Human Resource Management Review xxx (xxxx) xxx

Contents lists available at ScienceDirect

Human Resource Management Review

journal homepage: www.elsevier.com/locate/hrmr

Full Length Article

Stuttering: Stigma and perspectives of (dis)ability in organizational communication

Stephanie R. Seitz [a,*], Ai Leen Choo [b]

[a] California State University, East Bay Department of Management, 25800 Carlos Bee Blvd., Hayward, CA 94542, United States of America
[b] Georgia State University, Department of Communication Sciences and Disorders, 33 Gilmer St. SE, Atlanta, GA 30303, United States of America

ARTICLE INFO

Keywords:
Communication
Communication disorders
Stigma
Stuttering

ABSTRACT

There is a general consensus regarding the essential nature of effective communication in the workplace. However, in practice, there seems to be a narrow and specific definition of communication effectiveness that goes above and beyond the ability to deliver information. This perpetuates stigma surrounding communication disorders such as stuttering, and helps drive negative employment outcomes for those who stutter. In this paper, we develop a model of Stuttering Stigma in Organizational Communication (SSOC) in order to better understand the complexity surrounding communication, stuttering, and stigma. We discuss implications for organizations and strategies for stigma reduction.

Disabled people make up about 14–20% of the world population, however, research shows that those who are disabled are significantly less likely to participate in the workforce than typically abled people due to a number of barriers, including low rates of accommodation (Hogan, Kyaw-Myint, Harris, & Denronden, 2012). Those who do enter the workforce are often met with discrimination based on their disability; the patterns of mistreatment depend, in part, on the nature of the disability and how it is perceived by others (Graham, McMahon, Kim, Simpson, & McMahon, 2019). The communication disorder of stuttering, in particular, may be perceived as a disability and part of an identity (Plexico, Hamilton, Hawkins, & Erath, 2019), and as such is unique in its nature as an impairment.

Over 70 million people stutter worldwide (National Institutes of Health, 2019; The Stuttering Foundation, 2019a). As has been historically true for many marginalized groups, people who stutter (PWS) experience higher rates of unemployment or underemployment, despite having comparable knowledge, skills, and abilities as those who do not stutter (Gerlach, Totty, Subramanian, & Zebrowski, 2018; Opp, Hayden, & Cottrell, 1997). In order to begin to understand why this is the case, recent research has applied the notion of aesthetic labor to stuttering, noting that those who stutter often fail to meet the basic standard of "looking good and sounding right" (Butler, 2014, pg. 718). The way a person speaks has crucial social force (Gluszek & Dovidio, 2010), and the social capital in the workplace is of utmost importance to employment and career success (Seibert, Kraimer, & Liden, 2001). There is a clear consensus in the literature that stuttering is often met with stigma (Boyle, Dioguardi, & Pate, 2016; Dean & Medina, 2021), and that stuttering may lead to poor employment outcomes (Gerlach et al., 2018; Rice & Kroll, 2006), yet these streams of research continue to run parallel to one another without integration. Additionally, the Americans with Disabilities Act (ADA) dictates that employers may not discriminate on the basis of disability, including those that impede communication (such as stuttering; Gilman, 2011). As such, it is of increasing importance to organizations and Human Resources professionals to understand how stuttering stigma develops. Compliance with ADA

* Corresponding author.
E-mail addresses: stephanie.seitz@csueastbay.edu (S.R. Seitz), achoo1@gsu.edu (A.L. Choo).

https://doi.org/10.1016/j.hrmr.2021.100875
Received 24 October 2020; Received in revised form 27 September 2021; Accepted 5 October 2021

Please cite this article as: Stephanie R. Seitz, Ai Leen Choo, *Human Resource Management Review*, https://doi.org/10.1016/j.hrmr.2021.100875

depends, in part, on this understanding. In spite of the need for it, there is surprisingly little research (empirical or conceptual) on stuttering stigma as it operates in the workplace.

Potentially compounding the stigma that PWS face in the workplace, scholars across fields have converged on the importance of effective communication. "Interpersonal communication is the essence of organization" (Weick, 1987, pp. 97–98). It has been identified as an essential competency in the global workforce (Locker & Kaczmarek, 2001) - researchers have identified communication as essential for building connections within organizations and disseminating knowledge (Contractor & Monge, 2002). Practitioners also assert the importance of effective communication. For example, in a study of Silicon Valley employers, respondents expressed the desire that new hires have "stronger skills in public speaking, enhanced interpersonal skills, increased confidence, and improved interviewing skills" (Stevens, 2005, pg. 7). However, the insistence on a narrow definition of communication effectiveness in organizational members stigmatizes those with communication related disabilities, such as stuttering. Practical definitions of what is effective in communicating may be in contrast to a more objective interpretation of communication competence, defined simply as the "adequate ability to pass along or give information; the ability to make known by talking or writing" (McCroskey & McCroskey, 1988, pg. 109). Members of the workforce who are impacted by a communication disorder such as stuttering may be overlooked, underestimated, and discriminated against because of their diminished ability to engage in what many consider effective communication, even if they are able to otherwise pass along information. Thus, it is not surprising that members of the workforce who are unable to live up to the standards of effective communication face negative employment outcomes, and organizations may miss out on their abilities to contribute to positive organizational outcomes.

The primary purpose of this article is thus to explore the process by which stigma and negative attitudes develop in response to stuttering, with particular attention to the organizational context. In order to fulfill this purpose, we build on the work of Gluszek and Dovidio (2010) and adapt the Social Process Model of Language Attitudes (Cargile, Giles, Ryan, & Bradac, 1994) to present a model of Stuttering Stigma in Organizational Communication (SSOC). Since research on stuttering in the organizational context has not been conducted to a great degree, we intend to integrate research from multiple fields adjacent to stuttering and employment. In addressing the stigma associated with stuttering in organizational communication, this article seeks to offer a new perspective on communication and disability. The article is organized as follows: First is an overview of stuttering, stigma, and its impact on working adults. The sections following describe the language attitudes model, then present and apply the adapted SSOC model, extending the theory of the original to stuttering in organizational communication. Finally, the article discusses how organizations can reduce stigma and shift perspectives on disability.

1. Stuttering and stigma

1.1. Stuttering background

Stuttering is a neurodevelopmental disorder affecting communication in about 1% of the population (Bloodstein & Ratner, 2008). The disorder manifests as repetitions, prolongations and blocks, which may be accompanied by secondary behaviors such as blinking and head jerking (Ambrose and Yairi, 1999; Bloodstein & Ratner, 2008). Symptoms typically appear in early childhood (Yairi & Ambrose, 1992a, 1992b), and about 30% of affected children stutter into adulthood (Ambrose and Yairi, 1999; Månsson, 2000). Treatment is mainly behavioral and variably successful, however, there is growing emphasis on more holistic approaches to treating stuttering (Baxter et al., 2016; Brignell et al., 2020; Craig, 1998). Generally, treatments place enormous demands on PWS (e.g., speech restructuring where PWS are taught to modify their phonation intervals or slow down their speech to achieve fluency while also maintaining natural sounding speech; Brignell et al., 2020); reports of feeling overwhelmed by the daily effort required to manage, think about and control speech are common (Bothe, Davidow, Bramlett, & Ingham, 2006; Crichton-Smith, 2002).

1.2. Stigma, disability, and stuttering

The concept of stigma involves two components. First, the recognition of a characteristic regarded as different or undesirable, and second, devaluation (Dovidio, Major, & Crocker, 2000; Goffman, 1991). Goffman (1963) identified three factors that may trigger stigma: "1) abominations of the body (e.g., physical deformities, illnesses), (2) tribal stigma (e.g., race, religion, gender), and (3) blemishes of individual character" (Devers, Dewett, Mishina, & Belsito, 2009, pg. 157). Characteristics that are more visible, increase in conspicuity or debility over time, intrusive to interpersonal communication, considered unattractive, and perceived to be within the control of the individual or as contagious have greater potential for stigmatization (Dovidio et al., 2000; Jones et al., 1984). Because stigmas are socially constructed, they may change over time with popular opinion (Ragins, 2008).

Neither stigma nor communication disorders have received a great deal of attention within organizational research. However, stigma is highly relevant to organizations. "Stigmatized individuals are denied opportunities available to the non-stigmatized and are subject to discrimination that includes bullying, harassment, and social rejection. They may form negative self-identities that become self-fulfilling prophecies" (Paetzold, Dipboye, & Elsbach, 2008, pg. 187). Stigma additionally affects not only its direct victims in organizations, but under certain circumstances and involving certain disorders (e.g. perceived intellectual disability; Ali, Hassiotis, Strydom and King, 2012; Birenbaum, 1992), can also affect those who associate with them (Kulik, Bainbridge, & Cregan, 2008). The stigma that PWS face in their lives generally likely affects their employment experiences. This is especially true because stuttering may be seen within the workplace as a barrier to effective communication, and misunderstood as within the control of PWS.

Although the topics of communication disorders generally, and stuttering specifically, are rare in organizational research, there is a connection to existing organizational research on disability and stigma. McLaughlin, Bell, and Stringer (2004) characterized disability

stigma in terms of how others perceive the negative attributes or the predicted consequences of the disability, and how those perceptions and expectations deviate from the norm. They found that disability type affects employee acceptance via stigma, and that disabilities thought to affect performance had the strongest relationship with stigma and acceptance. Since oral communication has a general expectation of fluency (Council of Europe, 2021; McCarthy, 2009), stuttering may be perceived by coworkers as having an effect on performance for PWS who must communicate verbally during the course of their work, and PWS would thus experience stigma.

