BALBETTARE OR TO STUTTER: A COMPARATIVE ANALYSIS

OF STUTTERING INTERVENTION IN THE US AND ITALY

by

ETHAN J. DAWSON

A THESIS

Presented to the Department of Communication Disorders and Studies
and the Robert D. Clark Honors College
in partial fulfillment of the requirements for the degree of
Bachelor of Science

June 2023

An Abstract of the Thesis of

Ethan J. Dawson for the degree of Bachelor of Science
in the Department of Communication Disorders and Sciences to be taken June 2023

Title: Balbettare or To Stutter: A Comparative Analysis of Stuttering Intervention
in the US and Italy

Approved: _Harinder Kaur Khalsa, M.A. Senior Instructor of Italian_
Primary Thesis Advisor

As with all aspects of our lives, communication disorders are mediated by the cultures we find ourselves within. Such cultural subjectivity in a field founded on scientific principles of evidentiary rigor can result in a disconnect between evidence-based practices and attitudes, therapeutic goals, and models of care enacted in a specific cultural-linguistic context. To better arm clinicians with the ability to account for these subjectivities and integrate them with best practices, this research will compare intervention approaches and cultural perceptions of stuttering in the United States and Italy. Through literature analysis and identifying future research areas, this work contributes to a growing body of work recognizing the critical nature of intercultural collaboration in speech-language pathology.

Acknowledgments

This thesis is the representation of four years of exams, essays, reports, discussion boards, assignments, and mentorship from scholars across the Clark Honors College, the Italian department, and the Communication and Disorders and Sciences department. I would like to thank all of my professors and mentors who have shaped me into the student and scholar I am today. Without you all, this work would not have been possible.

I would specifically like to thank Harinder Kaur Khalsa for her incredible advising in this process. I entered her second-year Italian course after a year of less-than-ideal online language learning, and Harinder welcomed me with open arms. She gave me space to fail and, in the process, earned my deepest trust. Neither of us knew exactly what this process or this thesis was going to look like, and despite such uncertainty, we jumped headlong into this work together. I want to thank Harinder for always allaying my concerns, guiding me toward critical cultural insights, and, again, giving me space to fail. I'm happy to report that because of this space to fail, I have created a piece of research I am deeply proud of and that (I hope) will serve to improve my field in a meaningful way. Thank you, Harinder.

I also need to take a moment to thank my incredible family. Kerri, Travis, Avery, and Aubrey, you were my support system through this all. Thank you for listening to me read my writing to you (over and over and over and over again) and dealing with my crazed ramblings about stuttering. You four are the reason I am here today, and I thank you from the bottom of my heart for shaping me into the person I am today. To my family, thank you.

Table of Contents

Introduction

As with all aspects of our lives, communication disorders are mediated by the cultures we find ourselves within (Bloodstein et al. 78). Such cultural subjectivity in a field founded on scientific principles of evidentiary rigor can result in a disconnect between evidence-based practices and attitudes, therapeutic goals, and models of care enacted in a specific cultural-linguistic context (Goulart et al. 2). To better arm clinicians with the ability to account for these subjectivities and integrate them with best practices, this research will compare intervention approaches and cultural perceptions of stuttering in the United States and Italy. Through literature analysis and identifying future research areas, this work contributes to a growing body of work recognizing the critical nature of intercultural collaboration in speech-language pathology.

Focusing on stuttering will limit the scope of this work, allowing space to delve deeper into this subject and provide critical insights into frameworks of disability enacted in both countries. A central focus on stuttering instead of speech sound or language disorders will also generate a line of inquiry more apt to be compared cross-linguistically. Many communication disorders, such as speech sound disorders (SSD) and specific language impairments (SLI), are more linguistically specific as treatment must focus on elements of speech most critical to clear communication in the client's primary language, which vary significantly from language to language (DeVeney et al. 1730). SSD therapy in English will emphasize different phonemes, morphemes, prosodic techniques, etc., than SSD therapy in Italian (DeVeney et al. 1731). Stuttering is deeply embedded in one's language, but because it is not language-specific, comparing stuttering across languages will prove more fruitful than other language-specific disorders.

This research will bridge the gap between speech therapists in broadly differing linguistic and cultural environments. SLPs work with many other health and allied health professionals to construct and implement care plans. The professionals that most often work in tandem with SLPs include audiologists, psychologists, occupational therapists, physical therapists, educators, otolaryngologists, and others. Despite a great culture of inter-professional collaboration, there is a distinct lack of intercultural collaboration. This is a result of the language-specific nature of speech therapy. However, intercultural collaboration is a critical imperative that must be more fully developed as SLPs operate in an increasingly globalized world (Isaac 1). Additionally, as speech pathology moves toward a more culturally conscious model of care, we must look beyond the borders of any given country for guidance and insight (Leadbeater and Litosseliti 2-3). This research aims to provide greater mutual understanding and intercultural collaboration in a field that needs a greater number of diverse voices with unique perspectives.

"The Communication Bill of Rights," initially developed in 1992 by the National Joint Committee for the Communication Needs of Persons With Severe Disabilities (NJC), speaks to these fundamental functions of interconnection fostered through communication and centers the experiences of those with differing communicative capacities. This document is a guiding light to many SLPs, affirming the fundamental right to communication regardless of the material mechanisms and characteristics that comprise one's communication modality. These rights, as outlined by NJC, will guide this inquiry and are as follows:

1. The right to interact socially, maintain social closeness, and build relationships
2. The right to request desired objects, actions, events, and people
3. The right to refuse or reject undesired objects, actions, events, or choices
4. The right to express personal preferences and feelings

