(25%)
Business	2(50%)

Culture and Language

In the present study, the participants stated that dealing with different new languages and cultures here was a big shock for international students. All participants stated that:

"I faced significant challenges when I arrived at this university.... I was no longer part of this community, and I found it challenging to interact with them. The American culture outside might be less challenging compared within the deaf community at A. University. (Participant who is hard of hearing – HH.P.2). "For me, I kept trying hardly to get along with them because I grew up as deaf with hearing family and community in KSA and I do not know sign language" (Participant who is deaf – D.P4). Participant who is deaf – D.P1). "Because there are many deaf international students, I faced multiple challenges in dealing with sign language, deaf

culture, deaf world culture, attitude, and identity" (Participant who is hard of hearing – HH.P.3). "I've been there for 6 years, and I've observed these challenges on campus" (D.P4). In a similar vein, the participant who is hard of hearing (HH.P. 1) expressed, "As an international student, I faced numerous challenges, but not really shock dealing with new culture...". "it's good to be bilingual. Access allows me to gain knowledge and boost my confidence." (Participant who is deaf – HH.P.2)

The participants (D.P1) stated that "I remembered individuals who are deaf international students and arrived at this university that has different backgrounds, different cultures, and different ages; it was hard for most of DHH students learning two languages (English and American Sign Language - ASL....". "For me when I arrived here, I have basic language skills, but you need to be patient, work hard, and continuing to try in ELI will help you." (D.P.4).

Interestingly, one participant added that "when I learned ASL to get along with deaf internationals who have different experiences from different cultures, so every day I met different people on campus with different experiences; they gave you some of their culture and share it with you. This was very valuable for me, which is good for me as deaf students and positive." (HH.P.2)

When the interviewer asked DHH students; *Have you been treated irrespectively during your interactions with people on campus?* The participants reported the lack of deaf minority students' culture and communication at the college level. The participants' responses confirmed this. For example,

"the ELI teachers say to their students who wear Al Hijab, in Saudi Arabia, it is mandatory to wear the Al Hijab, but in America, it is a matter of personal preference. So, they need to understand the culture because there is conflict with their culture. They focus on identifying the individuals who uphold the new cultural norms. They suggest converting to the domain culture, stating that it helps you be more comfortable. So, they must understand the minority culture and respect it, not force the dominant culture." (HH.P.2). The fourth participant confirmed that, "They asked Saudi girls again, again, and again to take off their hijab, and they asked them, and they responded that they wanted to follow their culture and their family expectations." (D.P4). Another participant responded, "I always look at people who are welcoming. I encourage them to ask any questions they may have about our culture. If they feel unwelcome, just leave them for a while." (HH.P.3)

Cultural misunderstandings target students who adhere to certain stereotypes from their culture, as a participant stated:

"In America, the media portrays us in a negative light. The first time I came here, some people were not comfortable with me, despite my being deaf. They were fearful of certain aspects of Saudi beliefs and perspectives." (HH.P.2). The participant (D.P.1) demonstrated his commitment to respecting everyone. Some are smiling back, while others don't. I noticed some were uncomfortable talking to me because I wore hijab. They thought I couldn't get along." (D.P.1).

In fact, this cultural misunderstanding may lead these students to decrease their participation in their classroom. This is emphasized when the participants face the challenges of working on their projects with their classmates.

"These are my issues; I prefer to work on my project independently because some of my project peers don't feel comfortable with my ideas and research." (HH.P.3)

Another responded: "as team works, we have to balance our work. Not ignore my comments and ideas." (D.P.4). Another participant added: "They sign quickly; it's chick for me... I ask them slowly for clarification again and again". (D.P.1).