Other research has focused on the general treatment of disabled employees in organizations. Stone and Colella (1996) proposed a theoretical model detailing the factors that contribute to how others respond to disabled employees in the workplace, including interpersonal and career outcomes. Using this model as a framework, and building on other work including Dwertmann (2016) and Santuzzi, Waltz, Finkelstein, and Rupp (2014), Beatty, Baldridge, Boehm, Kulkarni, and Colella (2019) conducted a systematic review of empirical research on disabled individuals in the workplace. Their findings highlight the need for more specificity in disability research. In particular, the authors note that "treatment" is ill defined, in part because of the broadness of disability; disability is often treated as homogenous, and differences within the disabled population may be understated.

The literature is quite useful in understanding disability in the workplace generally, however, stuttering is a disability that is unique in its overlap with language and communication processes, and requires the specificity that has been called for by these disability researchers. Although stuttering shares some features with other disabilities, including other communication disorders, the disorder is unique in terms of how it is stigmatized, as well as the level of stigmatization experienced by affected individuals. For example, the use of stuttering to convey deception in the media, is not found for other communication disorders such as hearing loss (Johnson, 2008). The case of a woman who stutters being detained by U.S. customs and accused of lying and being dishonest after stuttering on a response highlights the real life consequences of these depictions and beliefs (Hutchins, 2016). Thus, we believe that stuttering must be viewed through a distinct lens to truly understand the level of stigma and the organizational support needed by the over 3 million people who stutter in the U.S. and 70 million worldwide. Additionally, unlike other communication disorders with clear epidemiology (e.g., aphasia resulting from stroke, or hearing disorders and deafness), the cause of stuttering is unclear (Büchel & Sommer, 2004). This in part may explain why it is perhaps one of the most misunderstood communication disorders. In the general population, stuttering is often attributed to stress, nervousness, or anxiety (e.g., Al-Khaledi et al., 2009; Boyle, 2017; St. Louis, 2012; Valente et al., 2014). This originates in generalizations made by those who do not stutter based on their personal experiences of disfluency during times of stress (MacKinnon, Hall, & MacIntyre, 2007). These stereotypes are exacerbated by depictions of stuttering in popular media. Within films, for instance, there are numerous examples of characters whose stutter is meant to be symbolic for weakness, and who subsequently lose their stutter when they finally gain their nerve (see, Johnson, 2008). In other words, the cause of stuttering is perceived to be within the control of the speaker, so the stigma surrounding stuttering may be distinguished from other types of communication disorders, and from the broader literature exploring disability stigma. As such, our exploration of the stigma process associated with stuttering includes the specific lens of language stigma - this exploration will begin to address the gaps and limitations identified by Beatty et al. (2019) and others.

One of the greatest challenges for PWS includes stigmatization within the workplace (Bricker-Katz, Lincoln, & Cumming, 2013; Mitchell, McMahon, & McKee, 2005; Plexico et al., 2019). The challenge exists because communication effectiveness in organizations

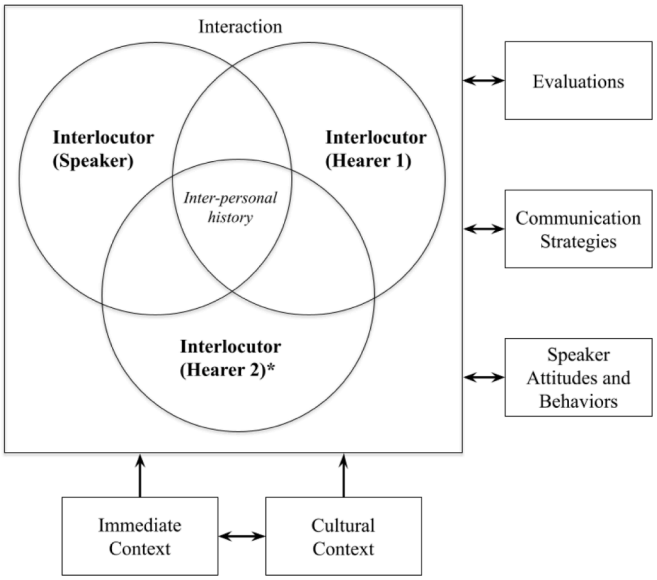

Fig. 1. Model of stuttering stigma in organizational communication.
*Note: Interactions involve two or more interlocutors, and the model may expand to include the number of interlocutor circles as present in any given interaction.

is highly valued, and work and achievements therein form occupational identity, which can be crucial to one's self-definition (Ashforth & Kreiner, 1999). Understanding the relevance of social identities such as race, gender and marginalized status may also reveal important contributors to the stigmatization of PWS in the workplace. The correlation between higher levels of stigma and lower earnings in women who stutter highlight the potential importance of social identities in the stigmatization of stuttering in the workplace (Gerlach et al., 2018). A framework that maps the various components involved in communication stigma will offer a vantage point from which to understand the process that leads to stigmatization, and will offer potential pathways to reduction and management of stuttering stigma in organizations (Fig. 1).

2. A model of Stuttering Stigma in Organizational Communication (SSOC)

In order to develop the SSOC model, this article adapts the language attitudes model, which refers to the development of attitudes related to language production as a social process and focuses primarily on pronunciation and language choice (Cargile et al., 1994). We build on the work of Gluszek and Dovidio (2010), who explored stigma associated with communicating in nonnative English, also using an adapted version of the language attitudes model. This particular application is highly relevant to stuttering because of its focus on perceptions of "deficient" communication due to factors outside of language ability and/or intelligence. The authors characterized accented language "as a manner of pronunciation with other linguistic levels of analysis (grammatical, syntactical, morphological, and lexical) more or less comparable with the standard language" (215). Stuttering is similarly defined not as a linguistic challenge (Nippold, 2018), but rather as a functional one, akin to a manner of pronunciation. As such, we theorize that the findings and theory related to accent stigma may be extended to stuttering stigma in organizational communication. We use a mode advocated by Zahra and Newey (2009) for theory-building at the intersection of fields (which is especially useful for novel avenues of exploration), where the application of theory to new phenomena extends both the original field and the one to which the theory is applied. In doing so, we build on a tradition of interdisciplinary theoretical application within the field of management (see, e.g. Agarwal and Hoetker, 2007; Hitt, Beamish, Jackson, & Mathieu, 2007). The following sections develop and describe the attributes of the SSOC model.

2.1. Elements of the interaction

Although the formation of stigma may occur without social process (for example, through film/television), this article considers the development and continuance of stigma as it occurs in an organizational context. As such, the interaction is an essential element. Within that interaction, there are two types of interlocutors (i.e., interaction members): Speaker and hearer.[1] The SSOC model overlaps factors and dynamics relating to the speaker and hearer(s) in order to present a theory that recognizes the complex nature of stigma within organizations. First, the characteristics of interlocutors often interrelate - that is, the interaction and its outcomes are affected by factors within interlocuters, both separately and in combination. Second, the stigma process is iterative, where interlocutors bring perceptions formed through numerous interactions (not necessarily with the current interlocutor), which forms actual or quasi-interpersonal histories. Finally, this allows for clear elements of time and experience, showing that interpersonal histories are essential to the process, and are also enmeshed with the characteristics of the interlocutors. The following sections begin with individual elements of speaker and hearer, followed by the ways they overlap.

2.1.1. Speaker

Two components constitute speaker performance: Language (the verbal output) and extra-linguistic phenomena (the non-verbal visual behaviors and features of the speaker; Cargile et al., 1994). For PWS, verbal output deviates in varying degrees from the expected depending on the frequency of stuttering. Greater deviation produces more discomfort, negative opinions and reactions from the listener (Panico, Healey, Brouwer, & Susca, 2005; Susca & Healey, 2002). Susca and Healey (2001) found that hearers judged PWS with higher rates of disfluencies as less competent. Hearers also judged speech with a higher frequency of stuttering, which could be accompanied by secondary behaviors, to be more unnatural (Martin & Haroldson, 1988). Perceptions of PWS with a higher frequency of stuttering are generally more negative compared to PWS who stutter mildly (Gabel, 2006; Panico et al., 2005). For normally fluent adult hearers, stuttering induced feelings of impatience, embarrassment and annoyance (Guntupalli, Erik Everhart, Kalinowski, Nanjundeswaran, & Saltuklaroglu, 2007; Manning, Burlison, & Thaxton, 1999; Panico et al., 2005). Given the current literature described above on disability stigma, it is likely that those who are perceived as having a higher frequency of stuttering will also be perceived as being less competent in the workplace (e.g. Susca & Healey, 2001).