5. The right to make choices from meaningful alternatives
6. The right to make comments and share opinions
7. The right to ask for and give information, including information about changes in routine and environment
8. The right to be informed about people and events in one's life
9. The right to access interventions and supports that improve communication
10. The right to have communication acts acknowledged and responded to even when the desired outcome cannot be realized
11. The right to have access to functioning AAC (augmentative and alternative communication) and other AT (assistive technology) services and devices at all times
12. The right to access environmental contexts, interactions, and opportunities that promote participation as full communication partners with other people, including peers
13. The right to be treated with dignity and addressed with respect and courtesy
14. The right to be addressed directly and not be spoken for or talked about in the third person while present
15. The right to have clear, meaningful, and culturally and linguistically appropriate communications (Brady et al. 121-138)

SLPs must recognize and honor the profound act that is communication, treating it with reverence and holding the utmost respect for those producing communicative matters. The above bill of rights primarily centers on the experiences of people with severe disability or those who use alternative and augmentative communication (AAC). Nonetheless, it has great relevance in the discussion of stuttering, as people who stutter (PWS) deserve to perform these communicative imperatives just as fluent people do. They may face many of the same discriminatory attitudes/actions as those with more severe disabilities do (Türkili 8).

Communication is the mechanism that characterizes and forms the basis for the unifying tapestry that comprises our human existence. This ability to share and receive ideas from others of diverse backgrounds constructs our internalized conception of the world around us and the material realities that form our respective milieus. Communication allows for a connection that

transcends temporal, geographic, and corporeal limitations, providing us with a mechanism of entanglement with times, peoples, and locales otherwise unknowable. Such a profound function of the seemingly pedestrian act of generating and receiving communicative matter affirms the critical nature of communication and the vital role speech-language pathologists (SLPs) play in the lives of individuals with variable communicative abilities.

Background

What is Stuttering?

Persistent developmental stuttering (PDS) is the most widely known language difference within the class of conditions considered fluency disorders. Fluency disorders broadly refer to differences in communication affecting the clarity of a speaker's message as impacted by dysfluent vocal production (PDS) or irregular use of syntactic, prosodic, and narrative conventions resulting in dysfluency at the utterance construction level (cluttering) (Levy 2011). These definitions rely wholly on behavioral analysis of observable dysfluent speech, ignoring the social-emotional aspects of stuttering. Recently, there has been a move to rely on a constructivist model and definition of stuttering, analyzing the participation and activity limitations that may affect PWS (DiLollo et al.). In a constructivist model, PWS's lived experiences are used to diagnose, determine severity ratings, and guide the intervention approach (DiLollo et al.). For this research, the behavioral definition of stuttering will be most effective as most resources use such a definition. However, the constructed nature of stuttering will play a significant role in the analysis.

It is also important to note that developmental stuttering (DS), PDS, and cluttering are distinct from acquired neurogenic stuttering (ANS). DS/PDS are idiopathic disorders presenting at an early age and without known neurological or structural causes (Krishnan and Tiwari 1). At the same time, ANSs are disfluencies caused by a specific, often traumatic, event to the central nervous system (Krishnan and Tiwari 1). Though these fluency disorders are all colloquially referred to as "stuttering," they are distinct disorders with specific approaches to intervention, public and personal perception, proposed etiologies, and symptoms. The following literature review will draw upon research regarding DS and PDS.

PDS and DS symptoms do not always indicate an underlying cognitive deficiency. Fluency disorders may present as comorbid conditions of other linguistic, cognitive, or psychiatric disorders but are not causally linked to deficits in these areas of functioning (Choo et al.9-10). DS and PDS are iterations of the same fluency disorders present at different stages in an individual's lifespan (Cleveland Clinic, 2022). DS is stuttering that presents between the ages of two and five years for six months or longer (Cleveland Clinic 2022). DS affects 5% of children and often resolves as language is acquired and development progresses; dysfluency is typical in the process of language acquisition (Polikowsky et al.1). PDS is stuttering that persists into adolescent, teenage, and adult life, affecting just over 1% of the population across cultures and languages (about 80 million globally) (Büchel and Sommer 160). Just as DS is idiopathic, so is PDS–there is no apparent cause of the dysfluency or reason it persists past early childhood.

Specific core dysfluent and secondary or compensatory behaviors characterize PDS and DS (Guitar 7). Core behaviors are behaviors that directly cause dysfluent vocal productions, including part word or syllable repetitions (*It-It-It-Italy*), prolongations (*IIIIIItaly*), and blocks or a lack of the vocal output despite a physical attempt to generate such production (********Italy*) (Guitar 7). Secondary behaviors are learned reactions to the presentation of primary behaviors and typical communication partner reactions to dysfluency. Accordingly, secondary behaviors are intimately linked to personal and public perceptions of PWS, often manifested from a lifetime of experiences that marginalize and ostracize dysfluent speech.

Secondary behaviors are a response to and attempt to avoid the uncomfortable situations many PWS find themselves in; these behaviors include facial and jaw tensions, blinking, gaze aversion, gross motor gestures (e.g., tapping, head-turning, arm or leg jerking, etc.), and avoidance behaviors (e.g., limitation of vocal production, avoidance of specific words,

communicative environments, or social situations) (Guitar 8). There is a growing recognition of the importance of managing secondary behaviors in stuttering intervention, as they are learned behaviors that can generate further dysfluency and additional distractions to communication partners.

What Causes PDS?

Societies across the globe have recognized stuttering and documented cases of dysfluency for centuries, one can find reference to dysfluent speech in the Bible, and yet, there is no known cause of stuttering (Guitar 5). The field of speech-language pathology has been actively searching for a concise etiology of PDS for decades, with little definitive success. In accordance with this vast body of work, it can be asserted that fluency disorders are resultant of a complex interaction of motor planning deficiency, auditory processing impairment, neurochemistry differences, neural communication deficiencies, and genetic and environmental factors (Büchel and Sommer 160-162) None of the above-listed factors can be identified as the primary cause of stuttering, nor are all of these differences present in every individual who stutters (Büchel and Sommer 160-162). Because of the multifactorial nature and variability in the etiology of PDS, there are few interventions designed to treat the underlying differences/deficiencies causing stuttering (Guitar 250). Instead, interventions focus on teaching compensatory behaviors, modeling or encouraging fluency, reducing secondary behaviors, and reducing anxiety around communication through acceptance of dysfluent speech.