When it comes to communication and language in the classroom, some international students find it difficult to articulate their ideas in English and American Sign Language (ASL), while others feel more confident. This was clear when the interviewer asked a question to the participants: *Tell me about your experience with expressing yourself in English and ASL*. All participants explained that they faced a big challenge in class due to a language issue. For example, one participant (HH.P.2) responded that:

"Indeed, English and ASL can be challenging for international students. When I want to learn English (write and read) in the class, I need English sign language because I don't see ASL grammar. Like I need to know or understand about THE, A, —-ED, ——ING...... I mean in English class; I need an English sign. ASL is good for explaining about grammar.". The other

participant (D.P.1) reported that "inside the classroom, there are challenges when I do not understand people's signs, as well as when people do not understand mine." Another participant added: "They sign quickly; it's chick for me... I ask them slowly for clarification again and again, sometimes some students or teachers look to international students with low expectations for international students due to their skills in language (English and ASL)." (D.P.4).

Supports.

All participants felt that they had support from their instructors, except for one instructor, who might have low expectations of DHH international students. This appeared when the interviewer asked them: *Describe your interaction with your professor and university staff.*

One participant stated, "All my professors are great." They are selling me to come to their office after class. I always want to ask questions. Love history professor Dr. E. W." (D.P.4). Similarly, the second participant explained, "For me, in my experience, many teachers support me a lot; they are wonderful, but there are few teachers now. For example, teachers give me feedback about my English grammar, sentences, and ASL skills sometime, but most of the supports in English. and ASL come from outside the classes, not from inside the class." (HH.P.3). Another participant added: "Most teachers provide me with feedback on my paper and project, asking me to go to the to the tutor and writing center on campus." (HH.P.2). However, another participant shared, "I once had low expectations from one teacher, but most of my teachers are good with international students, provide support, and give equal grades." (HH.P.3)

Some participants felt that they needed more support from schools. This proved correct when the interviewer asked the participants, 'How satisfied are you with the services provided for international students?'

The participants answered, "Yes and no, they have support but not much. They have support, but their thoughts and perspectives differ, necessitating a deeper understanding of the culture." (D.P.1). Another participant shared: "the school does not offer enough academic advice to solve problems or provide needed friend support or mentors. I made an effort to educate them and provide them with information about the deaf community in Saudi Arabia. They learned, and with time they became comfortable enough to chat with me." (HH.P.3). Another participant else said: "I introduced them to my culture by taking them to an Arabic restaurant, exposing them to my culture, and educating them." (HH.P.2)

Some of the participants believed that only the international office only supported them, as stated:

"International offices are always welcome at my university." They do make events for different countries. I think it is called FIST EVENT.". (D.P.4). "I have an ELSO international office that great guides my work, and a Saudi organization that is supported by the Saudi Culture Mission (SACM). On my time when I arrived, it did not have this

much support, but now people here like this organization have a Saudi leader that makes it easy to get support from for all Saudi deaf who arrive here to study..." (HH.P.2).

Discussion

The findings of this study showed that some deaf minority students' culture and communication are misunderstood at the university level. These misunderstandings create difficulty in interactions between international and American students. For example, some American students do not feel comfortable interacting with international students. Deaf women, rather than deaf men, are more susceptible to cultural misunderstandings because they wear a hijab—saris or veils. Further, hearing women who wear a hijab have the same experiences as the deaf women (Lee & Rice, 2007; Marschark et al., 2017). According to this evidence, female students, both deaf and hearing, who wore saris or veils had unpleasant experiences and difficulties integrating into campus life (Bevis, 2002; Cole & Ahmadi, 2003; Kuster, 2015), and they experienced feelings of isolation as a result (Robertson et al., 2000).

In addition, international students face many challenges in cultural adaptation, but they are held responsible to adapt themselves to the host culture fully (Bevis, 2002; Wu et al., 2015), while their schools do not pay sufficient attention to their unique needs. These challenges hinder their social integration as well as their academic achievement strongly. Proactive programs on school campuses that address students' integration issues are needed to help them during their initial integration into the campus community (Kher et al., 2003; Marschark et al., 2017). Student organizations need to play a role by creating activities on- and off-campus, such as camping, which helps students make new friends and share their experiences and culture.

More support from multicultural programs and international student organizations is necessary to help international and American students increase their understanding of each other's cultures. Helping deaf minority students through mentoring opportunities or informal networks can enhance culturally diverse individuals' development (Masaoka, 2006; Weinbach & Taylor, 2011). This could be achieved by designing a workshop that promotes these students' diversity and will allow them to process the experiences that they have while at the same time it will develop and strengthen their own organizations and develop network possibilities for them.