2.1.2. Hearer

Although listening and hearing have been used interchangeably, these processes could be distinguished by the level of engagement. Whereas hearing refers to passive perception, listening suggests attention to and engagement with the speaker (Back, 2007). We use the term hearer as the level of engagement between interlocutors is unclear. Cognitive, affective, and behavioral attributes of the hearer, such as gender, age, and ethnicity, play key roles in shaping perceptions of the speaker (Cargile et al., 1994), and these factors are evident in the perceptions of PWS. For example, male hearers rated PWS lower on personality characteristics such as sincerity,

[1] This article refers to interlocutors as speaker and hearer. However, hearing may also include perceiving other elements of the communication, such as secondary behaviors (eg. eye blinking, head jerking, etc.). Additionally, speaker and hearer are not static roles, and alternate within any given interaction. However, this article focuses on PWS as speaker.

likeability, trustworthiness, decisiveness, reliability, employability and "physical normality" compared to female hearers (Burley & Rinaldi, 1986). Male hearers also reported less patience and more negative employment attitudes toward PWS compared to female hearers (St. Louis, 2005). Specific beliefs about the origin and controllability of stuttering also influenced interactions with PWS; those who believed that stuttering is a psychological disorder or a habit, or that symptoms could be controlled by the speaker reported less sympathy toward PWS, and greater social distance (Arnold & Li, 2016; Boyle, Blood, & Blood, 2009). These findings suggest that the process of stigma and beliefs about stuttering intersect with age, sex and culture of the hearer and speaker.

2.1.3. Speaker/hearer overlap

One way that speaker and hearer overlap is how their characteristics interplay within the interaction - neither speaker nor hearer characteristics exist in a vacuum. Attributes of the hearer are thought to influence the speaker's performance and actions, thus intertwining speaker/hearer dynamics (Cargile et al., 1994). PWS may adjust their behavior to accommodate the hearer by modifying verbal actions, which may be challenging because of linguistic and behavioral constraints. Relative to normally fluent speakers, PWS produce less verbal output and complex language, and utilize fewer politeness markers, which could lead to greater difficulty in adapting to social expectations (Packman, Hand, Cream, & Onslow, 2001; Spencer, Packman, Onslow, & Ferguson, 2009). These differences in verbal output and language use between PWS and their normally fluent peers may be a corollary of the stigmatization of stuttering, that is, avoidance or reduction of stuttering to protect from the social penalties associated with the disorder (Spencer et al., 2009). Additionally, the use of avoidance strategies to reduce stuttering may further restrict the ability of speakers to marshall linguistic resources to accommodate their hearer (Jackson, Yaruss, Quesal, Terranova, & Whalen, 2015).

Silverman (1982) found that hearer attributes intersect with speaker characteristics in shaping attitudes. First, perceptions varied as a function of the speaker's age. Younger female PWS were viewed more negatively than older female PWS although the reverse was true for male PWS (Silverman, 1982). Girls who stutter were viewed as naïve, pessimistic, aimless, insubstantial, sensitive and excitable, while women who stutter were viewed as masculine (Silverman, 1982). In contrast, boys who stutter were described as matured and skeptical, and men who stutter as excitable (Silverman, 1982). Second, perceptions of PWS across ages varied according to the age of the hearers. While older adults (i.e., speech-language pathologists) perceived older female PWS as boring and unsociable, younger adults (i.e., undergraduates) described older female PWS as rational (Silverman, 1982). Additionally, older adults described boys who stutter as sophisticated while younger adults viewed boys who stutter as pessimistic and passive (Silverman, 1982). In short, the likelihood of negative evaluations increased as the age gap between PWS and their hearers decreased. Reports from a more recent study by Byrd, McGill, Gkalitsiou, and Cappellini (2017) examining the intersection between gender and self-disclosure on perceptions of PWS are consistent with the gender-related findings in the Silverman (1982) study. Women who stutter are perceived as *less* friendly, outgoing, intelligent, confident, and more shy compared to men who stutter (Byrd et al., 2017). Further, although self-disclosing stuttering was found to improve the perceptions of men who stutter for these personality traits, self-disclosure did not improve the perceptions of women who stutter (Byrd et al., 2017). This finding is in agreement with previous reports of greater levels of prejudice toward women with a disability compared to their male counterparts (Coleman, Brunell, & Haugen, 2015), and suggests an intersection between stuttering stigma and marginalized status.

2.1.4. Interpersonal histories

Any interaction exists within the context of the interlocutors' social history and organizational history, and this is another way that speaker and hearer overlap. We conceptualize interpersonal history as actual history between the specific interlocutors, and also social history with others that may have similar characteristics (for example, basic characteristics such as age or gender, or communication characteristics, such as the instance of stuttering), the experience of which can shape the current interaction.

Cargile et al. (1994) offered the example of a hearer who holds a negative stereotype regarding the intelligence of those with Southern US accents. If the hearer knows a person with that accent who defies such stereotype, their social history allows the listener to make exceptions in attitude about that known person. This process happens because of the principle of uncertainty reduction (Berger & Bradac, 1982) - the purpose of stereotypes is to reduce uncertainty and increase predictability about others, but when a specific person is known to the hearer, there is less uncertainty to be reduced.

This idea is supported by the research on PWS interacting with known others. For people who have close relationships with PWS, negative stereotypes and stigma associated with stuttering are reduced (Klassen, 2001). Using an experimental study design, Boyle et al. (2016) found that contact with PWS, including learning about their history and struggles, significantly reduced perceived social distance, negative emotional reactions, stereotypes, and discriminatory intentions and increased perceptions of empowerment of PWS. For PWS, interpersonal history may shape their own attitudes and behaviors. For example, familiarity with the hearer has been found to impact rates of disfluencies; PWS may stutter less with friends or family compared to strangers (Martin & Haroldson, 1988).

2.2. Contextual elements

2.2.1. Immediate context

Evaluations may change depending on the immediate context in which language occurs. For example, slow, deliberate speech may be positively evaluated when conveying complex or highly technical information, such as in a university lecture, but may be negatively evaluated in an informal context such as a party (Cargile et al., 1994). For PWS, workplace interactions may be more negatively evaluated than social situations, where listeners have different expectations of the interaction.

The makeup of the social group in which communication occurs is also relevant (Clément & Noels, 1992). For example, evaluations of accents can shift depending on the majority membership of the group in which the language is produced, and based on perceptions

of in-group/out-group (Abrams and Hogg, 1987; Creber & Giles, 1983; Fuertes, Gottdiener, Martin, Gilbert, & Giles, 2012). So, too, may be the case for PWS who are speaking to other PWS. Stigma may be lower, and thus evaluations higher in situations where the listener understands and has empathy for the disfluency of the speaker.

Numerous factors related to social and communicative pressure have also been found to influence the rate of disfluencies in PWS (Mullen, 1986; Vanryckeghem, Matthews, & Xu, 2017). For example, audience size and the presence of authority figures increased rates of disfluencies in PWS (Armson, Foote, Witt, Kalinowski and Stuart, 1997; Kalinowski, Stuart, Wamsley, & Rastatter, 1999; Martin & Haroldson, 1988). In contrast, under conditions of lower communicative stress, such as speaking when alone or to children, PWS typically report reduced disfluencies (Andrews, Howie, Dozsa and Guitar, 1982; Bloodstein & Ratner, 2008). The hierarchical relationship between hearer and speaker within an organization may thus influence the interaction and resulting stigma. Spontaneous or conversational speech, which requires more linguistic resources than practiced speech, also elicits higher rates of disfluencies (Constantino, Leslie, Quesal, & Yaruss, 2016; Young, 1980). Thus, the context of a practiced presentation may be quite different for PWS than an impromptu meeting.

2.2.2. Cultural context

Perceptions of stuttering are centered on the deviance of verbal behaviors from the norm (Panico et al., 2005). This is readily observed and perpetuated in popular media (Evans & Williams, 2015; Johnson, 2008). Characters who stutter are depicted as socially, mentally, or morally flawed, and the disorder is caricatured and employed as a prop for humor, or to convey nervousness and deception (Eagle, 2013; Evans & Williams, 2015; Johnson, 2008; Jordan, 2017). Nonetheless, some media reports have been found to reduce stigma. For example, narratives about celebrities with major depressive disorder reduced the stigma surrounding the condition (Ferrari, 2016; Leung, 2019). Consequently, it is plausible that films such as the King's Speech and reports of celebrities who stutter in the media (e.g., Lee, 2015; Van Horn, 2019) may help reframe perceptions of stuttering. The national coverage of the U.S. elections and President Joe Biden have also renewed interest in the topic of stuttering (Azios, Irani, Rutland, Ratinaud, & Manchaiah, 2020). Media coverage of Biden and ensuing discussions related to the disorder, mostly in positive light (e.g., Sullivan & Brader, 2020; Taddonio, 2020), could help diversify and improve perceptions of PWS (Azios et al., 2020). Efforts by stuttering advocacy groups to educate the public about stuttering, including listing famous PWS on their websites, may help decrease the stigma surrounding stuttering (National Stuttering Association, 2019; The Stuttering Foundation, 2019b).

Greater societal acceptance of stuttering will have nontrivial consequences for how organizations and organizational members interact with PWS. Media depictions such as those described above prompt questions rather than scorn. As van Kraayenoord (2011) asserted, “With respect to stuttering, viewers of the film [The King's Speech] might begin to raise questions such as: What is stuttering? When does it emerge? Can one out-grow it? What is the relationship between thinking and speech? Who can assist individuals who stutter? What training and qualifications should they have? What techniques do they use? How effective are these techniques?” (pg. 104). Positive media portrayals and the resulting shift in societal acceptance of stuttering may thus mirror shifts that have taken place for other stigmatized groups in the workplace, such as LGBT employees (see, for example, Hossain, Atif, Ahmed, & Mia, 2020).