Is There a "Cure" for PDS?

As described later, there are many approaches to managing dysfluent speech for people of all ages. Despite this, there is no "cure" for PDS. DS is responsive to therapeutic intervention or will resolve independently as development progresses (Guitar 5). Still, if stuttering persists

through adolescence, a person will likely stutter for the rest of their life (Guitar 6). This is not the result of failure by the client or the clinician, even if intervention is started close to the first presentation of dysfluency. Many media representations contribute to tropes that PWS can overcome stutters in moments of great need or when something finally "clicks." These representations have a harmful effect on the stuttering community as it implicitly implies that stuttering is a choice or something that must be overcome in order to exist as a bonafide human/character (Eagle and Johnson 251).

Professional Imperatives and Adherence to Professional Imperatives

Accreditation and Governing Bodies of SLPs

SLPs are considered allied health professionals, working closely with educators and medical professionals, and adhere to similar imperatives and educational requirements across the globe. In most countries, SLPs require 3-6 years of education across undergraduate and graduate levels (Mayer et al., 2020). They are qualified to diagnose and treat language disorders, speech sound disorders, swallowing disorders, developmental delays, cognitive deficiencies, and other communication disorders (Mayer et al., 2020). In The US, a four-year undergraduate degree in communication disorders and sciences (or related) and two years of graduate training in Speech Pathology are required to practice. Italy has a different undergraduate degree path with a typical three-year duration, but the graduate training requirements are the same.

Additionally, most countries have established governing bodies that oversee certification and professional imperatives central to treating communication disorders. The American Speech-Language-Hearing Association (ASHA) leads SLPs and their practice in the US. ASHA grants certificates of clinical competencies (CCC-SLP) that are required for the legal practice of speech therapy and provides an extensive network of resources, ethical imperatives, and collaboration.

Membership to this body is optional, but as they are the agency that grants certification, most SLPs working in The US are members of the body.

Italy's governing bodies were more regional and amorphous in nature until the recent elections of La Commissione di Albo Nazionale dei Logopedisti (The Commission of the National Register of Speech Therapists, CdA dei Logopedisti) in accordance with LAW 11 January 2018, n. 3. In September 2020, elections were held to establish the board of directors for CdA dei Logopedisti (TSRM PSTRP 2021). Their work is still in its infancy and was directly impacted by the COVID-19 global pandemic. However, it is forging ahead with the central aim of overseeing and integrating the regional governing bodies of SLPs nationwide to standardize and universalize the speech pathology profession (TSRM PSTRP 2021). ASHA is now more developed and prolific than CdA dei Logopedisti, offering more resources, services, safeguards, and stringent imperatives. With the passing of LAW 11 January 2018, n. 3 and the recent elections of CdA dei Logopedisti, Italy is on a solid path to creating a more robust governing body similar to ASHA.

The Role of Evidence-Based Practices

Evidence-based practices (EBP) are an offshoot of the evidence-based medicine movement developed in the 1970s and 80s (Roddam et al. 10). This movement aimed to more effectively standardize care within countries and the globe through the encouragement of adherence to standards of care based on widely recognized and accepted scientific study of specific health and allied health sectors. In addition to improving and standardizing models of care, this movement was driven by governmental regulatory agencies and insurance companies to ensure that adequate and appropriate care was offered (Roddam et al. 10). Laura M. Justice defines EBP in the treatment of communication disorder as:

…a process to which clinical professionals adhere when making decisions

concerning the assessment or treatment of a given condition. This process involves

careful consideration and integration of various types of evidence so that the most

effective solution can be identified; these types of evidence include, minimally: (1)

clinical expertise, (2) patient values and perspectives, and (3) best available scientific

evidence. (7)

EBP forms the basis of all therapeutic imperatives in The US and Italy and informs best

practices for screening, assessing, and intervening in communication disorders. As a result of the

EBP movement and its proliferation across professional sectors and the globe, many treatments

implemented in stuttering intervention are broadly similar. Despite linguistic differences, SLPs

across the globe draw from the same pool of evidence to inform our practice resulting in

standards of care that are broadly universalized. Where the differences arise is in the first two

tenants of EBP described by Justice, "(1) clinical expertise, (2) patient values and perspectives"

(Justice 7). Clinical expertise and patient perspectives are likely influenced by the specific

cultural-linguistic environment a clinician practices within and where the most significant

differences in approaches to stuttering intervention may be found.

Approaches to Stuttering Intervention

Overview

Thanks to increasing globalization, sharing ideas, data, and research globally has never been more accessible. In theory, this increased sharing of research combined with an SLP's imperative to draw upon EBP means that many interventions implemented to manage stuttering are largely the same in general structure and form between The US and Italy. Additionally, because Italy is a relatively small country, much of the research used to justify specific interventions comes from outside the country, specifically from The US. However, this universality is not necessarily borne out in practice as access to translated information, updated training, stuttering specialists, and resources generally varies between these countries. This section will outline the available modalities of stuttering intervention and compare the state of stuttering intervention in The US and Italy.

With a condition such as stuttering and its extensive history, it is no surprise that approaches to stuttering intervention have a similarly storied past. Many now-defunct approaches to treating stuttering would today be classified as inhumane. Such inhumane interventions include treatments based on the use of carbon dioxide (Kent 1961), a practice that is now entirely absent from the body of research today. Despite this complex history, modern stuttering interventions attempt to reflect and account for the multifactorial nature of stuttering, arming SLPs with tools to address disfluency itself and the emotional/self-perception aspects (Blomgren 273). Accordingly, most stuttering interventions can be categorized as fluency shaping or stuttering modification (Blomgren 273).