In addition, these institutions must improve their orientation and intervention practices (Schram & Lauver, 1988; Kersting, 1997) by having programs that address cultural and social issues and providing adequate support services. Involving these international students in the process may improve their own understanding as well of the situations and institutions in which they work (Friedner, 2018). Therefore, the school should organize a formal conversation and meeting on cultural diversities for all deaf students on campus. It would be critical that students who attend this meeting express their perspectives, beliefs, communication styles, attitudes, and values. Further, this would give students an opportunity to understand the life experiences that affect their relationships on campus and the perceptions that influence their communication with others. It would also help them become sensitive to the needs of culturally diverse people and willing to collaborate with others on problems when necessary (Moore, 2009). When everyone, American and international students, participates and is part of the discussion, this leads them all to feel more responsible for their actions (Lencioni, 2005) and develops networking possibilities for them.

In addition, extracurricular programs are needed that facilitate students' interactions and socialization with these diverse cultures. It is necessary for school faculty to understand the language and cultural challenges that international students face within the school environment and how they can help them. Increasing research on the effect of international students' experiences within the US academic environment from their perspective will be beneficial. Qualitative research is a useful method to present international students' needs and perspectives and understand the experiences and challenges that they encounter in depth.

Limitations and Future Research

Research on DHH international students in American colleges, particularly those from Saudi Arabia, is limited. Most research is related directly to studies of DHH American students at the college level. This study also investigated the experience of Saudi international students who are DHH and were studying at the college level in the US university. We should apply this study to a large sample of DHH international students from various countries and cultures.

In particular, the researcher recommends conducting research to investigate deaf female international students' experiences at the college level in the US. As mentioned previously, some deaf women who choose to preserve aspects of their culture, such as wearing saris or veils (Hijab), may face greater racial discrimination and have the same experiences as hearing women who wear a hijab compared to their deaf male counterparts (Lee & Rice, 2007).

The results showed that deaf female students who wear saris or veils have suffered unpleasant experiences and difficulties integrating into campus life (Cole & Ahmadi, 2003; & Bevis, 2002), and they may have feelings of isolation (Robertson et al., 2000). Finally, the media plays an important role in culture and society. Future research should explore the media's influence on school diversity.

Conclusion

The goal of this study was to investigate the experiences of Saudi DHH students who were attending an US university. The study's findings showed that international students face many challenges, such as language issues in the classroom, cultural adaptation, and misunderstandings of some deaf minority students' culture and communication on the university campus. Therefore, more support from multicultural programs, academic programs, and student affairs offices is necessary to help international and American students understand each other's cultures better. These findings present the voices and perspectives necessary to inform school administrators about the unacknowledged and implicit needs present, and help them support these students so that they attain social and academic success.

Perhaps most importantly, future research should address instructors' beliefs and attitudes when communicating with and teaching international DHH students. Future research should also investigate the way that American students communicate and interact with their DHH international peers during

college-level classroom activities. Such research should address what international students who are DHH need to communicate and interact successfully with other students and professionals within or outside the classroom on university campuses.