2.3. Outcomes

There are three categories of outcomes within the language attitudes model, all focusing on hearer attitudes and behaviors: evaluations, communication strategies, and other behaviors. This article also includes outcomes related to speaker attitudes and behavior.

2.3.1. Evaluations

“Language attitudes are intimately related to evaluations of a speaker performing a given language behavior” (Cargile et al., 1994: 223). From an early age, speech can have a profound impact on others' perceptions of the speaker, in terms of judgments of personality, social background, and academic ability, which can lead to behavior that confirms stereotypical expectations (Choy & Dodd, 1976; Giles & Billings, 2004). Stereotypes of stuttering are generally negative, and include shyness, insecurity, introversion, nervousness and fear (MacKinnon et al., 2007). These stereotypes are theorized to originate from a generalization of one's own experience of temporary disfluency - that is, because an average person might produce disfluencies during times of nervousness or anxiety, they believe PWS do so because they are, by nature, nervous or anxious (MacKinnon et al., 2007; White & Collins, 1984). In the employment setting, these biased evaluations begin at the first real contact – the interview. Researchers have found significant differences in evaluations of employability based on regional and non-standard accent in Britain (Giles, Wilson, & Conway, 1981), Australia (Seggie, Smith, & Hodgins, 1986) and the United States (Hopper & Williams, 1973). Likewise, given the research on the unemployment and under-employment of PWS, it is likely that evaluations of employability begin at the interview stage.

2.3.2. Communication strategies

The hearer may evoke different communication strategies based on speaker performance. Communication/Speech Accommodation Theory (CAT) posits that within a single interaction, interlocutors take cues from one another and adjust their communication accordingly (Gallois, Ogay, & Giles, 2005). “It originated in order to elucidate the cognitive and affective processes underlying speech convergence and divergence” (Thakerar, Giles, & Cheshire, 1982, p. 207). Since the origination of the theory, it has expanded to provide a basis theory underlying the exploration of mutual influences in communication (Giles, Mulac, Bradac, & Johnson, 1987). One example offered by Cargile et al. (1994) involved members of an ingroup (Welsh) hearing the accent of an outgroup member (English), and strengthening their own accent in response (Bourhis & Giles, 1977).

According to CAT, a hearer may thus alter how they would normally communicate based on observation of stuttering, which could, in turn, alter communication strategies employed by PWS. Novel and diverse communication strategies may emerge during interactions beyond what is expected and planned as interlocutors negotiate stuttering. For PWS, strategies may include devices to limit or conceal the production of disfluencies (e.g., slower speech rates, circumlocution) and tactics to manage the situation (e.g., humor) after the production of disfluencies (Dörnyei & Scott, 1997; Plexico, Manning, & Levitt, 2009). PWS may employ such strategies based on how the interlocutor reacts to stuttering. For example, if the interlocutor seems impatient, PWS may use circumlocution to avoid words that slow down their speech production.

PWS also report changes in communication from interlocutors once they hear a stutter. This may include attempting to finish sentences or phrases for the speaker (Klompas & Ross, 2004), or, worse, derision or mimicry (Corcoran & Stewart, 1998). In line with CAT, hearers may make attempts at convergence by speaking more slowly or even intentionally producing disfluencies to match the speech of PWS, or may attempt divergence to distance themselves from the speaker and their disability, such as speaking faster or rushing the speaker. Hearers with experience with stuttering may evoke past strategies perceived as successful when interacting with PWS. However, strategies perceived as successful by the hearer may not be regarded as such by the speaker, and vice versa.

2.3.3. Speaker attitudes and behaviors

Although Cargile et al. (1994) focused on the behavioral outcomes of the hearer, it is important to highlight the effect that these may have on the speaker. For PWS, stigma begins early, generally with the onset of disfluency. Adolescents and young adults report bullying, which has negative effects on self-esteem, life satisfaction, and optimism about the future (Blood & Blood, 2004; Blood et al., 2011). School-aged children who stutter, particularly girls, are six times more likely to have social anxiety disorder, and seven times more likely to have generalized anxiety disorder (Iverach et al., 2016). Higher levels of anxiety in PWS carried into adulthood may be related to their expectations of being evaluated negatively by others (Messenger, Onslow, Packman, & Menzies, 2004).

Adults who stutter anticipate stigmatization, resulting in fear of negative evaluation and other behaviors associated with stigmatization (Blood & Blood, 2016; Blumgart, Tran, & Craig, 2010). They are nine times less likely to ask questions in a group and 10 times less likely to interact in social gatherings than adults who do not stutter (Blumgart et al., 2010). Up to 80% of adults who stutter have social phobia, showing specific fears for situations where social appraisals are likely to arise (Blumgart et al., 2010; Messenger et al., 2004). The vast majority of adults who stutter report awareness of stigma surrounding stuttering, while about a third engage in self-stigmatization and stigma-consistent behavior (Boyle, 2013, 2015; Kalinowski, Lerman, & Watt, 1987). Self-stigmatization has been found to impact employment opportunities: about 75% of PWS believed that they would be better at their jobs if they did not stutter, and 27% declined a new job or promotion because of their stutter (Rice & Kroll, 2006).

Further, interactions with others help shape identity. “For people who stutter, constructing a positive identity can be very difficult, because of the effect that stuttering may have on communication and social interactions, and the scarcity of role models and peers who stutter” (Daniels & Gabel, 2004, pg. 201). Outcomes for PWS are the product of the series of interactions they have throughout their lives; each interaction experience builds on previous ones, producing outcomes that extend beyond a single interaction. Knowledge of the stereotypes formed during interactions can lead PWS to develop a fear of confirming those stereotypes (Stereotype Threat; Steele & Aronson, 1995), which may cause poor performance or self-selection to avoid or decline roles that require a significant amount of verbal communication (Klein & Hood, 2004; MacKinnon et al., 2007; Rice & Kroll, 1997).

3. Discussion

The SSOC model contributes to the literature in a number of ways. With this paper, we addressed an important but neglected area of communication disorders, specifically stuttering, in the workplace, by formulating a theoretical model that integrates research from the fields of stigma and language/communication into the organizational context. This allowed us to view the treatment of those with a fluency-based disorder in the workplace through the relevant lens of language and communication stigma. We also built on research that focuses on disability in the workplace by distinguishing how stigma uniquely develops in response to a disability affecting speech and communication, namely stuttering. This begins to answer the call by researchers to explore the treatment of disabled workers with more specificity. “Disability is a broad term, and HR practitioners need to consider how treatment may differ across disability types” (Beatty et al., 2019).

3.1. Theoretical implications

The SSOC model describes the process of stigma as it relates to stuttering in the workplace, including the factors influencing such stigma as well as behavioral and psychological outcomes. The theoretical implications of the SSOC model include its explanatory function for other behaviors associated with stuttering within organizational communication, its application to other communication disorders, and its extension to research on disability within organizations.

3.1.1. Application to other communication disorders

Although we developed the SSOC model to specifically address stigma associated with stuttering in organizations, it likely may be highly relevant to other forms of communication disorders. For example, stigma associated with hearing loss impacts one's acceptance of the impairment, decision to seek treatment, and use of hearing aids (Wallhagen, 2009). Negative perceptions (e.g., being “handicapped”) related to hearing loss and use of hearing aids are present in all age groups, although they are generally more pervasive in younger versus older adults (Erler & Garstecki, 2002; Gilhome-Herbst, 1983). In fact, working age adults reported greater stigma

related to hearing loss relative to older adults (Gilhome-Herbst, 1983), and cite acceptance, support and consideration from co-workers and society as crucial needs in their employment (Detaille, Haafkens, & van Dijk, 2003).

Any disorder affecting communication in the workplace is likely met with stigma, and the SSOC is likely to be applicable. We encourage this application by future researchers with expertise in other communication disorder disciplines in order to form a body of research, both conceptual and empirical, that provides a holistic perspective on stigma and communication. Information gathering and dissemination is a first step in dismantling the structural inequities that result from disability-related stigma. In the next section, we discuss how stigma builds and reinforces such structural inequities.

3.1.2. Stuttering stigma and abled organizations

Much has been written about the gendered nature of organizations (for example, Acker, 1990; Martin & Collinson, 2002; Williams, Muller, & Kilanski, 2012) as well as the gendered nature of communication in organizations (Ashcraft, 2000), and scholars are beginning to explore racial foundations (or, "Whiteness") of organizational communication (Ashcraft & Allen, 2003). However, although scholars have characterized disability as a core dimension of diversity in organizations (McLaughlin et al., 2004; Shore et al., 2009), its relevance to communication in organizations has been largely overlooked.

The social theory of disability links the experiences of similarly marginalized groups and posits that, rather than being neutral entities, organizations are "socially constructed realities that rest as much in the heads and minds of their members as they do in concrete sets of rules and relations" (Morgan, 1986, pg. 131). Referring to marginalized groups in organizations, Mumby and Stohl (1996) aptly asked, "How can we show from a communication perspective that what appears natural and normal about organizational practices is actually socially constructed and obscures other organizational possibilities?" (pg. 58). This article underscores organizational communication as having a foundation of ableness. The vast majority of work requires communication, and the greatest factor contributing to disability stigma is the perception of how that disability will affect work performance (McLaughlin et al., 2004). The practical notion of communication effectiveness (clear, articulate, appropriately rhythmic) is challenged by PWS, and although they may use the same linguistic structures as those who do not stutter, the extra time and apparent struggle involved with language production for PWS does not fit the standard or default notion of organizational member.