Fluency shaping is defined by Guitar as "ways of speaking designed to induce fluency. Examples are slow rate, easy onset of voicing, and light contact of articulators." (198). Fluency

shaping has the express goal of generating fluent speech through the modification of vocal habits. It is often implemented in young PWS cases as their stuttering habits are yet to be deeply entrenched (Blomgren 273). Instead, stuttering modification turns inward, addressing adverse reactions to dysfluent speech to allow PWS to stutter less severely and have greater confidence in communicative exchanges (Blomgren 273). Stuttering modification finds its basis in cognitive learning theories and classical conditioning (Guitar 90). Fluency shaping and stuttering modification both have a place in modern stuttering intervention, yet, a more significant body of research supports fluency shaping as an effective method for PWS to produce more fluent speech (Blomgren 274).

A comparison between these two approaches in terms of effectiveness is not ideal, however. Fluency shaping and stuttering modification inherently have differing goals; one is to increase fluency, and the other to encourage acceptance of a stutter such that participation is limited as minimally as possible. Elements of both treatment approaches are implemented in comprehensive stuttering intervention, and such comprehensive approaches are growing in popularity as the profession learns more about the multifactorial causes of stuttering (Blomgren 272).

Stuttering Intervention in Italy

In Italy, just as in other countries, there is a disconnect between the research at the forefront of our field and the actual therapy approaches implemented (Eggers et al. 89). This disparity between established research and access to EBP therapy is most visible in economically and culturally marginalized locales (Zahir et al. 2). Stella et al. found that in Southern Italy only 23.1% of those diagnosed with a fluency disorder in public health facilities received any form of treatment there (3). Donatella Tomaiuoli, a prolific Italian stuttering researcher, has developed

and published many therapeutic approaches, workbooks, and textbooks that reflect the newest research regarding the causes of and best practices for stuttering intervention. Her work includes, *Favolando con la balbuzie dei piccoli* (2009), "Evidence-Based Medicine e balbuzie: la buona pratica clinica in logopedia nella letteratura e nella realtà italiana" (2020), "Profiling People who Stutter: A Comparison Between Adolescents and Adults" (2015), and many more. Much of her research and the intervention approaches she has developed are grounded in a comprehensive approach to stuttering intervention, reflecting the modern state of accepted research and accounting for the multifactorial nature of stuttering. Despite her prolific and celebrated work, the state of modern stuttering treatment reflects a need for updated practices, greater access to translated material (that is also validated for implementation in an Italian context), and the disengagement of negative stereotypes from the construction of stuttering care plans (Accornero 18).

Stuttering in children is most often addressed with interventions based on principles of fluency shaping if any treatment is implemented at all (Eggers et al. 90). As described above, there is a large body of research validating the efficacy of fluency shaping in the production of fluent speech. Yet, such an approach fails to acknowledge and integrate a constructivist perspective of stuttering that accounts for the detrimental social effects resultant of and perpetuating stuttering. Eggers et al. posit that this preference for fluency-shaping-based intervention originates from inaccurate perceptions of stuttering held by families and clinicians, presenting a view of stuttering intervention with the singular purpose of "curing" a stutter (90). Additionally, it was found that many families were reticent to seek early intervention, even after a diagnosis of developmental stuttering, in hopes that disfluency would resolve on its own (Eggers et al. 89). Though it is true that many early presentations of stuttering will resolve by

later adolescence, early intervention and access to treatment are essential in ensuring the development of typically fluent speech (Onslow and O'Brian 2). This avoidance of any intervention leaves young PWS with little guidance for navigating a world hostile to stuttering and may lead to PDS that could have otherwise been avoided.

In addition to a culture unwilling to accept and address stuttering, Italian speech therapists lack specialized training or certification in treating stuttering (Accornero 20). In fact, there are no official Italian accreditation programs for fluency specialists (Accornero 20). This, combined with university curricula that do not adequately address issues of fluency, leaves PWS wanting for intervention administered by SLPs with comprehensive training in the treatment of stuttering (Stella et al. 4). In lieu of treatment from qualified SLPs or following treatment with little to no improvements in fluency or communication participation (resultant of a lack of professional development), there is fear that Italian PWS will seek treatment in the private sector where unscientific interventions promise miraculous cures to dysfluency (Stella et al. 6). Despite a flourishing scholarly community dedicated to the research of stuttering in Italy, the lack of adequate infrastructure to deliver high-quality EBP therapy renders Italy's stuttering community with little access to potentially life-changing services.

Stuttering Intervention in The US

In the united states, there are about 197,297 SLPs accredited through ASHA, with a national ratio of 51.1 SLPs per 100,000 inhabitants (ASHA, 2023, 2019). Compare this with a rate of 15,000 SLPs or 24 per 100,000 inhabitants in Italy (Proia, 2021); the sheer number of professionals renders stuttering intervention more accessible in the US than in Italy. Despite this higher ratio of clinicians to inhabitants and a larger share of fluency research originating from the US, there persists a disconnect between best practices and the reality of stuttering treatment,

especially in generalized settings such as schools (Tellis et al. 16). Many non-fluency specialist SLPs feel unequipped to manage stuttering, and failed to identify EBP in the diagnosis and intervention for pathological disfluency (Tellis et al. 22). Tellis et al. cites a systemic gap in graduate training and lack of professional development post-graduation that would equip SLPs with the critical knowledge to serve PWS (21). Combining this lack of training with excessive caseloads and a wide range of professional obligations leaves school-based SLPs with little opportunity to provide PWS with the care they need.

