Enhancing Accessibility in Higher Education: Supporting Students with Speech, Language, and Communication Challenges

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Communication accessibility remains a critical yet underdeveloped aspect of inclusive higher education. This thematic analysis examines how institutional culture shapes accommodations for students with speech and language impediments and communication disorders through targeted faculty training and connects prioritizing accessible communication to enhanced student experience and improved learning outcomes. We explore the intersection of speech-language pathology principles with educational frameworks to create student-centered learning environments that reflect core institutional values of inclusion and equity. Our analysis reveals significant gaps in current accommodation practices and proposes comprehensive strategies for faculty development that emphasize flexible and multimodal instruction. It depicts the experiences and perspectives of these students as they engage in classes and social opportunities at a higher education institution. This research contributes to understanding how higher education institutions can facilitate inclusive environments and a range of accommodations that benefit students with diverse communication abilities and ultimately enhance the overall campus community.

INTRODUCTION

As the Americans with Disabilities Act of 1990 (ADA) defines, disability is "a physical or mental impairment that substantially limits one or more major life activities...; a record of such an impairment; or being regarded as having such an impairment" (section 12102, part 1). The number of students in higher education with disabilities is growing and affects the success of these students. In 2013, 12.7% of the United States population had a disability (Houtenville et al., 2016). This number is projected to continue to grow in coming years.

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Speech and language impediments and communication disorders are disabilities in which an individual has a deficit in how they communicate with others. These disorders include but are not limited to stuttering, speech sound disorders, voice disorders, and language disorders. There is limited current research on the impact of these specific disorders on academic performance and perceptions of the educational experience.

Higher education does not have rules regarding accommodations for students with disabilities like the public school system. Instead, some universities have a department focused on student accommodation services. Despite the attention that these departments place on supporting students with disabilities, there is still a gap between the provided accommodations and faculty implementation. Faculty at these institutions should be trained on accommodations to help incorporate supports in the classroom (Moriña et al., 2017). Certain designs and frameworks, such as the Universal Design for Learning (UDL), are used to support individuals with disabilities pursuing a degree.

University culture shapes the experiences that students have. In Uganda, students who are enrolled in universities have discrimination tendencies throughout their lectures and services, impacting their experience. For example, students with hearing impairment have shared negative experiences in lectures from professors (Emong et al., 2016), suggesting universities need to consider their inclusion factors to better support their students.

There is a critical gap in research due to the lack of legally required accommodations in higher education and knowledge among faculty on how to support these students with communication disabilities. The intersection between speech-language pathology principles and these educational frameworks should be explored to support students who have these communication related disorders since institutional culture is shaping the experience for their students with disabilities through their inclusion values and perspectives.

Literature Review:

In the aftermath of the Second World War, the international community adopted the UN Charter (1945) and the Universal Declaration of Human Rights (1948) to provide vision and guiding principles for maintaining peace, security, and effective global cooperation. Article 1 states “All human beings are born free and equal in dignity and rights. They are endowed with reason and conscience and should act towards one another in a spirit of brotherhood;” and article 5 states “No one shall be subject to torture or to cruel, inhuman or degrading treatment or punishment” (United Nations Universal Declaration of Human Rights, 1948). A related initiative, an Individualized Education Plan (IEP), is a legally binding document used in the public school system to provide

accommodation for students with disabilities. Nevertheless, IEP is not used in the university system. Although there can be departments in universities that focus on providing accommodation based on student needs and previous IEP recommendations, these supports are not legally required. IEPs can be beneficial tools in guiding accommodations for the higher education programs to provide.

Both the higher education accommodation services departments and faculty training vary by university. Effectiveness of faculty training with supporting students with disabilities has been demonstrated, recommending that universities implement training programs (Zahid, 2021; Gull et al., 2025). Training sessions on inclusivity and the social action model of disability are beneficial for the faculty and thus the students with disabilities (Zahid, 2021). Additionally, instructor perceptions of their ability to use accommodations for students are complex and nuanced; some claim that most accommodations are straightforward, yet other accommodations do not get handled due to time (Goodwin et al., 2024). The accommodations and the experiences of their students with disabilities vary with the training of staff.

The Universal Design for Learning (UDL) is a design of teaching where the students' individuality is a focus (CAST, 2011). CAST (2011) created the *Universal Design for Learning guidelines Version 2.0*, which is a framework that has set guidelines for supporting university students. The UDL facilitates the learning of every student through creating inclusive learning environments, listening to the voices of those with disabilities, and providing tools for faculty implementation (Barrera Ciurana & Moliner García, 2024; Edwards et al., 2022; Ferguson et al., 2019). Having this foundational design can create a basis for an institution's inclusion and accessibility.

In universities, students with disabilities benefit from receiving services. They have been supported through instructor communication, community in their classes, and validated identities and diverse perspectives (Ehlinger et al., 2020) that help them feel belonging. The challenges of students with disabilities in universities also have been mitigated when the students disclose their disabilities and advocate for the accommodations that they need (Gin et al., 2022). Specifically in communication sciences and disorders (CSD) programs, students with disabilities can receive accommodations to help support them in the classroom. In the Midwest in particular, they most often receive the following accommodations: timing, alternate format, assistive technology, note taking, attendance, physical environment, course load, service animals, and coaching (Hatfield et al., 2023). Assistive technology has been shown to promote psychological, educational, and social benefits in students with disabilities, and it is crucial that users of this technology are

aware of how to use it effectively and reduce stigma (McNicholl et al., 2019).