3.2. Organizational implications

Our theoretical model reveals that the social process of stuttering stigma involves more than the language performance of speakers, but also includes hearers (organizational members) and culture (organizational culture). Organizations thus have the responsibility to reduce stuttering stigma by altering the components of the model within their purview. Most of stuttering stigma reduction is currently the burden of PWS, who may choose disclosure, treatment, attempts to hide the disorder, or communication avoidance to ease their felt stigma. However, these "remedies" can be invasive, stressful, exhausting, and often not possible.

3.2.1. Changing the context of culture

Organizations have the most power in altering the social context in which their employees operate and communicate. Spataro (2005) characterized culture as a tool for successfully integrating workers with disabilities. If any change is to occur, however, it is important to note why organizations hesitate to hire candidates with disabilities: (1) Organizations do not understand the scope of the talent that is available (likely because they have limited knowledge on any particular disability); (2) they do not understand the potential benefits of hiring disabled employees; and (3) they do not correctly estimate the cost and/or ROI of disability inclusion (Accenture, 2018). Even when organizations consider disability accommodations, they often focus on physical access to the workplace, such as ramps for employees who use wheelchairs (Robinson, 2000). Barrier-free physical access to a workplace is indeed essential, but this is just a small subset of accommodations required for a truly inclusive environment. In order to overcome these challenges, organizations must begin thinking and operating differently when it comes to disability; it is not enough to espouse diversity as a value. If organizations can truly create cultures and environments of disability inclusion, they will gain access to an untapped, under-employed talent pool of nearly eleven million people (Accenture, 2018).

Some people stutter covertly due to a fear of discrimination or being stigmatized, employing strategies that reduce stuttering or their need to speak but may still be limited in their ability to perform duties of their job. Those who stutter covertly, may pass as "fluent" by using strategies such as avoidance of words, or situations where stuttering cannot be concealed (Constantino, Manning, & Nordstrom, 2017; Murphy, Quesal, & Gulker, 2007). It is often in the best interest of both the employer and employee for a disability to be disclosed. However, there is reasonable fear for employees that disclosure will result in negative outcomes (Ellison, Russinova, MacDonald-Wilson, & Lyass, 2003). The climate of inclusion shaped by employers, managers, and peers is critical to encouraging disclosure and allowing for the accommodations necessary for disabled employees to thrive (Von Schrader, Malzer, & Bruyere, 2014). Climate of inclusion has significant impact on outcomes for disabled employees (Dwerttman & Boehm, 2016; Zhu, Law, Sun, & Yang, 2019), thus changing the climate or culture in which interactions occur for PWS in an organization will likely improve outcomes as well.

For any stigmatized group in the workplace, the possibility of stigma and discrimination exists not only from internal organizational members, but from external sources as well, including customers (Bartlett & Gulati, 2016; Holzer & Ihlanfeldt, 1998). Customer interaction involves interlocutors over whom the organization has relatively less control. However, control still exists to some extent, and interactions between PWS employees and those external to the organization should still be considered within the organizational context. Although there is no legal prohibition of discrimination that targets customers specifically, there are ways that organizations may deal with this as a matter of public policy (Bartlett & Gulati, 2016; Wang, 2016). Bartlett and Gulati (2016), for example, proposed

that since firms already collect a substantial amount of data on their customers (in particular, large and well-resourced firms), they would be able to "structure the choices they give customers, influence their preferences and habits, and distribute the costs of discrimination that they are unable, or not required, to eliminate" (pg. 249).

3.2.2. Changing perspectives of hearers

There have been calls from scholars and disability advocates to change perspectives on disability (for example, promotion of the idea of neurodiversity; Kapp, Gillespie-Lynch, Sherman, & Hutman, 2013). Similarly, within stuttering advocacy, scholars have coined the term *transfluency*, which parallels the idea of demedicalization within neurodiversity and promotes stuttering as "manifestation of diversity in speech pattern, as being black, homosexual and left-handed are expressions of diversity in race, sexual orientation and hemispheric dominance" (Loriente, 2009, pg. 131). Constantino (2018) furthered this idea by explicitly linking Autism advocacy and neurodiversity with stuttering, proposing that PWS may benefit from adopting a similar concept. Jaarsma and Welin (2012) suggested adopting a narrow definition of neurodiversity that takes into account the extent to which the disability is socially constructed (i.e., if the disability is based, at least in part, in others' discomfort and phobia). If more information and knowledge about a condition such as stuttering would naturally make it less disabling, then to that extent we may view stuttering as identity. This puts the onus on the listener rather than the speaker who stutters to cope with the differences in communication.

There is evidence that contact with persons who stutter and familiarity with the disorder improves perceptions of PWS. Individuals who have family members, friends and colleagues who stutter report less negative stereotypical views of stuttering compared to the general public (Arnold & Li, 2016; Klassen, 2002), and their relationship quality (e.g., longer duration, greater depth and value of the relationship with a PWS) was correlated with their perceptions (Hughes, Gabel, & Palasil, 2017). These findings suggest that opportunities to engage with PWS may reduce negative perceptions. Organizations could facilitate this engagement amongst organizational members by providing incentives to learn more about stuttering including attending stuttering support groups (e.g., National Stuttering Association chapters). Further, organizations could acknowledge Stuttering Awareness Day (October 22) and engage speakers who stutter as part of a strategy to support diversity initiatives.

4. Conclusion

PWS face the challenge of stigma in the workplace. This is not only because of actual communication issues, but also because of the biases and assumptions held by those around them. The development of the SSOC model allows scholars to better understand stigma associated with stuttering because it explores the process of stigma in the context of organizational communication. This model identified a number of strategies that organizations may use to alter the model's components and reduce stigma. Organizations and managers can begin to educate themselves about the particulars of various disabilities, as well as understand that there are different ways of thinking about disability which may allow for heightened respect, dignity, and value for those who are considered disabled.

References

Abrams, D., & Hogg, M. A. (1987). Language attitudes, frames of reference, and social identity: A Scottish dimension. *Journal of Language and Social Psychology, 6*(3–4), 201–213.

Accenture. (2018). Getting to equal: The disability inclusion advantage. Retrieved from: https://www.accenture.com/t20181029T185446Z_w_/us-en/_acnmedia/PDF-89/Accenture-Disability-Inclusion-Research-Report.pdf.

Acker, J. (1990). Hierarchies, jobs, bodies: A theory of gendered organizations. *Gender & Society, 4*(2), 139–158.

Agarwal, R., & Hoetker, G. (2007). A Faustian bargain? The growth of management and its relationship with related disciplines. *Academy of Management Journal, 50*(6), 1304–1322.

Ali, A., Hassiotis, A., Strydom, A., & King, M. (2012). Self stigma in people with intellectual disabilities and courtesy stigma in family carers: A systematic review. *Research in Developmental Disabilities, 33*(6), 2122–2140.

Al-Khaledi, M., Lincoln, M., McCabe, P., Packman, A., & Alshatti, T. (2009). The attitudes, knowledge and beliefs of Arab parents in Kuwait about stuttering. *Journal of Fluency Disorders, 34*(1), 44–59.

Ambrose, N. G., & Yairi, E. (1999). Normative disfluency data for early childhood stuttering. *Journal of Speech, Language, and Hearing Research, 42*(4), 895–909.

Andrews, G., Howie, P. M., Dozsa, M., & Guitar, B. E. (1982). Stuttering: Speech pattern characteristics under fluency-inducing conditions. *Journal of Speech, Language, and Hearing Research, 25*(2), 208–216.

Armson, J., Foote, S., Witt, C., Kalinowski, J., & Stuart, A. (1997). Effect of frequency altered feedback and audience size on stuttering. *International Journal of Language & Communication Disorders, 32*(3), 359–366.

Arnold, H. S., & Li, J. (2016). Associations between beliefs about and reactions toward people who stutter. *Journal of Fluency Disorders, 47*, 27–37.

Ashcraft, K. L. (2000). Empowering "professional" relationships: Organizational communication meets feminist practice. *Management Communication Quarterly, 13*(3), 347–392.

Ashcraft, K. L., & Allen, B. J. (2003). The racial foundation of organizational communication. *Communication Theory, 13*(1), 5–38.

Ashforth, B. E., & Kreiner, G. E. (1999). "How can you do it?": Dirty work and the challenge of constructing a positive identity. *Academy of Management Review, 24*(3), 413–434.

Azios, M., Irani, F., Rutland, B., Ratinaud, P., & Manchaiah, V. (2020). Representation of stuttering in the United States newspaper media. *Journal of Consumer Health on the Internet, 24*(4), 329–345.

Back, L. (2007). *The art of listening*. Oxford: Berg.

Bartlett, K. T., & Gulati, M. (2016). Discrimination by customers. *Iowa L. Rev., 102*, 223.

Baxter, S., Johnson, M., Blank, L., Cantrell, A., Brumfitt, S., Enderby, P., & Goyder, E. (2016). Non-pharmacological treatments for stuttering in children and adults: a systematic review and evaluation of clinical effectiveness, and exploration of barriers to successful outcomes. *Health Technology Assessment, 20*(2), 1–302.