A questionnaire offered to PWS members of the National Stuttering Association (NSA) found that they had a significant preference for treatment offered at university and private clinics above schools or hospitals (Yaruss et al. 231). Yaruss et al. assert that this is probably because of experiences receiving poor services in public school settings, a likely result of the lack of training described above. Unlike Italy, the US has an official channel for accreditation as a fluency specialist through the American Board of Fluency and Fluency Disorders (ABFFD), most of whom operate in the private or university sectors. Through these fluency specialists, PWS may access care from clinicians more equipped to manage their unique needs. Unfortunately, there is an extreme lack of access to such fluency specialists, with the ABFFD website listing only 144 specialists with active accreditations.

Similarly to Italy, fluency shaping approaches are often implemented in treating young children (Bothe et al.). Many of these programs, such as the Lidcombe Program, Family Focussed Treatment, and RESTART-DCM include parental involvement in the shaping of fluent speech.,\ Such parental involvement was infrequently implemented in Italian contexts, a likely result of differing cultural views on stuttering, parenting, and the role of the clinician (Eggers et al. 90). Again, fluency shaping programs, especially the Lidcombe program, have been proven to

be effective in the treatment of stuttering, but neglect many of the social-emotional aspects that contribute to participation limitation and other adverse effects of stuttering. There is a distinct lack of literature addressing differences in the nature of stuttering intervention as implemented in the real world and what is reflected in the body of research outside the school setting. Further research shedding light on rates of fluency intervention, rates of implementation of variable stuttering intervention programs, and broader barriers to stuttering treatment are needed to form a complete picture of stuttering in the US.

Similarities and Differences

Both the US and Italy have robust scholarly communities dedicated to researching stuttering, though Italy's is certainly smaller due to its smaller population and linguistic insularity. Despite strong research communities, both countries struggle to translate research into therapy itself. This problem is more pervasive in Italy, affecting private and public therapeutic services due to limited university education on stuttering, limited professional development opportunities, a lack of formal fluency specialist accreditation, and stuttering research rendered inaccessible due to language barriers. The US struggles to translate research to school-based settings due to excessive caseloads and innumerable professional obligations associated with working in schools. The US has a more substantial infrastructure regarding fluency specialization, making adequately fluency-informed SLPs marginally more accessible. Both countries favor fluency shaping intervention and put a lesser emphasis on stuttering modification approaches; such a trend reflects the state of the research today. The empirical basis for fluency shaping is strong. However, as the field continues to progress toward culturally conscious models of care and a constructivist perspective of disability, comprehensive approaches are likely to grow in popularity.

Perceptions of PWS

Overview

People who do not stutter (PWNS) have the privilege of operating in a world expressly built for them. Our conversations, transactions, requests, declarations, and jokes are all expected to be communicated rapidly, one phoneme following directly after the other with no interruption or adverse physical reaction. A vast body of research asserts PWNS's negative perceptions regarding stuttered speech, some addressing how children as young as five identify and negatively perceive dysfluency (Healy 230). Additionally, negative perceptions of stuttering have been observed in widely variable cultural-linguistic environments (Üstün-Yavuz et al. 614-615). Because of this deeply entrenched expectation of fluency, PWS often face stigma and stereotyping that can reinforce and further entrench stuttering (Guitar 10). Guitar explains this process,

> A person's feelings can be as much a part of the disorder of stuttering as his speech behaviors. Feelings may precipitate stutters, just as stutters may create feelings. In the beginning, a child's positive feelings of excitement or negative feelings of fear may result in repetitive stutters that he hardly notices. Then, as he stutters more frequently, he may become frustrated or ashamed because he can't say what he wants to say–even his own name–as smoothly and quickly as others. These feelings make speaking harder, as frustration and shame increase effort and tension…impede fluent speech. Feelings that result from stuttering may include not only frustration and shame but also fear of stuttering again, guilt about not being able to help oneself, and hostility toward listeners as well. (10)

This combination of prolific stigmatized perceptions of stuttering and its negative effect on fluency in PWS affirms the critical need for clinicians and anyone who might interact with a PWS (everyone) to work to unlearn derogatory perceptions of dysfluent speech actively. Moreover, this process of conditioned responses to negative perceptions of dysfluency highlights

the pivotal role of stigma in the construction of care plans, willingness to receive therapy or diagnosis, and quality of life for PWS.

Perceptions of Stuttering in Italy

Perceptions of people who stutter are broadly negative across the globe. However, due to cultural differences, folk myths regarding stuttering, and the related infrastructure of communication disorder services, the exact form and severity of perceptions of disfluency will vary from country to country. Bernardini et al. found in a study evaluating the effectiveness of a translated version of a communication attitudes assessment (CAT) that by the age of six or seven, children who stutter had a negative attitude toward communication (159). This indicates that Italian children who stutter had a disproportionately adverse reaction to communication, as did their fluent peers by first grade. This data aligns with other assessment findings in other countries (Bernardini et al. 159). It also indicates the pervasive stuttering stigma and its early impact on language acquisition in children who stutter.

In a comparison of perceptions of people who stutter in five Western European countries, it was found that Italians held the lowest views regarding stutters in the countries investigated. (St. Louis et al. 126-127). It had been expected that responses from these Western countries would not vary significantly, and such an unexpected finding affirms the role that national identities play in the perception of stuttering, as Norway inversely reported above-average perceptions (St. Louis et al. 127). The researchers explained that further investigation was required to determine the cause of this disparity in perception empirically, but the role of knowledge regarding stuttering likely played a role in these perceptions as Italy also scored very low in their professed knowledge of the disorder (St. Louis et al. 221). A more robust infrastructure of communication disorder services and public education regarding these matters

is critical in shifting Italian's negative perspectives and improving Italian PWS lives (Boyle et al. 54).