Research on speech and language impairments in higher education is sparse. Students who stutter (SWS) in undergraduate programs in China and Japan were negatively impacted by cultural and societal norms in their respective countries that shape their experiences with stuttering, and they require culturally responsive and individualized interventions (He et al., 2025). Both groups desire awareness and understanding of their stuttering, despite their cultural differences. Women who stutter and students with dyslexia can struggle to complete academic tasks. Use of a client-centered approach is crucial for success and improved quality of life and well-being. If the faculty were not accepting or aware of student disability, the students reported negative experiences (Azios et al., 2022; Rolak et al., 2023). Voice disabilities also could limit students' ability to complete tasks at school (Kyriakou et al., 2024). Additionally, individuals with learning disabilities need support in higher education and when students are reluctant to ask for accommodation, it contributes to misunderstanding (Denhart, 2008). Deaf and hard of hearing (DHH) students have significant benefits when there are captioning services in the classroom and staff that are open to communication (Alsalamah, 2020; Corby et al., 2020). In addition to building relationships, it is important that students with disabilities that impact communication receive the necessary accommodation.

Many students with autism at the university level do not receive adequate social or educational support (Cai & Richdale, 2016). Personalized support services for each student with ASD are effective in leading them to success (Syriopoulou-Delli et al., 2024; Davis et al., 2021), as well as the campus climate that the university creates for itself (Evans et al., 2023). Non-academic supports for these students with autism are increasing, yet the academic supports are not as emphasized (Davis et al., 2021). Faculty at these institutions do not have set standards for how they should support their students with ASD, leading to inconsistencies in their priorities: some care about legalities and others want a quiet testing environment (Claxton et al., 2019).

There also is overlap between the designs and communication disabilities. For example, English language learners (ELL) have benefitted from UDL due to the universal nature that it presents. Faculty can implement this framework and have more universal accommodations that benefit all learners, not just those with specific disabilities or not (Delaney & Hata, 2020). The UDL approach can allow for a more inclusive learning environment that includes people from all sorts of families and backgrounds (Orndorf et al., 2022).

The limited research on accommodations in higher education for those with speech, language, and communication disorders has

implications for service delivery. There is potential for advancing frameworks to improve the experiences of these university students. Inclusion is critical for ensuring supportive and beneficial educational environments for students to be successful.

The following potential research questions were presented and explored during this thematic analysis:

1. What supports would be needed to be successful in higher education for students with communication disabilities?
2. How do students with communication impairments in higher education perceive their academic and social experiences?

METHODOLOGY

Articles selected for review were from the years of 2015 to 2025 and relating to speech and language impairments in higher education or universities. The communication impairments included relate to stuttering, language, speech, voice, and any other diagnoses that could contribute to challenges that pertain to speech and language. Twelve articles met these criteria and were selected for review. This is due to a lack of primary research articles combining both communication disorders with higher education in recent years of 2015 to 2025. The articles were excluded if they were not about higher education, speech, language, and communication impairments, or in the stipulated year range for the study. The databases searched in the fall of 2025 included Illinois State University's Milner Library, Google Scholar, National Library of Medicine, PubMed, and PubMed Central. The twelve journals used include *American Annals of the Deaf*, *Journal of Interactional Research in Communication Disorders*, *Studies in Higher Education*, *Journal of Autism & Developmental Disorders*, *The Journal of College Orientation and Transition*, *Research in Autism Spectrum Disorders*, *Latin American Journal of Content & Language Integrated Learning*, *Journal of Higher Education Policy and Management*, *Journal of Fluency Disorders*, *Journal of Voice*, *Trends in Higher Education*, and *Dyslexia*.

Screening of titles and abstracts was conducted by one reviewer (DK). The full texts were read by the same reviewer (DK) and ensured that inclusion criteria were met. Both qualitative and quantitative research was accepted for review. All data was analyzed through interpretive thematic analysis to look for patterns across the articles through a synthesis of literature. Although a range of disorders are included in the category of communication impairments, each has distinct mechanisms and barriers. Consequently, the articles were analyzed into one cumulative interpretation.

Braun and Clarke's six-stage process of reflexive thematic analysis was utilized to methodically search for patterns in the articles (Braun & Clarke, 2022). Thematic analysis is a tool used to develop themes of

review articles through deliberate thought and finding patterns. To start, familiarization of the data was completed through a thorough reading to understand the articles. Then, the codes were developed for each article. Codes are the potentially relevant, meaningful, or interesting parts of data that are used to generate themes. These themes were then created through reading each article and the researcher extracted each important concept mentioned. For example, the code of "Universal Design for Learning (UDL)" is from the quote "UDL is, as the name states, meant to be "universal" and helpful for all learners" (Delaney & Hata, 2020, p. 11). When there was potential overlap between the systematic reviews and primary studies, the same codes would have surfaced and considered for initial theme creation. Initial themes were next generated based on the codes to combine the articles. The initial themes were assessed and reviewed multiple occurrences between two reviewers (DK and SS) to create the five final themes and their sub-themes that facilitate meaning-making for students with communication disabilities in higher education.

RESULTS

Twelve articles were selected to be reviewed. Six of these articles were from the United States. Singular articles were from Spain, Australia, the Netherlands, Ireland, Greece, and a combination one from Japan and China. Qualitative studies, quantitative studies, mixed-methods studies, and systematic reviews were included.