Beatty, J. E., Baldridge, D. C., Boehm, S. A., Kulkarni, M., & Colella, A. J. (2019). On the treatment of persons with disabilities in organizations: A review and research agenda. *Human Resource Management, 58*(2), 119–137.

Berger, C. R., & Bradac, J. J. (1982). *Language and social knowledge: Uncertainty in interpersonal relations* (Vol. 2). Hodder Education.

Birenbaum, A. (1992). Courtesy stigma revisited. *Mental Retardation, 30*(5), 265–268.

Blood, G. W., & Blood, I. M. (2016). Long-term consequences of childhood bullying in adults who stutter: Social anxiety, fear of negative evaluation, self-esteem, and satisfaction with life. *Journal of Fluency Disorders, 50*, 72–84.

Blood, G. W., Blood, I. M., Tramontana, G. M., Sylvia, A. J., Boyle, M. P., & Motzko, G. R. (2011). Self-reported experience of bullying of students who stutter: Relations with life satisfaction, life orientation, and self-esteem. *Perceptual and Motor Skills, 113*(2), 353–364.
Blood, G. W., & Blood, I. M. (2004). Bullying in adolescents who stutter: Communicative competence and self-esteem. *Contemporary Issues in Communication Science and Disorders, 31*, 69–79. Spring.
Bloodstein, O., & Ratner, N. (2008). *A handbook on stuttering*. New York: Thomson Delmar Learning.
Blumgart, E., Tran, Y., & Craig, A. (2010). Social anxiety disorder in adults who stutter. *Depression and Anxiety, 27*(7), 687–692.
Bothe, A. K., Davidow, J. H., Bramlett, R. E., & Ingham, R. J. (2006). Stuttering treatment research 1970-2013;2005: I. Systematic review incorporating trial quality assessment of behavioral, cognitive, and related approaches. *American Journal of Speech-Language Pathology, 15*(4), 321–341.
Bourhis, R. Y., & Giles, H. (1977). The language of intergroup distinctiveness. In H. Giles (Ed.), *Language, ethnicity and intergroup relations* (pp. 119–135). London: Academic.
Boyle, M. P. (2017). Personal perceptions and perceived public opinion about stuttering in the United States: Implications for anti-stigma campaigns. *American Journal of Speech-Language Pathology, 26*(3), 921–938.
Boyle, M. P. (2013). Assessment of stigma associated with stuttering: Development and evaluation of the self-stigma of stuttering scale (4S). *Journal of Speech, Language, and Hearing Research, 56*(5), 1517–1529.
Boyle, M. P. (2015). Identifying correlates of self-stigma in adults who stutter: Further establishing the construct validity of the Self-Stigma of Stuttering Scale (4S). *Journal of Fluency Disorders, 43*, 17–27.
Boyle, M. P., Blood, G. W., & Blood, I. M. (2009). Effects of perceived causality on perceptions of persons who stutter. *Journal of Fluency Disorders, 34*(3), 201–218.
Boyle, M. P., Dioguardi, L., & Pate, J. E. (2016). A comparison of three strategies for reducing the public stigma associated with stuttering. *Journal of Fluency Disorders, 50*, 44–58.
Bricker-Katz, G., Lincoln, M., & Cumming, S. (2013). Stuttering and work life: An interpretative phenomenological analysis. *Journal of Fluency Disorders, 38*(4), 342–355.
Brignell, A., Krahe, M., Downes, M., Kefalianos, E., Reilly, S., & Morgan, A. T. (2020). A systematic review of interventions for adults who stutter. *Journal of Fluency Disorders, 64*, 105766.
Büchel, C., & Sommer, M. (2004). What causes stuttering? *PLoS Biology, 2*(2), Article e46.
Burley, P. M., & Rinaldi, W. (1986). Effects of sex of listener and of stutterer on ratings of stuttering speakers. *Journal of Fluency Disorders, 11*(4), 329–333.
Butler, C. (2014). Wanted–straight talkers: Stammering and aesthetic labour. *Work, Employment and Society, 28*(5), 718–734.
Byrd, C. T., McGill, M., Gkalitsiou, Z., & Cappellini. (2017). The effects of self-disclosure on male and female perceptions of individuals who stutter. *American Journal of Speech-Language Pathology, 26*(1), 69–80.
Cargile, A. C., Giles, H., Ryan, E. B., & Bradac, J. J. (1994). Language attitudes as a social process: A conceptual model and new directions. *Language & Communication, 14*(3), 211–236.
Choy, S. J., & Dodd, D. H. (1976). Standard and nonstandard Hawaiian English-speaking children: Comprehension of both dialects and teacher's evaluations. *Journal of Educational Psychology, 68*(2), 184.
Clément, R., & Noels, K. A. (1992). Towards a situated approach to ethnolinguistic identity: The effects of status on individuals and groups. *Journal of Language and Social Psychology, 11*(4), 203–232.
Coleman, J. M., Brunell, A. B., & Haugen, I. M. (2015). Multiple forms of prejudice: How gender and disability stereotypes influence judgments of disabled women and men. *Current Psychology, 34*, 177–189.
Constantino, C. D. (2018). What can stutterers learn from the neurodiversity movement? *Seminars in Speech and Language, 39*(4), 382–396.
Constantino, C. D., Leslie, P., Quesal, R. W., & Yaruss, J. S. (2016). A preliminary investigation of daily variability of stuttering in adults. *Journal of Communication Disorders, 60*, 39–50.
Constantino, C. D., Manning, W. H., & Nordstrom, S. N. (2017). Rethinking covert stuttering. *Journal of Fluency Disorders, 53*, 26–40.
Contractor, N. S., & Monge, P. R. (2002). Managing knowledge networks. *Management Communication Quarterly, 16*(2), 249–258.
Corcoran, J. A., & Stewart, M. (1998). Stories of stuttering: A qualitative analysis of interview narratives. *Journal of Fluency Disorders, 23*(4), 247–264.
Council of Europe. (2021). Qualitative aspects of spoken language use. In *Common European framework of reference for languages*. https://www.coe.int/en/web/common-european-framework-reference-languages/table-3-cefr-3.3-common-reference-levels-qualitative-aspects-of-spoken-language-use.
Craig, A. (1998). Relapse following treatment for stuttering: A critical review and correlative data. *Journal of Fluency Disorders, 23*(1), 1–30.
Creber, C., & Giles, H. (1983). Social context and language attitudes: The role of formality-informality of the setting. *Language Sciences, 5*(2), 155–161.
Crichton-Smith, I. (2002). Communicating in the real world: Accounts from people who stammer. *Journal of Fluency Disorders, 27*(4), 333–352.
Daniels, D. E., & Gabel, R. M. (2004). The impact of stuttering on identity construction. *Topics in Language Disorders, 24*(3), 200–215.
Dean, L., & Medina, A. M. (2021). Stigma and the Hispanic stuttering experience: A qualitative study. *Journal of Communication Disorders, 89*, 106056.
Detaille, S. I., Haafkens, J. A., & van Dijk, F. (2003). What employees with rheumatoid arthritis, diabetes mellitus and hearing loss need to cope at work. *Scandinavian Journal of Work, Environment & Health, 29*(2), 134–142.
Devers, C. E., Dewett, T., Mishina, Y., & Belsito, C. A. (2009). A general theory of organizational stigma. *Organization Science, 20*(1), 154–171.
Dörnyei, Z., & Scott, M. L. (1997). Communication strategies in a second language: Definitions and taxonomies. *Language Learning, 47*(1), 173–210.
Dovidio, J. F., Major, B., & Crocker, J. (2000). Stigma: Introduction and overview. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, & J. G. Hull (Eds.), *The social psychology of stigma* (pp. 1–28). New York, NY, US: Guilford Press.
Dwertmann, D. J. (2016). Management research on disabilities: Examining methodological challenges and possible solutions. *International Journal of Human Resource Management, 27*(14), 1477–1509.
Dwertmann, D. J., & Boehm, S. A. (2016). Status matters: The asymmetric effects of supervisor–subordinate disability incongruence and climate for inclusion. *Academy of Management Journal, 59*(1), 44–64.
Eagle, C. (2013). *Dysfluencies: On speech disorders in modern literature*. Bloomsbury Publishing USA.
Ellison, M. L., Russinova, Z., MacDonald-Wilson, K. L., & Lyass, A. (2003). Patterns and correlates of workplace disclosure among professionals and managers with psychiatric conditions. *Journal of Vocational Rehabilitation, 18*(1), 3–13.
Erler, S. F., & Garstecki, D. C. (2002). Hearing loss- and hearing aid-related stigma. *American Journal of Audiology, 11*(2), 83–91.
Evans, J., & Williams, R. (2015). Stuttering in film media-investigation of a stereotype. *Procedia-Social and Behavioral Sciences, 193*, 337.
Ferrari, A. (2016). Using celebrities in abnormal psychology as teaching tools to decrease stigma and increase help seeking. *Teaching of Psychology, 43*(4), 329–333.
Fuertes, J. N., Gottdiener, W. H., Martin, H., Gilbert, T. C., & Giles, H. (2012). A meta-analysis of the effects of speakers' accents on interpersonal evaluations. *European Journal of Social Psychology, 42*(1), 120–133.
Gabel, R. M. (2006). Effects of stuttering severity and therapy involvement on attitudes towards people who stutter. *Journal of Fluency Disorders, 31*(3), 216–227.
Gallois, C., Ogay, T., & Giles, H. (2005). Communication accommodation theory: A look back and a look ahead. In W. B. Gudykunst (Ed.), *Theorizing about intercultural communication* (pp. 121–148). Sage.
Gerlach, H., Totty, E., Subramanian, A., & Zebrowski, P. (2018). Stuttering and labor market outcomes in the United States. *Journal of Speech, Language, and Hearing Research, 61*(7), 1649–1663.
Giles, H., & Billings, A. C. (2004). Assessing language attitudes: Speaker evaluation studies. *The Handbook of Applied Linguistics, 187*.
Giles, H., Mulac, A., Bradac, J. J., & Johnson, P. (1987). Speech accommodation theory: The first decade and beyond. In M. McLaughlin (Ed.), *Communication yearbook 10* (pp. 13–48). Newbury Park, CA: Sage.
Giles, H., Wilson, P., & Conway, A. (1981). Accent and lexical diversity as determinants of impression formation and perceived employment suitability. *Language Sciences, 3*(1), 91–103.
Gilhome-Herbst, H. K. (1983). Psycho-social consequences of disorders of hearing in the elderly. In R. Hinchcliffe (Ed.), *Hearing and balance in the elderly*. Churchill Livingstone.