Perceptions of Stuttering in The US

Americans, unsurprisingly, also hold negative views of dysfluent speech (Bloodstein et al. 81). An investigation of listener perceptions of modified and un-modified stuttering found that PWNS perceive dysfluent speech negatively but have an even more negative reaction to modified stuttering (De Nardo 8). Listeners reacted most negatively to the pull-out method of stuttering modification, where a PWS pauses when they notice they are stuttering, taking a deep breath and reducing muscle tension, before continuing in their utterance. (De Nardo 8). Such a finding points to the inescapable stigma PWS face even as they attempt to produce more fluent speech and the need for society-wide un-learning of negative perceptions. Additionally, these findings point to the critical role that social-emotional aspects of stuttering intervention play in appropriate management of dysfluency.

The International Project on Attitudes Toward Human Attributes (IPATHA), the organization responsible for the previous study comparing stutter attitudes between European countries, is currently in the collections phase of a study profiling stuttering attitudes in the US. Unfortunately, there is no comparable study investigating widespread American perceptions of stuttering, though it has been well documented that Americans, like other nationalities, also hold negative perspectives of dysfluency. A pilot study using the survey developed by IPATHA found that Americans had similarly negative views of stuttering and cluttering as did Russian respondents, and both nationalities held more positive views than did Turkish and Bulgarian respondents. (Simon 102). This pilot study is not comprehensive nor broadly representative, only receiving responses from subjects in West Virginia and similarly small geographic locales in the

other locations. Further inquiry is required to compare broad perceptions of stuttering between the U.S. and Italy.

Similarities and Differences

The US and Italy both have a stuttering stigma issue that must be addressed if meaningful progress is to be made in the qualitative improvement of PWS lives. Italy likely has a more negative view of stuttering than the US. Until data is collected through IPATHA, such an assertion is only based on broader disparities in access to stuttering intervention, access to information, and fluency specialists. However, shifts in public perception of PWS are possible, but meaningful efforts must be made to raise awareness and empathy among PWNS. Boyle et al. found significant improvements in the perception of stuttering were possible using several approaches. (Boyle et al. 54). Education and contact with PWS were found to reduce social distance scores, reduce discriminatory intentions, and increase empowerment attitudes of PWNS toward PWS ((Boyle et al. 53). These results are exciting because as much as negative attitudes are entrenched in cultures across the globe, there is hope for change and a viable path toward stuttering acceptance.

Conclusion

Stuttering is a profoundly complex communication disorder with a vast body of research expanding clinical understanding of its underlying etiology, nature, intervention approaches, best practices, and social effects and attitudes. Despite significant cultural, linguistic, and demographic differences between the US and Italy, many of the stigmas and barriers to service broadly originate from similar marginalizing forces. Both countries must work to expand access to SLPs trained in unique intervention approaches that honor and uplift dysfluent voices. Both countries must work to systematically reduce the public stigma that does nothing but exacerbate stuttering and marginalize individuals deserving of the full breadth of communicative imperatives outlined by NJC. This research has compared the US and Italy, not to denigrate one and uplift the other, but to progress a discourse of intercultural collaboration and shared desire to do right by people who stutter.

Action must be taken to further educate clinicians in Italian and American contexts such that they have the ability to provide care for PWS in a manner congruent with the available research. Such education is possible in universities through expanded coursework pertaining to stuttering, ideally with hands-on work and direct connection with PWS. An official channel to fluency specialization in an Italian context would not correct all of the downfalls described in the care for PWS. However, it would serve as an invaluable resource in directing Italian PWS to competent, stuttering-informed, SLPs and provide a criterion of education and experience that can mold generalist SLPs into fluency specialists. Alternatively, expanded professional development opportunities for generalist SLPs (i.e., school-based SLPs or NHS SLPs) post-graduation should be offered in an accessible format that would serve to improve the care of PWS by those already established in the field. One accessible format that could also have the

potential to encourage intercultural collaboration is peer-to-peer seminars, wherein experts in stuttering (American SLPs accredited by ABFFD or others) work with generalist SLPs. This peer-to-peer mentorship creates an ideal environment where SLPs of diverse backgrounds can come together to share experiences and gain critical information regarding stuttering or other communication disorders. SLPs in diverse contexts, including those in Italy and the US, face challenges originating from similar forces. Connecting these SLPs with one another has the potential to develop a coalition that recognizes the over-arching challenges faced by the field of speech pathology and allows for mutual understanding that could form the basis for international advocacy of PWS.

In addition to expanded clinician education, greater public empathy and understanding of PWS is essential in changing the lives of PWS. As Boyle et al. describes, improvements in attitudes toward PWS on an individualized level are possible through education and connection with PWS. The problem of systemic stigma toward PWS is more challenging to correct because of the pervasive expectation of fluency in locales across the globe. Such a shift in the expectation of fluency will require society-wide action and uprooting of hierarchical views of fluency that work to marginalize PWS. Positive representation of stuttering in media performed by actors who themselves stutter may be one avenue to inspiring this shift. Seeing someone who stutters be treated just as their fluent counterparts would not only serve PWS but provide a representation to PWNS of how best to interact with dysfluent speech. Beyond representation, direct education regarding stuttering, potentially in the form of public service announcements or compulsory curricula, also has the potential to change how societies across the globe view dysfluent speech.

Limitations and Further Research

As this thesis was based upon literature analysis, it has been inherently limited by the scope of available research. There are several distinct holes in the body of research relating to stuttering intervention in an Italian context. However, there is also a lack of systematic analysis of types of stuttering intervention implemented in the US and broad public polling of American attitudes toward stuttering. Accordingly, future research that will continue a discourse of intercultural collaboration between the US and Italy include–validation of various stuttering interventions in an Italian context, Italian clinician attitudes toward stuttering, qualitative analysis of lived experiences of Italian PWS, American perceptions of stuttering, rates of various stuttering interventions implemented in the US, and statistical comparison of outcomes between the two countries. Despite these limitations, this research establishes a path toward more holistic care of people who stutter in the US and Italy.