As shown in Figure 1, five themes were created with subthemes through the thematic analysis of these twelve articles. These five themes included (1) the barriers to inclusion; (2) navigating social and communication landscapes; (3) from accommodations to universal design; (4) the critical role of human support systems; and (5) student agency in disability identity and advocacy. Each theme had three to four subthemes.

Figure 1

Thematic Map showing the relationship between the central theme, themes, and subthemes



Author	Year	Study Design	Population	Key Findings
Alsalamah, A.	2020	Systematic Review	7 studies	Deaf and Hard of Hearing students benefit from captioning services in retention and comprehension of lectures. Real time speech-to-text service has a role in helping students succeed as well.
Azios et al.	2022	Qualitative Analysis	7 women who stutter attending university	Classrooms tasks were a struggle due to stuttering, especially with stuttering stereotypes. There is a connection between good

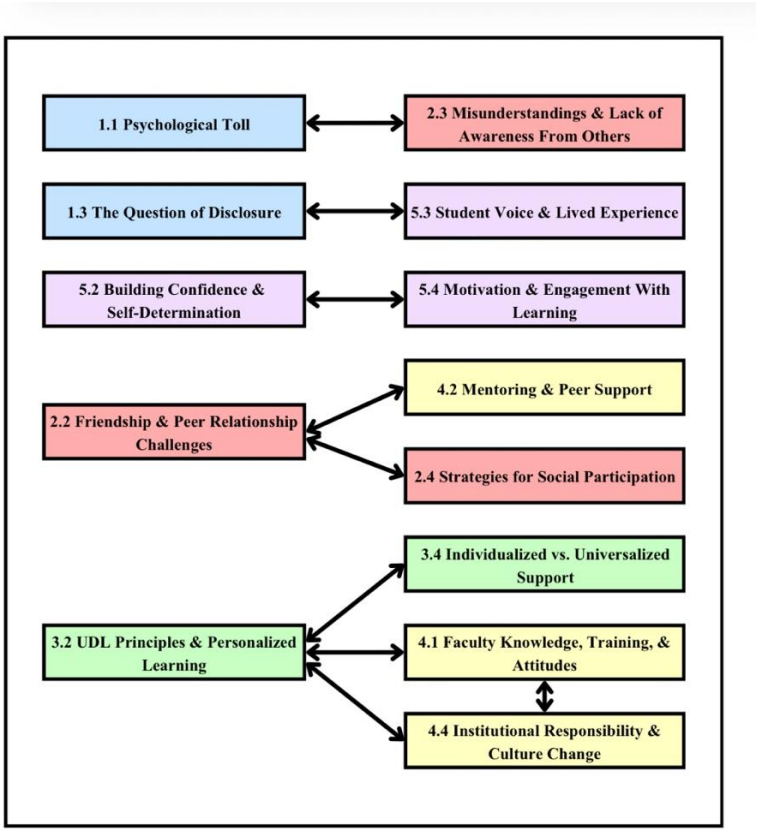
				faculty and a better experience relating to advocacy of university students who stutter.
Barrera Ciurana & Moliner Garcia	2024	Qualitative Analysis	7 university students with autism spectrum disorder	Majority of participants felt engaged when teachers considered their opinions and efforts. They appreciate when their voice is considered as significant and appreciated. UDL is able to facilitate the learning of students with ASD and others also.
Cai et al.	2016	Thematic Analysis	23 students with ASD and 15 family members	Five themes were revealed: comorbid conditions, transition, disclosure, core features, and services and support. Many of the students were not receiving the support that they needed from their post-secondary institution. They felt educationally supported but not socially supported, while their families felt like they were not supported well in either area. Disclosure of the ASD diagnosis is an important consideration while enrolling.
Claxton et al.	2019	Qualitative Case Study	6 students with ASD and 4 faculty	Five themes were found: accommodations, accountability, compassion/individuality, professors, and social factors. Many students claimed to struggle with the transition to higher education. Faculty have the chance to support students with ASD.
Corby et al.	2020	Qualitative Analysis	27 people between 21-57 years old	The main theme found was living an authentic life, with core themes

			who attended courses in higher education	including learning, relationships, and perceptions.
Davis et al.	2021	Systematic Review	24 studies	Students in higher education with autism may need more individualized support. Increasing assistance, awareness, and accessibility of the supports and knowledge of ASD for implementing professional are crucial for improving these students' experiences in higher education.
Delaney et al.	2020	Opinion Paper	N/A	ELL individuals are often overlooked. UDL-inspired assessment strategies have allowed for universal accessibility for students.
Evans et al.	2023	Mixed-Methods Study	74 students from an urban research university in southeast United States	Higher education institutions should evaluate the current supports that they have to determine if they are adequate for their students' academic, personal, and social success. The campus climate, diversity and inclusion, and faculty must be considered. Findings revealed differences in gender, disclosure, engagement, and difficulties interacting with neurotypical peers.
He et al.	2025	Reflexive Thematic Analysis	11 Chinese and 11 Japanese undergraduate students who stutter (SWS)	The norms in the country of the individual shape the students' experiences if they have stuttering, and these were often negative. It is important to be culturally responsive and

				individualized to meet the needs of the students who stutter.
Rolak et al.	2023	Qualitative Analysis	23 students with diagnosed dyslexia between 18 and 48 years old, 10 student counselors	Students with dyslexia had goals regarding their future, and there needs to be more individualized support for each student to reach these. There are barriers for some students with dyslexia that inhibit their ability to achieve their goals.
Syriopoulou et al.	2024	Systematic Literature Review	11 studies on higher education students with ASD	Students with ASD in higher education face several challenges in their social and educational lives. There are interventions available to effectively support these students in higher education settings, including peer mentoring and support group interventions, as they allow for feelings of acceptance by peers. The implementation of supportive interventions is effective, and these should be personalized for each college student with ASD.