Gilman, J. (2011). Disability or identity: Stuttering, employment discrimination, and the right to speak differently at work. *Brook. L. Rev., 77*, 1179.
Gluszek, A., & Dovidio, J. F. (2010). The way they speak: A social psychological perspective on the stigma of nonnative accents in communication. *Personality and Social Psychology Review, 14*(2), 214–237.
Goffman, E. (1963). *Stigma: Notes on the management of a spoiled identity*. New York: Simon & Schuster.
Goffman, E. (1991). Stigma and social identity. In T. L. Anderson (Ed.), *Understanding deviance: Connecting classical and contemporary perspectives* (pp. 256–265). New York: Routledge.
Graham, K. M., McMahon, B. T., Kim, J. H., Simpson, P., & McMahon, M. C. (2019). Patterns of workplace discrimination across broad categories of disability. *Rehabilitation Psychology, 64*(2), 194–202.
Guntupalli, V. K., Erik Everhart, D., Kalinowski, J., Nanjundeswaran, C., & Saltuklaroglu, T. (2007). Emotional and physiological responses of fluent listeners while watching the speech of adults who stutter. *International Journal of Language & Communication Disorders, 42*(2), 113–129.
Hitt, M. A., Beamish, P. W., Jackson, S. E., & Mathieu, J. E. (2007). Building theoretical and empirical bridges across levels: Multilevel research in management. *Academy of Management Journal, 50*(6), 1385–1399.
Hogan, A., Kyaw-Myint, S. M., Harris, D., & Denronden, H. (2012). Workforce participation barriers for people with disability. *International Journal of Disability Management, 7*, 1–9.
Holzer, H. J., & Ihlanfeldt, K. R. (1998). Customer discrimination and employment outcomes for minority workers. *The Quarterly Journal of Economics, 113*(3), 835–867.
Hopper, R., & Williams, F. (1973). Speech characteristics and employability. *Speech Monographs, 40*, 296–302.
Hossain, M., Atif, M., Ahmed, A., & Mia, L. (2020). Do LGBT workplace diversity policies create value for firms? *Journal of Business Ethics, 167*(4), 775–791.
Hughes, C. D., Gabel, R. M., & Palasil, S. T. (2017). Examining the relationship between perceptions of a known person who stutters and attitudes toward stuttering. *Canadian Journal of Speech-Language Pathology and Audiology, 41*(2), 237–252.
Hutchins, S. D. (2016). Woman with stutter detained by US customs. *Leader Live*. https://leader.pubs.asha.org/do/10.1044/woman-with-stutter-detained-by-u-s-customs/full.
Iverach, L., Jones, M., McLellan, L. F., Lyneham, H. J., Menzies, R. G., Onslow, M., & Rapee, R. M. (2016). Prevalence of anxiety disorders among children who stutter. *Journal of Fluency Disorders, 49*, 13–28.
Jaarsma, P., & Welin, S. (2012). Autism as a natural human variation: Reflections on the claims of the neurodiversity movement. *Health Care Analysis, 20*(1), 20–30.
Jackson, E. S., Yaruss, J. S., Quesal, R. W., Terranova, V., & Whalen, D. (2015). Responses of adults who stutter to the anticipation of stuttering. *Journal of Fluency Disorders, 45*, 38–51.
Johnson, J. K. (2008). The visualization of the twisted tongue: Portrayals of stuttering in film, television, and comic books. *The Journal of Popular Culture, 41*, 245–261.
Jones, E. E., Farina, A., Hastorf, A. H., Markus, H., Miller, D. T., & Scott, R. A. (1984). *Social stigma: The psychology of marked relationships*. New York: WH Freeman.
Jordan, J. P. (2017). The man with two faces: Stuttering characters and surprise. *The Journal of Popular Culture, 50*(4), 855–870.
Kalinowski, J. S., Lerman, J. W., & Watt, J. (1987). A preliminary examination of the perceptions of self and others in stutterers and nonstutterers. *Journal of Fluency Disorders, 12*(5), 317–331.
Kalinowski, J. S., Stuart, A., Wamsley, L., & Rastatter, M. P. (1999). Effects of monitoring condition and frequency-altered feedback on stuttering frequency. *Journal of Speech, Language, and Hearing Research, 42*(6), 1347–1354.
Kapp, S. K., Gillespie-Lynch, K., Sherman, L. E., & Hutman, T. (2013). Deficit, difference, or both? Autism and neurodiversity. *Developmental Psychology, 49*(1), 59.
Klassen, T. R. (2001). Perceptions of people who stutter: Re-assessing the negative stereotype. *Perceptual and Motor Skills, 92*(2), 551–559.
Klassen, T. R. (2002). Social Distance and the negative stereotype of people who stutter. *Journal of Speech-Language Pathology and Audiology, 26*(2), 90–99.
Klein, J. F., & Hood, S. B. (2004). The impact of stuttering on employment opportunities and job performance. *Journal of Fluency Disorders, 29*(4), 255–273.
Klompas, M., & Ross, E. (2004). Life experiences of people who stutter, and the perceived impact of stuttering on quality of life: Personal accounts of South African individuals. *Journal of Fluency Disorders, 29*(4), 275–305.
Kulik, C. T., Bainbridge, H. T., & Cregan, C. (2008). Known by the company we keep: Stigma-by-association effects in the workplace. *Academy of Management Review, 33*(1), 216–230.
Lee, A. (2015). Ed Ed Sheeran gives inspiring, irreverent speech on stuttering: "Embrace Your Weirdness". *The Hollywood Insider*. Retrieved from https://www.hollywoodreporter.com/news/ed-sheeran-stutter-speech-embrace-801170.
Leung, V. S. (2019). The disclosure of celebrity major depressive disorder diagnoses in Hong Kong: Its effects on public awareness and understanding toward the illness. *Community Mental Health Journal, 55*(1), 120–128.
Locker, K. O., & Kaczmarek, S. K. (2001). *Business communication: Building critical skills*. Boston: McGraw Hill-Irwin.
Loriente, C. (2009). The demedicalization of stuttering: Towards a notion of transfluency. *Journal of Stuttering Therapy, Advocacy, and Research, 3*, 131–139.
Louis, K. O. S. (2012). Male versus female attitudes toward stuttering. *Journal of communication disorders, 45*(3), 246–253.
MacKinnon, S. P., Hall, S., & MacIntyre, P. D. (2007). Origins of the stuttering stereotype: Stereotype formation through anchoring–adjustment. *Journal of Fluency Disorders, 32*(4), 297–309.
Manning, W. H., Burlison, A. E., & Thaxton, D. (1999). Listener response to stuttering modification techniques. *Journal of Fluency Disorders, 24*(4), 267–280.
Månsson, H. (2000). Childhood stuttering: Incidence and development. *Journal of Fluency Disorders, 25*(1), 47–57.
Martin, P. Y., & Collinson, D. (2002). Over the pond and across the water: Developing the field of gendered organizations. *Gender, Work and Organization, 9*(3), 244–265.
Martin, R. R., & Haroldson, S. K. (1988). An experimental increase in stuttering frequency. *Journal of Speech, Language, and Hearing Research, 31*(2), 272–274.
McCarthy, M. (2009). Rethinking spoken fluency. *EILA, 9*, 11–29.
McCroskey, J. C., & McCroskey, L. L. (1988). Self-report as an approach to measuring communication competence. *Communication Research Reports, 5*(2), 108–113.
McLaughlin, M. E., Bell, M. P., & Stringer, D. Y. (2004). Stigma and acceptance of persons with disabilities: Understudied aspects of workforce diversity. *Group & Organization Management, 29*(3), 302–333.
Messenger, M., Onslow, M., Packman, A., & Menzies, R. (2004). Social anxiety in stuttering: Measuring negative social expectancies. *Journal of Fluency Disorders, 29*(3), 201–212.
Mitchell, P. R., McMahon, B. T., & McKee, D. (2005). Speech impairment and workplace discrimination: The national EEOC ADA research project. *Journal of Vocational Rehabilitation, 23*(3), 163–169.
Morgan, G. (1986). *Images of organization*. Beverly Hills: Sage.
Mullen, B. (1986). Stuttering, audience size, and the other total ratio: A self-attention perspective. *Journal of Applied Social Psychology, 16*(2), 139–149.
Mumby, D. K., & Stohl, C. (1996). Disciplining organizational communication studies. *Management Communication Quarterly, 10*(1), 50–72.
Murphy, B., Quesal, R. W., & Gulker, H. (2007). Covert stuttering. *Perspectives on Fluency and Fluency Disorders, 17*(2), 4–9.
National Institutes of Health. (2019). Quick statistics about voice, speech and language. Retrieved from https://www.nidcd.nih.gov/health/statistics/quick-statistics-voice-speech-language.
National Stuttering Association. (2019). Mission statement. Retrieved from https://westutter.org/who-we-help/many-ways-employers-can-help-people-stutter/.
Nippold, M. (2018). Language development in children who stutter: A review of recent research. *International Journal of Speech-Language Pathology, 21*(4), 1–9.
Opp, K. L., Hayden, P. A., & Cottrell, G. T. (1997). Stuttering and employment: A survey report. Annual Convention of the American Speech, Language, and Hearing Association. *Boston*.
Packman, A., Hand, L., Cream, A., & Onslow, M. (2001). *An investigation of linguistic factors in the rhythm effect in stuttering*. Paper presented at the Speech motor control in normal and disordered speech. Proceedings of the 4th International Speech Motor Conference.
Paetzold, R. L., Dipboye, R. L., & Elsbach, K. D. (2008). Introduction to special topic forum: A new look at stigmatization in and of organizations. *Academy of Management Review, 33*(1), 186–193.