Bibliography

Accornero, Anna Rosa, et al. "Evidence-Based Medicine e balbuzie: la buona pratica clinica in logopedia nella letteratura e nella realtà italiana." *LOGOPEDIA E COMUNICAZIONE* 16 (2020): 11-25.Blomgren, Michael. "Stuttering Treatment for Adults: An Update on Contemporary Approaches." *Seminars in Speech and Language*, vol. 31, no. 04, 2010, pp. 272–282, https://doi.org/10.1055/s-0030-1265760.

ASHA. "Annual Demographic and Employment Data - American Speech-Language-Hearing Association 2022." *ASHA*, 2023, www.asha.org/siteassets/surveys/2022-member-affiliate-profile.pdf.

ASHA. "SLP-to-Population Ratio Rises Overall, Supply Varies by State." *ASHA*, 1 Apr. 2019, leader.pubs.asha.org/doi/10.1044/leader.AAG.24042019.28.

Bernardini, Simona, et al. "Communication Attitude of Italian Children Who Do and Do Not Stutter." *Journal of Communication Disorders*, vol. 42, no. 2, 2009, pp. 155–161, https://doi.org/10.1016/j.jcomdis.2008.10.003.

Blomgren, Michael. "Stuttering Treatment for Adults: An Update on Contemporary Approaches." *Seminars in Speech and Language*, vol. 31, no. 04, 2010, pp. 272–282, https://doi.org/10.1055/s-0030-1265760.

Bloodstein, Oliver, et al. "The Demography of Stuttering: Across the Lifespan, Communities, and Cultures." *A Handbook on Stuttering*, Plural Publishing, Incorporated, San Diego, 2021, pp. 41–84.

Bothe, Anne K., et al. "Stuttering Treatment Research 1970–2005: I. Systematic Review Incorporating Trial Quality Assessment of Behavioral, Cognitive, and Related Approaches." *American Journal of Speech-Language Pathology*, vol. 15, no. 4, 2006, pp. 321–341, https://doi.org/10.1044/1058-0360(2006/031).

Boyle, Michael P., et al. "A Comparison of Three Strategies for Reducing the Public Stigma Associated with Stuttering." *Journal of Fluency Disorders*, vol. 50, 2016, pp. 44–58, https://doi.org/10.1016/j.jfludis.2016.09.004.

Brady, Nancy C., et al. "Communication Services and Supports for Individuals with Severe Disabilities: Guidance for Assessment and Intervention." *American Journal on Intellectual and Developmental Disabilities*, vol. 121, no. 2, 2016, pp. 121–138, https://doi.org/10.1352/1944-7558-121.2.121.

Büchel, Christian, and Martin Sommer. "What Causes Stuttering?" *PLoS Biology*, vol. 2, no. 2, 2004, https://doi.org/10.1371/journal.pbio.0020046.

Choo, Ai Leen, et al. "Associations between Stuttering, Comorbid Conditions and Executive Function in Children: A Population-Based Study." *BMC Psychology*, vol. 8, no. 1, 2020, https://doi.org/10.1186/s40359-020-00481-7.

Cleveland Clinic medical. "Stuttering: What It Is, Causes, Treatment & Types." *Cleveland Clinic*, 14 Dec. 2022, my.clevelandclinic.org/health/diseases/14162-stuttering#:~:text=Developmental%20stuttering%20is%20always%20a,condition%20that%20begins%20during%20childhood.

De Nardo, Thales, et al. "Listener Perceptions of Stuttering and Stuttering Modification Techniques." *Journal of Fluency Disorders*, vol. 75, 2023, p. 105960, https://doi.org/10.1016/j.jfludis.2023.105960.

DeVeney, Shari L., et al. "Target Selection Considerations for Speech Sound Disorder Intervention in Schools." *Perspectives of the ASHA Special Interest Groups*, vol. 5, no. 6, 2020, pp. 1722–1734, https://doi.org/10.1044/2020_persp-20-00138.

DiLollo, Anthony, et al. "8 Talking Back to Stuttering: Constructivist Contributions to Stuttering Treatment." *The Free Library*, 1 Jan. 2008,

www.thefreelibrary.com/8+Talking+back+to+stuttering%3a+constructivist+contributions+to...-a0219520199.

Eagle, Christopher, and Jeffrey K. Johnson. "The Visualization of the Twisted Tongue: Portrayals of Stuttering in Film, Television, and Comic Books." *Literature, Speech Disorders, and Disability: Talking Normal*, Routledge, New York, NY, 2014, pp. 245–261.

Eggers, Kurt, et al. " Multicultural Commonalities in Stuttering and Intervention." *Clinical Cases in Dysfluency*, Routledge, Taylor & Francis Group, Abingdon, Oxon, 2023, pp. 89–95.

Goulart, Bárbara G., et al. "Multiculturality Skills, Health Care and Communication Disorders." *Cadernos de Saúde Pública*, vol. 34, no. 4, 2018, https://doi.org/10.1590/0102-311x00217217.

Guitar, Barry. Stuttering: An Integrated Approach to Its Nature and Treatment. Wolters Kluwer, 2019.

Healey, E. "What the Literature Tells Us about Listeners' Reactions to Stuttering: Implications for the Clinical Management of Stuttering." *Seminars in Speech and Language*, vol. 31, no. 04, 2010, pp. 227–235, https://doi.org/10.1055/s-0030-1265756.

Isaac, Kim M. Speech Pathology in Cultural and Linguistic Diversity. Whurr, 2006.

Justice, Laura M. "Evidence-Based Practice in Speech Language Pathology: Scaling Up." *South African Journal of Communication Disorders*, vol. 55, no. 1, 2008, pp. 7–12, https://doi.org/10.4102/sajcd.v55i1.740.

Kent, Louise Robison. "Carbon Dioxide Therapy as a Medical Treatment for Stuttering." *Journal of Speech and Hearing Disorders*, vol. 26, no. 3, 1961, pp. 268–271, https://doi.org/10.1044/jshd.2603.268.