References

- Albertini, J., Kelly, R., & Matchett, M. (2011). Personal factors that influence deaf college students academic success. *Journal of Deaf Studies and Deaf Education*, 17(1) 85-101. Doi:10.1093/deafed/enr016.
- Almotiri, A. (2017). Saudi deaf students post-secondary transitioning experience: A grounded theory study. *Deafness & Education International*, 19(3-4), 162-170. doi: 10.1080/14643154.2018.1429731.
- Andrade, M. (2006). International Student persistence: Integration or cultural Integrity. *Journal College Student Retention*, 8 (1), 57-81.
- Bailey, T., Calcagno, J., Jenkins, D., Kienzl, G., & Leinbach, T. (2005). *The effects of institutional factors on the success of community college students*. New York, NY: Community College Research Center, Teachers College, Columbia University.
- Bevis, T. B. (2002). At a glance: International students in the United States. *International Educator*, 11(3), 12-17.
- Bista, K. (2012). Silence in teaching and learning: Perspectives of a Nepalese graduate student. *College Teaching*, *60*, 76-82.
- Breivik, J.K. (2005). Vulnerable but strong: Deaf people challenge established understandings of deafness. *Scandinavian Journal of Public Health*, *33*(66), 18-23. doi: 10.1080/14034950510033327
- Campbell, N., & Kean, A. (2016). American cultural studies: An introduction to American culture. Routledge.
- Cole, D., & Ahmadi, S. (2003). Perspectives and experiences of Muslim women who veil on campuses. *Journal of College Student Development*, 44(1), 47-66.
- Convertino, C. M., Marschark, M., Sapere, P., Sarchet, T., & Zupan, M. (2009). Predicting academic success among deaf college students. *Journal of deaf studies and deaf education*, 14(3), 324-343.
- Dammeyer, J. (2014). Literacy skills among deaf and hard of hearing students and students with cochlear implants in bilingual/bicultural education. *Deafness & Education International*, 16(2), 108-119. doi: 10.1179/1557069X13Y.0000000030
- Erichsen, E. A., & Bolliger, D. U. (2011). Towards understanding international graduate student isolation in traditional and online environments. *Educational Technology Research and Development*, *59*, 309-326.
- Evivie, L. G. (2009). Challenges faced by African international students at a metropolitan research university: A phenomenological case study. The University of North Carolina at Charlotte.
- Fox, R., & King, B. (2020). Anthropology beyond culture. Routledge.
- Frederick, W. C. (1995). Values, nature, and culture in the American corporation. Oxford University Press, USA.
- Friedner, M. (2018). Negotiating legitimacy in American Sign Language interpreting education: Uneasy belonging in a community of practice. *Disability Studies Quarterly*, 38(1), 5836. doi: 10.18061/dsq.v38.i1.5836.
- Furlonger, B., & Gencic, E. (2014). Comparing satisfaction, life-stress, coping and academic performance of counselling students in on-campus and distance education learning environments. *Journal of Psychologists and Counsellors in Schools*, 24(1), 76-89. doi: 10.1017/jgc.2014.2.
- Garberoglio, C.L., Palmer, J.L., Cawthon, S., & Sales, A. (2019). *Deaf people and educational attainment in the United States: 2019.* Washington, DC: U.S. Department of Education,