Panico, J., Healey, E. C., Brouwer, K., & Susca, M. (2005). Listener perceptions of stuttering across two presentation modes: A quantitative and qualitative approach. *Journal of Fluency Disorders, 30*(1), 65–85.
Plexico, L. W., Hamilton, M. B., Hawkins, H., & Erath, S. (2019). The influence of workplace discrimination and vigilance on job satisfaction with people who stutter. *Journal of Fluency Disorders, 62*, 105725.
Plexico, L. W., Manning, W. H., & Levitt, H. (2009). Coping responses by adults who stutter: Part I. Protecting the self and others. *Journal of Fluency Disorders, 34* (2009), 87–107.
Ragins, B. R. (2008). Disclosure disconnects: Antecedents and consequences of disclosing invisible stigmas across life domains. *Academy of Management Review, 33*(1), 194–215.
Rice, M., & Kroll, R. (1997). Workplace experiences of people who stutter. *Journal of Fluency Disorders, 2*(22), 140.
Rice, M., & Kroll, R. (2006). *The impact of stuttering at work: Challenges and discrimination*. Paper presented at the International Stuttering Awareness Day (Online Conference).
Robinson, J. E. (2000). Access to employment for people with disabilities: Findings of a consumer-led project. *Disability and Rehabilitation, 22*(5), 246–253.
Santuzzi, A. M., Waltz, P. R., Finkelstein, L. M., & Rupp, D. E. (2014). Invisible disabilities: Unique challenges for employees and organizations. *Industrial and Organizational Psychology, 7*(2), 204–219.
Seggie, I., Smith, N., & Hodgins, P. (1986). Evaluations of employment suitability based on accent alone: An Australian case study. *Language Sciences, 8*(2), 129–140.
Seibert, S. E., Kraimer, M. L., & Liden, R. C. (2001). A social capital theory of career success. *Academy of Management Journal, 44*(2), 219–237.
Shore, L. M., Chung-Herrera, B. G., Dean, M. A., Ehrhart, K. H., Jung, D. I., Randel, A. E., & Singh, G. (2009). Diversity in organizations: Where are we now and where are we going? *Human Resource Management Review, 19*(2), 117–133.
Silverman, E. M. (1982). Speech—Language clinicians' and university students' impressions of women and girls who stutter. *Journal of Fluency Disorders, 7*(4), 469–478.
Spataro, S. E. (2005). Diversity in context: How organizational culture shapes reactions to workers with disabilities and others who are demographically different. *Behavioral Sciences & the Law, 23*(1), 21–38.
Spencer, E., Packman, A., Onslow, M., & Ferguson, A. (2009). The effect of stuttering on communication: A preliminary investigation. *Clinical Linguistics & Phonetics, 23*(7), 473–488.
St. Louis, K. O. (2005). A global project to measure public attitudes about stuttering. *The ASHA Leader, 10*(14), 12–23.
Steele, C. M., & Aronson, J. (1995). Stereotype threat and the intellectual test performance of African Americans. *Journal of Personality and Social Psychology, 69*(5), 797–811.
Stevens, B. (2005). What communication skills do employers want? Silicon Valley recruiters respond. *Journal of Employment Counseling, 42*(1), 2–9.
Stone, D. L., & Colella, A. (1996). A model of factors affecting the treatment of disabled individuals in organizations. *Academy of Management Review, 21*(2), 352–401.
Sullivan, K., & Brader, E. (2020, February). *Biden opens up about stuttering and offers advice to young people who stutter*. CNN. https://www.cnn.com/2020/02/05/politics/joe-biden-stutter/index.html.
Susca, M., & Healey, E. C. (2001). Perceptions of simulated stuttering and fluency. *Journal of Speech, Language, and Hearing Research, 44*(1), 61–72.
Susca, M., & Healey, E. C. (2002). Listener perceptions along a fluency–disfluency continuum: A phenomenological analysis. *Journal of Fluency Disorders, 27*(2), 135–161.
Taddonio, P. (2020, September). *Biden's stutter: How a childhood battle shaped his approach to life & politics*. PBS Frontline. https://www.pbs.org/wgbh/frontline/article/bidens-stutter-how-a-childhood-battle-shaped-his-approach-to-life-and-politics/.
Thakerar, J. N., Giles, H., & Cheshire, J. (1982). Psychological and linguistic parameters of speech accommodation theory. *Advances in the Social Psychology of Language, 205*, 255.
The Stuttering Foundation. (2019a). Stuttering facts and information. Retrieved from https://www.stutteringhelp.org/faq.
The Stuttering Foundation. (2019b). Celebrity corner. Retrieved from https://westutter.org/who-we-help/many-ways-employers-can-help-people-stutter/.
Valente, A. R., Jesus, L., Leahy, M., & St Louis, K. O. (2014). *Attitudes and knowledge of the Portuguese population about stuttering. In European Symposium on Fluency Disorders*. Belgium: Antwerp.
van Kraayenoord, C. (2011). Movies and disability: Positive impact or harm?.. International Journal for Disability. *Development and Education, 58*(2), 103–106.
Van Horn, C. (2019). Emily blunt 'Mary Poppins' struggled with stuttering for years. *Celebrity Insider*. Retrieved from https://celebrityinsider.org/emily-blunt-mary-poppins-struggled-with-stuttering-for-years-192617/.
Vanryckeghem, M., Matthews, M., & Xu, P. (2017). Speech situation checklist–revised: Investigation with adults who do not stutter and treatment-seeking adults who stutter. *American Journal of Speech-Language Pathology, 26*(4), 1129–1140.
Von Schrader, S., Malzer, V., & Bruyere, S. (2014). Perspectives on disability disclosure: The importance of employer practices and workplace climate. *Employee Responsibilities and Rights Journal, 26*(4), 237–255.
Wallhagen, M. I. (2009). The stigma of hearing loss. *The Gerontologist, 50*(1), 66–75.
Wang, L. I. (2016). When the customer is king: Employment discrimination as customer service. *Va. J. Soc. Pol'y & L., 23*, 249.
Weick, K. E. (1987). Theorizing about organizational communication. *Handbook of Organizational Communication, 97*, 122–135.
White, P. A., & Collins, S. R. (1984). Stereotype formation by inference: A possible explanation for the "stutterer" stereotype. *Journal of Speech, Language, and Hearing Research, 27*(4), 567–570.
Williams, C. L., Muller, C., & Kilanski, K. (2012). Gendered organizations in the new economy. *Gender & Society, 26*(4), 549–573.
Yairi, E., & Ambrose, N. (1992a). A longitudinal study of stuttering in children: A preliminary report. *Journal of Speech, Language, and Hearing Research, 35*(4), 755–760.
Yairi, E., & Ambrose, N. (1992b). Onset of stuttering in preschool children: Selected factors. *Journal of Speech, Language, and Hearing Research, 35*(4), 782–788.
Young, M. A. (1980). Comparison of stuttering frequencies during reading and speaking. *Journal of Speech, Language, and Hearing Research, 23*(1), 216–217.
Zahra, S. A., & Newey, L. R. (2009). Maximizing the impact of organization science: Theory-building at the intersection of disciplines and/or fields. *Journal of Management Studies, 46*(6), 1059–1075.
Zhu, X., Law, K. S., Sun, C., & Yang, D. (2019). Thriving of employees with disabilities: The roles of job self-efficacy, inclusion, and team-learning climate. *Human Resource Management, 58*(1), 21–34.