Figure 2

Connections between subthemes



Theme 1: The Barriers to Inclusion

Students with communication impairments in universities face difficulties mentally and socially. They have consequences that stem from the aspects of their disability that others can see in addition to the disclosure of their disability itself.

1.1 Psychological toll

Higher education students with communication impairments often have psychological impacts including anxiety, depression, shame, and emotional uneasiness. There are stigmas around disability also that lead these students to face psychological consequences. One participant with stuttering depicts their experience: “I believe my depression and anxiety

are caused by stuttering. It feels like a big black dog constantly chasing me—sometimes it catches up and bites me, other times it lags behind." (He et al., 2025, p. 7).

Another article describes students with autism spectrum disorders' experiences: "Building friends and social networks can be challenging for students with ASD, and as a result, they struggle with isolation, loneliness, stress, anxiety, and depression" (Evans et al., 2023, p. 252). Students who lack these social skills and supports can feel lonely and depressed due to their difficulty building and maintaining these relationships (Claxton et al., 2019). Shame regarding one's disability is another psychological toll that these students feel (Evans et al., 2023; Barrera Ciurana & Moliner García, 2024). This, in part, could stem from the stigma and stereotypes that surround communication disorders (Davis et al., 2021; Azios et al., 2022; Claxton et al., 2019). Students with these disabilities make their disclosure decisions based on the shame or lack thereof that they feel due to the stigma around their impairment (Evans et al., 2023). These students may face a psychological toll if they choose to disclose their disability to their higher education institution and peers because of the social stigmas they encounter.

1.2 Social consequences

Students with communication impairments also face social consequences including isolation, bullying, and judgment from their peers. Socialization is a crucial part of one's higher education experience that can be impacted by a communication disability.

Communication disorders in university students can lead to isolation (Syriopoulou-Delli et al., 2024; Azios et al., 2022; He et al., 2025; Davis et al., 2021), and bullying from peers (Davis et al., 2021; Cai & Richdale, 2016; Azios et al., 2022; Evans et al., 2023; Corby et al., 2020). Students also might face judgment from their peers (He et al., 2025; Evans et al., 2023). All of these consequences can have an impact on a student's academic and social performance at their higher education institution.

1.3 The question of disclosure

There is a question with the visibility of these communication impairments. While disclosure can bring accommodations and support, it can also bring mental and social consequences. Individuals with disability face a question of whether to disclose their disability to others. If they disclose, some fear that they will be treated differently. Other students think that disclosing their communication disabilities leads to less fear of judgment and more understanding from peers (Azios et al., 2022). Some individuals simply do not see a need to disclose (Evans et al., 2023). However, faculty might be unaware of the disability if not disclosed, potentially leading to difficulties academically (Azios et al., 2022; Delaney

& Hata, 2020). Disclosure is a choice that comes with different challenges and benefits based on the individual and their disability's circumstances.

Theme 2: Navigating Social and Communication Landscapes

Communication impairments also impact transactions in social situations. This is because speech and language disorders influence an individual's participation as well as other individuals' perspectives while interacting with each other.

2.1 Communication barriers in academic contexts

Depending on their communication impairment, higher education students have various academic impacts. These communication obstacles can be barriers to educational success in the classroom (Syriopoulou-Delli et al., 2024; Cai & Richdale, 2016; He et al., 2025). These students might not want to participate in group activities in the classroom due to communication barriers (Cai & Richdale, 2016). Communication barriers with the faculty at the universities can also lead to less faculty support or access to accommodations (He et al., 2025).

Autism has impacts on social pragmatics, leading to potential communication breakdowns in academic settings (Davis et al., 2021; Cai & Richdale, 2016). Students with autism spectrum disorder might have difficulties based on their literal "interpretation of teachers' instructions, leading to misunderstandings, which often have a negative impact on the student-staff relationships, peer relationships and student learning outcomes." (Cai & Richdale, 2016, p. 34).

2.2 Friendship and peer relationship challenges

Friendship and relationships with peers in the classroom are often crucial aspects of higher education. Students who have communication disabilities often have difficulty making and maintaining these relationships with others (Evans et al., 2023; He et al., 2025; Claxton et al., 2019; Syriopoulou-Delli et al., 2024). Some individuals are even afraid to engage in making friends (He et al., 2025).

2.3 Misunderstandings and lack of awareness from others

Faculty unawareness can lead to misunderstandings about the disabilities that their students might have, which creates a challenging situation for students with disabilities. Specifically, faculty awareness and understanding of disabilities contributes to their student's classroom success, for faculty "who took points off were unaware of the student's stuttering, but what is of interest is that stuttering warrants a point deduction at all." (Azios et al., 2022, p. 164).

Peers also have misunderstandings about the disabilities that students they encounter might have (Azios et al., 2022; Claxton et al., 2019). An individual with a communication disability says, "he felt capable academically, but his inability to deal with roommates, and their lack of

understanding about his disability, made it almost impossible to live in the dorms." (Claxton et al., 2019, p. 13). Awareness and continued education on communication disabilities are important to ensure respect in university settings (He et al., 2025). Peers and faculty awareness contribute to success and lowered fear in students with communication disorders.