Krishnan, Gopee, and Shivani Tiwari. "Differential Diagnosis in Developmental and Acquired Neurogenic Stuttering: Do Fluency-Enhancing Conditions Dissociate the Two?" *Journal of Neurolinguistics*, vol. 26, no. 2, 2013, pp. 252–257, https://doi.org/10.1016/j.jneuroling.2012.09.001.

Leadbeater, Claire, and Lia Litosseliti. "The Importance of Cultural Competence for Speech and Language Therapists." *Journal of Interactional Research in Communication Disorders*, vol. 5, no. 1, 2014, https://doi.org/10.1558/jircd.v5i1.1.

"LEGGE 11 Gennaio 2018, n. 3 ." *Gazzetta Ufficiale*, 15 Feb. 2018, www.gazzettaufficiale.it/eli/id/2018/1/31/18G00019/sg.

Levy, Gal. "Stuttering versus Cluttering – What's the Difference?" *ASHA Wire*, 2011, leader.pubs.asha.org/do/10.1044/stuttering-versus-cluttering-whats-the-difference/abs/.

Mayer, J., et al. "Speech-Language Pathology in England, France, and Italy." *OUHSC Allied Health*, 2020, alliedhealth.ouhsc.edu/Portals/1058/Assets/documents/ResearchDay2020/Emily%20Pollman%20Abstract.pdf?ver=2020-04-17-135424-663.

Onslow, Mark, and Sue O'Brian. "Management of Childhood Stuttering." *Journal of Paediatrics and Child Health*, vol. 49, no. 2, 2012, https://doi.org/10.1111/jpc.12034.

Polikowsky, Hannah G., et al. "Population-Based Genetic Effects for Developmental Stuttering." *Human Genetics and Genomics Advances*, vol. 3, no. 1, 2022, p. 100073, https://doi.org/10.1016/j.xhgg.2021.100073.

Proia, Lorenzo. "Con La Pandemia è Boom Di Richieste Di Riabilitazione Logopedica, Ma All'Appello Mancano 10 Mila Logopedisti." *Con La Pandemia è Boom Di Richieste Di Riabilitazione Logopedica, Ma All'appello Mancano 10 Mila Logopedisti - Quotidiano Sanità*, 22 Nov. 2021, www.quotidianosanita.it/lavoro-e-professioni/articolo.php?articolo_id=100230#:~:text=Nel%20nostro%20Paese%20ci%20sono,di%2040%20per%20100%20mila.

Roddam, Hazel, and Jemma Skeat. "What Does EBP Mean to Speech and Language Therapists?" *Embedding Evidence-Based Practice in Speech and Language Therapy*, 2010, pp. 9–15, https://doi.org/10.1002/9780470686584.ch2.

Simon, Eleanor L., and Kenneth O. St. Louis . "Public Attitudes toward Cluttering and Stuttering in Four Countries ." *Psychology of Stereotypes*, Nova Science Publishers, New York, 2011, pp. 81–105.

St. Louis, Kenneth O., et al. "Public Attitudes toward Stuttering in Europe: Within-Country and between-Country Comparisons." *Journal of Communication Disorders*, vol. 62, 2016, pp. 115–130, https://doi.org/10.1016/j.jcomdis.2016.05.010.

Stella, M., et al. "Inquiry on Stuttering in Italy: Characteristics of the Public Service (Regarding University Education and Health Care) and Characteristics of Logopedic Practice ." *2nd International Conference on Stuttering*, Jan. 2015, https://doi.org/https://www.researchgate.net/profile/Claudio-Zmarich/publication/313532896_Inquiry_on_Stuttering_in_Italy_Characteristics_of_the_ public_service_regarding_university_education_and_health_care_and_characteristics_of _logopedic_practice/links/589dac5492851c599c9bb36e/Inquiry-on-Stuttering-in-Italy-Characteristics-of-the-public-service-regarding-university-education-and-health-care-and-characteristics-of-logopedic-practice.pdf.

Tellis, Glen M., et al. "An Exploration of Clinicians Views about Assessment and Treatment of Stuttering." *Perspectives on Fluency and Fluency Disorders*, vol. 18, no. 1, 2008, pp. 16–23, https://doi.org/10.1044/ffd18.1.16.

TSRM PSTRP . "Logopedisti, Rossetto (CDA Nazionale): 'Aumentare Assistenza Domiciliare Integrata. Sei Macro Aree per Coinvolgere Le Cda Provinciali.'" *TSRM PSTRP Roma*, 25 Jan. 2021, www.tsrmpstrproma.it/logopedisti/2021/01/25/logopedisti-rossetto-cda-nazionale-aumentare-assistenza-domiciliare-integrata-sei-macro-aree-per-coinvolgere-le-cda-provinciali/.

Türkili, Seda, et al. "Mental Well-Being and Related Factors in Individuals with Stuttering." *Heliyon*, vol. 8, no. 9, 2022, https://doi.org/10.1016/j.heliyon.2022.e10446.

Yaruss, J.Scott, et al. "National Stuttering Association Members' Opinions about Stuttering Treatment." *Journal of Fluency Disorders*, vol. 27, no. 3, 2002, pp. 227–242, https://doi.org/10.1016/s0094-730x(02)00142-0.

Zahir, Mariyam Z., et al. "Optimising Existing Speech-Language Therapy Resources in an Underserved Community: A Study of the Maldives." *Journal of Communication Disorders*, vol. 93, 2021, p. 106136, https://doi.org/10.1016/j.jcomdis.2021.106136.

Üstün-Yavuz, Meryem S., et al. "Cultural Difference in Attitudes towards Stuttering among British, Arab and Chinese Students: Considering Home and Host Cultures." *International Journal of Language & Communication Disorders*, vol. 56, no. 3, 2021, pp. 609–619, https://doi.org/10.1111/1460-6984.12617.