- Office of Special Education Programs, National Deaf Center on Postsecondary Outcomes. doi: 10.26153/tsw/10052
- Geertz, C. (1973). Thick description: Toward an interpretive theory of culture. In C. Geertz (Ed.), *The interpretation of culture: Selected essays* (pp. 3-30). New York: Basic Books.
- Gopal, A. (2011). Internationalization of higher education: Preparing faculty to teach cross-culturally. *International Journal of Teaching and Learning in Higher Education*, 23(3), 373-381.
- Goldstein, S., & Keller, S. (2015). US college students' lay theories of culture shock. International Journal of Intercultural Relations, 47(1), 187-194. doi:10.1016/j.ijintrel.2015.05.010
- Guiberson, M. (2014). Bilingual skills of deaf/hard of hearing children from Spain. *Cochlear Implants International*, 15(2), 87-92.
- Harrison, N. (2012). Investigating the impact of personality and early life experiences on intercultural interaction in internationalized universities. *International Journal of Intercultural Relations*, 36(2), 224-237.
- Hellstén, M., & Prescott, A. (2004). Learning at University: The international student experience. *International Education Journal*, 5(3), 344-351.
- Hennebry, M., Lo, Y. Y., & Macaro, E. (2012). Differing perspectives of non-native speaker students' linguistic experiences on higher degree courses. *Oxford Review of Education*, 38(2), 209-230.
- Hole, R. (2007). Narratives of identity A poststructural analysis of three Deaf women's life stories. *Narrative Inquiry*, 17(2), 259-278. doi: 10.1075/ni.17.2.06hol.
- Hrastinski, I., & Wilbur, R. B. (2016). Academic achievement of deaf and hard-of- hearing students in an ASL/English bilingual program. *Journal of Deaf Studies and Deaf Education*, 21(2), 156-170. doi: 10.1093/deafed/env072.
- Institute of International Education (IIE). (2022). *Open Doors report on international educational exchange*. http://www.iie.org/opendoors.
- Kelly, L. P. (2003). The importance of processing automaticity and temporary storage capacity to the differences in comprehension between skilled and less skilled college-age deaf readers. *Journal of Deaf Studies and Deaf Education*, 8(3), 230-249.
- Kersting, S. A. (1997). Balancing between deaf and hearing worlds: Reflections of mainstreamed college students on relationships and social interaction. *Journal of Deaf Studies and Deaf Education*, 252-263.
- Kher, N., Juneau, G., & Molstad. S. (2003). From the southern hemisphere to the rural south: A Mauritian students' version of coming to America. *College student Journal*, 37(4), 564-569.
- Knoors, H., & Marschark, M. (2018). Evidence-based practices in deaf education. Oxford University Press.
- Kusters, A. (2015). *Deaf space in Adamorobe: An ethnographic study of a village in Ghana.* Gallaudet University Press.
- Ku, H. Y., Lahman, M. K. E., Yeh, H. T., & Cheng, Y. C. (2008). Into the academy: preparing and mentoring international doctoral students. *Educational Technology Research and Development*, 56(3), 365-377. doi: 10.1007/s11423-007-9083-0.
- Kwon, Y. (2009). Factors affecting international students' transition to higher education institutions in the United States. From the perspective of office of international students. *College Student Journal*, 43(4), 1020-1036.
- Lau, L. K. (2003). Institutional factors affecting student retention. *Education*, *124*, 126-136. Retrieved from http://www.projectinnovation.biz/index.html.
- Lee, J., & Rice, C. (2007). Welcome to America? International students' perceptions of Discrimination. *Higher Education*, 53(3), 381-409

- Lencioni, P. (2005). Overcome the five dysfunctions of a team: A field guide for leaders, managers, and facilitators. San Francisco, CA: Jossey-Bass Inc.
- Lehmann, W. (2007). "I just didn't feel like I fit in.": The role of habitus in university dropout decisions. *Canadian Journal of Higher Education*, *37*, 89–110. Retrieved from http://ojs.library.ubc.ca/index.php/cjhe/index.
- Lloyd, N. (2003). A research study exploring the attitudes and experiences of international students enrolled in the Faculty of Engineering, Computing and Mathematics at the University of Western Australia. Unpublished manuscript. University of Western Australia: Equity and Diversity Office.
- Marschark, M., Zettler, I., & Dammeyer, J. (2017). Social dominance orientation, language orientation, and deaf identity. *The Journal of Deaf Studies and Deaf Education*, 22(3), 269-277. doi: 10.1093/deafed/enx018.
- Masaoka, J. (2006). Ten things I learned about leadership from women executive directors of color. In F. Hesselbein, & M. Goldsmith (Eds.), The leader of the future 2: Visions, strategies, and practices of the new era (pp. 55-60). San Francisco, CA: Jossey-Bass Inc. Publishers.
- Marschark, M., Lang, H., & Albertini, J. (2002). *Educating deaf students: From research to practice*. New York, NY: Oxford University Press.
- Merriam, S. B. (2015). Qualitative research: Designing, implementing, and publishing a study. In *Handbook of research on scholarly publishing and research methods* (pp. 125-140). IGI Global.
- Mesidor, J., & Sly, K. (2016). Factors that contribute to the adjustment of international students. *Journal of International Students*, 6(1), 262-282. doi: 10.32674/jis.v6i1.569.
- Moore, E. A. (2009). Perceptions and Experiences of Black Deaf and Hard of Hearing Administrators: A Pilot Study. Washington, DC: Gallaudet University.
- Mori, S. (2000). Addressing the mental health concerns of international students. *Journal of Counseling & Development*, 78(2), 137–144.
- Olatunbosun, O.E. (2020). *Deaf women's lived experiences in Nigeria: A phenomenological study*. Unpublished Master's Thesis Lamar University.
- Owens, D. L., Srivastava, P., & Feerasta, A. (2011). Viewing international students as state stimulus potential: current perceptions and future possibilities. *Journal of Marketing for Higher Education*, 21(2), 157-179.
- Patton, M. Q. (2023). *Qualitative research & evaluation methods: Integrating theory and practice*. Sage publications.
- Perrucci, R., & Hu, H. (1995). Satisfaction with social and educational experiences among international graduate students. *Research in Higher education*, *36*, 491-508.
- Rabia, H. (2017). Undergraduate Arab international students' adjustment to U.S. universities. *International Journal of Higher Education*, 6(1), 131-139. doi: 10.5430/ijhe.v6n1p131
- Reverdito, G., & St. John, S. (2019). Breaking the language barriers: Free movement and language learning in the European community. In: St. John, S., & Murphy, M. (eds),
- *Education and public policy in the European Union.* New York, NY: Palgrave Macmillan. doi: 10.1007/978-3-030-04230-1_6
- Robertson, M., Line, M., Jones, S., & Thomas, S. (2000). International students, learning environments and perceptions: A case study using the Delphi technique. *Higher Education Research and Development*, 19(1), 89-102.
- Rosica, M., Kelly, R., & Adams, R. (2001). *The influence of SVP on students' choice of career and degree goals: Internal technical report.* Rochester, NY: National Institute for the Deaf, Rochester Institute of Technology.