2.4 Strategies for social participation

There are various strategies that students with communication disabilities use when it comes to socializing with other individuals. Avoidance, advocacy, and disclosure are all potential strategies that these students could choose to use.

These students with communication impairments report avoidance of conversations with peers from their higher education institutions and friends (He et al., 2025). They also use advocacy (Claxton et al., 2019) and disclosure of their disabilities. Disclosure is a decision that a student can make if they would like their peers to know about their disability. Although there are mixed opinions on disclosure, it is a decision that would impact the social participation of these students (Azios et al., 2022; Evans et al., 2023; Davis et al., 2021; Corby et al., 2020; Cai & Richdale, 2016).

Theme 3: From Accommodations to Universal Design

Depending on the institution, a university might rely more on traditional accommodations or universal design principles that are universal across all of the student body.

3.1 Traditional accommodation models and their limitations

Many universities provide traditional accommodations to their students if requested. Functional accommodations are typically the focus of institutions instead of other accommodations that challenge campus inclusion (He et al., 2025). The common supports given by institutions are "professional support, testing and in class accommodations, and coursework modifications" (Davis et al., 2021, p. 10). These traditional accommodations are not preferred by all students with disabilities, for other nontraditional accommodations might be better suited for their needs. These include "extra time on exams, note takers, and testing accommodations, others wanted flexible attendance policies, the ability to complete group work independently, professors who accommodated different learning styles, and a weekly ASD icebreaker support group" (Evans et al., 2023, p. 249). Every student's needs for accommodations are different, and sometimes traditional accommodations are not fitting for a student's disability.

3.2 UDL principles and personalized learning

Universal Design for Learning principles are a guiding framework for some institutions that focus on inclusion and universal accommodations for all of its students to help everyone succeed. The UDL design

implementation allows for a more universal and inclusive approach in the classroom that creates a balanced environment to prepare all students for academic success (Barrera Ciurana & Moliner García, 2024; Delaney & Hata, 2020). In some situations, UDL principles offer advantages as opposed to traditional accommodations for individual students (Delaney & Hata, 2020). Additionally, personalized learning situations where the students with disabilities are prioritized can be beneficial for their well-being and success if the student needs that individualized learning support (Azios et al., 2022; Barrera Ciurana & Moliner García, 2024).

3.3 Technology and flexible assessment methods

Technology has the potential to support higher education students with various communication disorders (Barrera Ciurana & Moliner García, 2024; Alsalamah, 2020). Deaf and hard of hearing students have had success academically with the support assistive technology provides in the classroom (Alsalamah, 2020). Additionally, students with autism described how technology in the classroom in terms of visual supports benefit them in terms of both learning and motivation (Barrera Ciurana & Moliner García, 2024). Technological accommodations can be effective for students with communication disorder diagnoses.

3.4 Individualized vs. universalized support

Every student with a communication disability is different despite the label that they are given by their diagnosis (Barrera Ciurana & Moliner García, 2024). The individualization of supports and universal supports both can be efficient in their own ways for accommodations (Davis et al., 2021; Rolak et al., 2023; Barrera Ciurana & Moliner García, 2024; Delaney & Hata, 2020). The individualization of support can be beneficial when a specific student needs personalization to be successful in the classroom (Azios et al., 2022), while universal support is intended to offer support to a range of students all at once (Delaney & Hata, 2020).

Theme 4: The Critical Role of Human Support Systems

Higher education students with communication impairments have described how other individuals have supported their endeavors in higher education environments. It has been suggested that human connection and support can improve educational experiences in the university setting.

4.1 Faculty knowledge, training, and attitudes

Faculty in higher education institutions have a significant impact on the experiences of all their students, including those with communication disabilities. The connection between faculty and student can be important in the success of a student with a communication disability (Claxton et al., 2019). For example, “Faculty relationships were found to be important when positive relationships were established, but detrimental when barriers to creating a connection were present” (Davis et al., 2021, p. 9).

Additionally, the faculty require the knowledge about their students' communication disabilities such as stuttering and Deaf and Hard of Hearing students to support them (He et al., 2025; Alsalamah, 2020). The faculty of English language learners at universities "are often unequipped with strategies to work effectively with students with disabilities" (Delaney & Hata, 2020, p. 81). Faculty trainings can improve the knowledge that they hold about communication disabilities, leading to better connections and experiences for the students who have these disabilities in their higher education institutions.

4.2 Mentoring and peer support

Mentoring can be an effective support for students with communication disabilities, especially those diagnosed with autism spectrum disorder (Cai & Richdale, 2016; Syriopoulou-Delli et al., 2024; Evans et al., 2023). Having peers to communicate with improves the experience for these students. Additionally, peer support groups with other students with similar disabilities have been suggested to be beneficial (Evans et al., 2023).

4.3 Family involvement and emotional support

Students with communication disabilities may rely on their families for support. Parents provide support financially, emotionally, and organizationally (Cai & Richdale, 2016), and some students rely on them to be successful (Cai & Richdale, 2016; Davis et al., 2021; Corby et al., 2020; Azios et al., 2022). Involvement of families influences the performance of the students with communication disabilities.

4.4 Institutional responsibility and culture change

Institutions have a responsibility to identify faculty that are likely to be accommodating of students with disabilities. The faculty at such institutions should be well trained to encourage a culture of inclusion and acceptance (Evans et al., 2023; Claxton et al., 2019). Accommodations are to be created by the institution's department for services, leading to the importance of choosing individuals that are knowledgeable in the specific disabilities (He et al., 2025). These institutional decisions and aims for inclusion are aspects that influence one's experience in higher education. Culture at an institution shapes the perspectives of students with communication disabilities.

Theme 5: Student Agency in Disability Identity and Advocacy

Higher education students with communication disabilities can make their own choices regarding the supports that they request. They have the agency to choose if they disclose their disabilities and to advocate for supports that they believe would help them academically and socially.

5.1 Self-advocacy and help-seeking

Literature documents that students in higher education with communication impairments have difficulty asking for help and self-advocating for themselves (Claxton et al., 2019; Rolak et al., 2023; Evans et al., 2023). For example, a student attests that their advocating for testing accommodations "just added to the test anxiety she was already experiencing" (Claxton et al., 2019, p. 13). Several students also share that they do not want to seek help because "they do not want to be different from other students, to be judged on their dyslexia and to burden people with their request for help" (Rolak et al., 2023, p. 204). Other students "did not think they needed support, found it hard to ask for help, or felt their situation was more complicated than staff could understand." (Evans et al., 2023, p. 249). These students might avoid seeking help for their disability despite potential benefits that it might bring them in terms of academic success.

5.2 Building confidence and self-determination

Confidence is associated with quality of life and self-esteem. The more that a student with a disability builds their confidence, the better they will feel academically and emotionally (Rolak et al., 2023). These students' experiences were "described as positive by the participants in this study, with the results reflecting the transformational power of education, supporting learning, independence, confidence, self-esteem, self-belief and meaningful inclusion." (Corby et al., 2020, pp. 352-353). Self-determination can improve the educational experience of a student with a communication impairment (Corby et al., 2020). Having this drive to control one's own experience can lead to success in the classroom and beyond.

5.3 Student voice and lived experiences

Listening to students' voices and considering their perspectives is a crucial process because no two students are the same in their accommodation needs (Barrera Ciurana & Moliner García, 2024). Each student has their own values and experiences that shape who they are and what supports would help them socially and academically. Considering every student's individual needs can improve their experiences in higher education and lead to success in the classroom.

5.4 Motivation and engagement with learning

Motivation drives a student's desire to engage with their learning. All students could have poor academic motivation from multiple areas, making academic success difficult (Delaney & Hata, 2020). Some causes of low motivation are a lack of interest, large workload, difficulty understanding content, low energy, and being overwhelmed (Cai & Richdale, 2016). Some students with communication disabilities claim

how support systems can help them increase confidence and motivation (Azios et al., 2022). Other students wish that they had an individual who would motivate them (Syriopoulou-Delli et al., 2024). Motivation and engagement with learning are variable based on the individual yet supports and encouragement can help these improve.

As shown in Figure 2, there are connections found between subthemes of each of the themes as well. These linkages were created based on conceptual overlaps that are relevant to consider. Subthemes that emerged appeared to have an intertwined nature. Additionally, there is a central theme that connects all five themes together titled *Inclusive Communication Supports,* which is depicted in Figure 1.

DISCUSSION

This thematic analysis is one of the first to synthesize current research on students enrolled in higher education with speech and language impairments. Theme one focuses on the barriers that come with inclusion. This theme includes the psychological tolls, social consequences, and the question of disclosure of their disability. Students with communication disabilities were found to have depression, anxiety, and shame regarding their disabilities (Evans et al., 2023; Barrera Ciurana & Moliner García, 2024). This expands on current research in that students with disabilities in general also have mental health difficulties and isolate themselves from their peers (Gull et al., 2025). Even though most students with disabilities in higher education see these psychological and social effects, this study exemplifies the impact that communication disorders specifically can have on these areas. These students are at high risk for mental health difficulties which leads to the discussion of disclosure in the classroom. Many students with disabilities, including those with communication disorders, face a debate of whether to disclose their disability for others to see (Gull et al., 2025; Azios et al., 2022). These decisions and tolls have a weight on these students across disabilities and not just communication disorders.

The second theme addresses social difficulties that these students with speech and language impairments have at their higher education institutions. These difficulties are mostly unique to this population, but there are difficulties with interpersonal relationships that arise for students across disabilities (Gull et al., 2025). Students with communication disabilities have social outcomes impacted while interacting with their peers and faculty at their respective institutions. Other students with other types of disabilities benefit from instructor communication and socialization with peers (Ehlinger et al., 2020), but the students with communication impairments might not see the same benefits depending on their disability. One connection in Figure 2 (Subthemes 1.1 and 2.3) is when a student with a disability faces misunderstandings with others, this

could have a psychological toll on them. Additionally, another connection (Subthemes 2.2 and 2.4) stems from an idea that underdeveloped social strategies can lead to challenges creating and maintaining relationships. Building friendships relies on an individual's success in their strategies for participating in social situations.