- Rosica, M., & Kelly, R. (2002–2006). *Internal technical reports on the influence of SVP on students' choice of career and degree goals: Internal technical report*. Rochester, NY: National Technical Institute for the Deaf, Rochester Institute of Technology.
- Scherer, M; Stinson, M; & Walter, G (1987). Factors affecting persistence of deaf college students. *American Educational Research Association*. Annual Meeting, Washington, DC.
- Schram, J., & Lauver, P. (1988). Alienation in international students. *Journal of College Student Development*, 29, 146-150.
- Spooner-Lane, R., Tangen, D., & Campbell, M. (2009). The complexities of supporting Asian international pre-service teachers as they undertake practicum. *Asia-Pacific Journal of Teacher Education*, 37(1), 79-94.
- Stake, R. E. (2010). Qualitative research: Studying how things work. Guilford Press.
- Stokoe, W. C. (2005). Sign language structure: An outline of the visual communication systems of the American deaf. *Journal of Deaf Studies and Deaf Education*, 10(1), 3-37.
- Stinson, M. & Walter, G. (1992) Persistence in college. In S. Foster and G. Walter (Eds.) *Deaf students in postsecondary education* (pp.41-63), New York: Routledge.
- Tesch, R. (1990). *Qualitative research: Analysis types and software tools*. New York: Falmer. Tomasello, M. (2016). Cultural learning redux. *Child Development*, 87(3), 643-653. doi: 10.1111/cdev.12499.
- Wadsworth, B. C., Hecht, M. L., & Jung, E. (2008). The role of identity gaps, discrimination, nd acculturation in international students' educational satisfaction in American classrooms. *Communication Education*, *57*(1), 64-87.
- Weinbach, R.W., & Taylor, L.M. (2011). The social worker as manager: A practical guide to success (6th edu.). Boston, MA: Allyn & Bacon.
- Wilkins, S., & Huisman, J. (2011). International student destination choice: the influence of home campus experience on the decision to consider branch campuses. *Journal of Marketing for Higher Education*, 21(1), 61-83.
- Wu, H., Garza, E., & Guzman, N. (2015). International student's challenge and adjustment to college. *Education Research International*, 2015(1), article ID 202753. doi: 10.1155/2015/202753.
- Yang, P. (2018). Experiential learning opportunities: removing language barriers and maximizing cultural immersion. Hershey, PA: IGI Global.
- Yin, R.K. (2009). Case study research: Design and methods (4th ed). Thousand Oaks, CA: Sage.
- Yu, Y. (2020). From universities to Christian churches: Agency in the intercultural engagement of non-Christian Chinese students in the UK. *Higher Education*, 80(2), 197-213.