The third theme explicates the accommodations and frameworks that are useful for these higher education students. This includes both individualized accommodations and universalized accommodations. Universalized accommodations through the Universal Design for Learning (UDL) framework are beneficial, but some students might benefit from more personalized accommodations. UDL facilitates learning for all students (Barrera Ciurana & Moliner García, 2024; Edwards et al., 2022), confirming the significance it has on higher education students with communication disabilities. Personalized accommodations also are valuable for students with disabilities, especially those with autism spectrum disorder where everyone with the diagnosis can have variety in symptoms (Syriopoulou-Delli et al., 2024; Davis et al., 2021). Faculty also varied in their supports that they offer to students depending on their values (Claxton et al., 2019), which contrasts with Universal Design for Learning. Traditional supports are also what student accommodation services and professors give most often (Hatfield et al., 2023). A connection shown in Figure 2 (Subthemes 3.2 and 3.4) also presents itself in this theme, for UDL principles are a form of universalized support that contrast with traditional accommodations and individualized supports.

The fourth theme observes that human support systems have a significant impact on the educational experience of students with special needs. Staff training and knowledge can be limited in terms of disabilities that they were not educated in (Gull et al., 2025). This also applies further to communication disorders, for the faculty who are not aware of it cannot support it as well (Delaney & Hata, 2020). The institutions have a responsibility to provide the trainings to the staff on inclusion and disabilities. Additionally, having a community in the classroom is a big factor in a student with a disability's academic success (Ehlinger et al., 2020), and this holds true with those with communication disorders specifically as well (Cai & Richdale, 2016; Syriopoulou-Delli et al., 2024; Evans et al., 2023). Peer support, however, is a difficult accommodation to provide. Institutions should look at ways to integrate peer collaboration into their classrooms in a way that encourages friendly behavior. Family support has primarily been mentioned when it comes to students with communication impairments (Cai & Richdale, 2016; Davis et al., 2021; Corby et al., 2020; Azios et al., 2022). Although this is beyond the institutional level in terms of accommodations, the family support should be considered when it comes to students with communication impairments. One connection displayed in Figure 2 (Subthemes 3.2 and

4.1) poses that faculty need training, increased knowledge, and positive attitudes **to** implement UDL principles and personalized learning. Without faculty involvement and commitment, the UDL framework cannot be used effectively. Another connection (Subthemes 3.2 and 4.4) has been created, for it is the institution's responsibility to implement UDL principles if they see fit. UDL implementation has the potential to change a university's culture, so it is important that these principles are considered. There is an additional connection (Subthemes 4.1 and 4.4), as the institution is responsible for faculty training and culture. Without institutional prompting and requirements, faculty might not have the proper training to support students with communication disabilities. The institution has a duty to train their faculty and create a culture of positivity and acceptance that their faculty carry out. Connecting further (Subthemes 2.2 and 4.2), as challenges come with building and maintaining relationships, peer support may be more difficult for students with disabilities to find. Peer support is so crucial for higher education students with communication impairments, yet they often have challenges finding those people. The difficulties with relationships impact their support systems and thus their experiences.

The fifth theme identifies the importance of student agency and advocacy when it comes to making decisions about their disability disclosure and standing up for themselves. Students with disabilities in higher education have benefitted from disclosing their disabilities and asking for accommodations (Gin et al., 2022). This connects to the students with communication impairments specifically, for they also benefit from self-advocacy. Learning engagement and motivation can also be impacted based on the disability and the faculty's concern for the students themselves (Ehlinger et al., 2020). When it comes to students with communication disorders, their disability itself, rather than the faculty's perspective, might impede motivation and engagement in the classroom (Delaney & Hata, 2020; Cai & Richdale, 2016). Thus, the students with speech and language impairments' perception of themselves and their disabilities impacts the ways that they engage in the classroom and advocate for themselves. Highlighted in Figure 2 (Subthemes 1.3 and 5.3), the choice to disclose a disability relies on a student's lived experience and ability to use their voice. Reversed, the life a person experiences can be different if they choose to disclose their disability. Also, there is a connection (Subthemes 5.2 and 5.4) where having increased confidence leads to higher motivation and engagement with learning. These two subthemes are directly related, for motivation can come from a student's confidence in themselves and their academic abilities.

The central theme of Inclusive Communication Support connects to each of the five themes, as displayed in Figure 1. Students with communication disorders in higher education need inclusive supports for success academically and socially. In Theme 1 (The Hidden Cost of

Inclusion), inclusive communication support is necessary to prevent social and psychological consequences for the students. With Theme 2 (Navigating Social and Communication Landscapes), inclusive communication support prevents communication barriers and guides students to successful relationships. Students with communication disorders rely on support to participate in the social atmosphere at their institutions. In Theme 3 (From Accommodations to Universal Design), communication supports (both individual and universal) are used to lead students to success. Inclusive communication supports are seen in Theme 4 (The Critical Role of Human Support Systems), since humans have the power to mentor and guide the students with communication disabilities. With Theme 5 (Student Agency in Disability Identity and Advocacy) the central theme is connected through students seeking supports and being confident with and without them. Inclusive communication supports are important for the student's own self-advocacy and motivation to learn, for inclusive supports can lead a student to be more open to learning in their institutional environment. The central theme unifies how all students with communication disorders can benefit from communication supports that are inclusive and accommodating of their disabilities.

Review of Research Questions and Conclusions

In the study, the primary research questions addressed were:

1. What supports would be needed to be successful in higher education for students with communication disabilities?

In higher education, students with communication disabilities benefit from individualized and universal supports that give them the fullest opportunity to succeed. These supports should facilitate successful social interactions and academic participation across their higher education experience. Faculty need to be trained to provide universal supports fitting the UDL framework in their classroom that encourage students with and without disabilities, including those impacting communication, to find success.

2. How do students with communication impairments in higher education perceive their academic and social experiences?

Students with communication impairments in higher education often may have negative perceptions relating to their academic and social experiences, with some individuals facing complex emotions: depression, anxiety, and shame, impacting their performance across environments. These students may not feel as confident in their abilities, limiting their participation and engagement with peers and academics. Support systems (family, peers, and faculty) play a crucial role in the perception of students with communication disorders relating to their higher education experiences and abilities.

CONCLUSION

Supports provided by Student Access and Accommodation Services are powerful tools that guide the experiences of students with communication disabilities in higher education. These accommodation services need more development to facilitate even more awareness and benefits for the students they serve. Faculty training and awareness is encouraged to implement better accommodations and support overall.

An outlier revealed the potential limitation to inclusion, for some students benefit more from not being in mainstream programs. The option of participating in classes with other students with disabilities similar to their own might lead to more success depending on the student and their disability (Corby et al., 2020). Although there is this potential limitation, inclusion still is beneficial for students with disabilities.

Other limitations include a lower level of evidence base that emanated from a limited number of articles in this thematic analysis. Additionally, not all areas of communication disorders had current data relating to higher education. This also contributed to limiting the comprehensiveness of this study. The single reviewer screening also could be a limitation due to the lack of multiple perspectives used to initially search for and analyze pieces for inclusion. Lastly, it is important to further address the heterogeneity between communication disorders, as these disorders are not uniform in their manifestations. This could limit the application of UDL principles, as the "universal" nature of this framework requires that all students could benefit, regardless of the potential vast differences in presentation of the impairment. It is important to address these varieties as higher education institutions continue to consider how to create inclusive classrooms centered on the UDL framework.

There are still critical gaps to explore in future research when it comes to the accommodations of higher education students with communication disorders. Although other countries were explored in this thematic analysis, there is still more to research regarding how each country would compare in terms of accommodations for this student population. Each country has different services that they provide for their students, so understanding each country's methods can be useful in exploring successful accommodations. Also, there are communication impairments that students in higher education might have that are not researched yet in terms of accommodations, so they were not included in this thematic analysis. Voice disorders, for example, were not included due to lack of research on the topic. Further research should explore the accommodations and supports that work best with students enrolled in higher education across the communication disorders to broaden knowledge. It is crucial that research is performed across the disorders to ensure success for individual students with their disorder. Student

perspectives should also be researched further to explore their experiences with the university accommodations programs and faculty directly.

Communication disorders in higher education students have been shown to often have negative impacts on their academic and social performance. The accommodations that higher education institutions provide, whether universal or traditional, are powerful tools that guide the experiences that students with disabilities have. Faculty knowledge and training about disability and inclusion also contributes to the success of the students. Students can make decisions about disclosure of their disabilities as they see fit. Accommodations, although a relatively unexplored topic, could drastically improve a student with a communication disability's higher education experience.

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Appendix A

Databases	Search Strings
Illinois State University Milner Library	"Disabilities in higher education" "Stuttering in universities" "Stuttering in higher education" "Language disabilities in universities" "Language disabilities in higher education" "Articulation in universities" "Articulation in higher education" "Voice disability in universities" "Voice disability in higher education" "Universal Design for Learning (UDL) in universities" "Universal Design for Learning (UDL) in higher education" "Faculty training for disabilities in universities" "Faculty training for disabilities in higher education" "Autism Spectrum Disorders in universities" "Autism Spectrum Disorders in higher education"
Google Scholar	"Disabilities in higher education" "Stuttering in universities" "Stuttering in higher education" "Language disabilities in universities" "Language disabilities in higher education" "Articulation in universities" "Articulation in higher education" "Voice disability in universities" "Voice disability in higher education" "Universal Design for Learning (UDL) in universities" "Universal Design for Learning (UDL) in higher education" "Faculty training for disabilities in universities" "Faculty training for disabilities in higher education" "Autism Spectrum Disorders in universities" "Autism Spectrum Disorders in higher education"
National Library of Medicine	"Disabilities in higher education" "Stuttering in universities"

	"Stuttering in higher education" "Language disabilities in universities" "Language disabilities in higher education" "Articulation in universities" "Articulation in higher education" "Voice disability in universities" "Voice disability in higher education" "Universal Design for Learning (UDL) in universities" "Universal Design for Learning (UDL) in higher education" "Faculty training for disabilities in universities" "Faculty training for disabilities in higher education" "Autism Spectrum Disorders in universities" "Autism Spectrum Disorders in higher education"
PubMed	"Disabilities in higher education" "Stuttering in universities" "Stuttering in higher education" "Language disabilities in universities" "Language disabilities in higher education" "Articulation in universities" "Articulation in higher education" "Voice disability in universities" "Voice disability in higher education" "Universal Design for Learning (UDL) in universities" "Universal Design for Learning (UDL) in higher education" "Faculty training for disabilities in universities" "Faculty training for disabilities in higher education" "Autism Spectrum Disorders in universities" "Autism Spectrum Disorders in higher education"

PubMed Central	"Disabilities in higher education" "Stuttering in universities" "Stuttering in higher education" "Language disabilities in universities" "Language disabilities in higher education" "Articulation in universities" "Articulation in higher education" "Voice disability in universities" "Voice disability in higher education" "Universal Design for Learning (UDL) in universities" "Universal Design for Learning (UDL) in higher education" "Faculty training for disabilities in universities" "Faculty training for disabilities in higher education" "Autism Spectrum Disorders in universities" "Autism Spectrum Disorders in higher education"