The influence of active listening on parents' perceptions of clinical empathy in a stuttering assessment: A preliminary study

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Abstract

Purpose: The primary purpose of this preliminary study was to explore whether a clinician's use of active listening skills (i.e., client-directed eye gaze and paraphrasing) influenced parents' perceptions of clinical empathy in a stuttering assessment. A secondary purpose was to determine whether parent age, education, or parent concern predicted perceived clinical empathy.

Method: Participants (n = 51 parents/guardians of children who stutter) watched two counter-balanced videos of a clinician demonstrating either high or low frequency use of active listening skills during the clinician's initial assessment with a standardized patient actor portraying a parent of a child who stutters. After each video, parents rated the clinician's empathy and active listening skills via the *Jefferson Scale of Physician Empathy for Observers* (JSPEO; Hojat et al., 2017) and the *Counselor Activity Self-Efficacy Scales - Modified* (Victorino & Hinkle, 2018). Participants then completed a demographic questionnaire and rated their concern about their child's stuttering.

Results: Paired t-tests demonstrated significantly higher ratings of perceived clinical empathy in the high frequency active listening condition compared to the low frequency condition ($d =$ 0.548). Simple linear regression analyses indicated parent age or level of education did not predict perceived clinical empathy. An independent samples t-test indicated that parent concern about stuttering did not predict perceived clinical empathy.

Conclusions: Preliminary findings suggest that the clinician was viewed as significantly more understanding, concerned, and caring (i.e., perceived as empathic) when active listening skills were used. Parents' ratings of empathy on the JSPEO, based on high levels of active listening by the clinician, were not associated with parents' ages, education levels, or concern about their children's stuttering. This may reflect the value of active listening in clinical relationships regardless of variables specific to the recipient (e.g., parent of a child who stutters). Given that parents are more apt to share thoughts and emotions about their child's communication with clinicians who demonstrate empathic qualities, this preliminary study suggests that the use of active listening skills warrant emphasis in clinical training.

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Keywords

Stuttering; Assessment; Clinical empathy; Active listening; Counseling

1. Introduction

Parents of children who stutter often report feelings of guilt, worry, shame, and stress surrounding their child's communication (Berquez & Kelman, 2018; Langevin et al., 2010; Humeniuk & Tarkowski, 2016; Nonis et al., 2021). These feelings can stem from a variety of thoughts and experiences, such as beliefs that they caused their child's stuttering (Langevin et al., 2010), uncertainty regarding how to help their child (Plexico & Burrus, 2012), and feelings of discomfort when listening to their child stutter (Berquez & Kelman, 2018). Parents may also struggle with the variable nature of stuttering and fear how stuttering will affect their child in the future (Plexico & Burruss, 2012). When these parents meet with a speech and language pathologist, they may be discussing these thoughts and feelings for the first time. However, they will be less likely to feel comfortable if their clinician is lacking in clinical empathy (Derksen et al., 2013), which could ultimately influence stuttering assessment and treatment outcomes.

1.1. Conceptualizing clinical empathy

Empathy is broadly defined as the ability to connect with and understand others' perspectives on an intellectual and/or emotional level while consciously maintaining a boundary between self and other (Halpern, 2012; Hojat et al., 2001; Mercer & Reynolds, 2002; Rogers, 1951). *Clinical* empathy involves channeling this empathic process toward patients or clients in a clinical setting and can be further defined by three sub-types (Derksen et al., 2013; Mercer & Reynolds, 2002): cognitive (understanding another person's perspective), affective (resonating with others emotionally or "sharing" in emotional states), and behavioral (effectively communicating, verbally and nonverbally, that one understands the other person's perspective). Despite the ongoing debate regarding the relative roles of cognitive and affective empathy in the clinical setting (Decety et al., 2014; Halpern, 2012), researchers and clinicians alike agree that behavioral empathy is critical for increasing clients' perceptions that the clinician understands and cares about their needs (i.e., clinical empathy; Neumann et al., 2011; Olson, 1995; Pehrson et al., 2016). Ultimately, clients' perceptions of a clinician's empathy hold profound implications for improving the clinician-client relationship and for facilitating effective assessment and treatment (Ebert & Kohnert, 2010; Elliott et al., 2018; Plexico et al., 2010).

1.2. Active listening behaviors and perceived clinical empathy

Active listening is foundational to the therapeutic process and to building the client-clinician relationship, including the client's perception of clinical empathy, as it involves the clinician's intentional use of non-verbal and verbal behaviors to communicate unconditional positive regard (i.e., the clinician's consistent acceptance of the client regardless of their behavior), understanding, and empathy (Beck & Kulzer, 2018; Ivey & Ivey, 1999; Lieberman, 2018; Rogers, 1951). Non-verbal behaviors might include maintaining client-

directed eye gaze (i.e., looking at the client during conversation), a supportive facial expression (i.e., an expression that is engaged and attentive), and open body language (e.g., uncrossed arms and legs). Verbal behaviors might include paraphrasing (i.e., restating content, thoughts, or ideas that the client shared), reflecting feelings (i.e., verbally identifying the client's feelings), and/or summarizing client concerns. Collectively, these behaviors can significantly influence clients' perceptions of empathy and, ultimately, client outcomes.

In one study, Dowell and Berman (2013) utilized video vignettes to investigate the influence of eye gaze and trunk lean (i.e., forward leaning or upright posture) on undergraduate students' perceptions of therapist empathy, therapeutic alliance, and treatment credibility. After watching a randomized order of therapy session videos featuring four psychotherapists demonstrating four combinations of eye gaze and trunk lean, participants rated the therapists in the video on these qualities. Findings revealed that high percentages of eye gaze and forward trunk leaning predicted enhanced perceptions of therapist empathy, alliance, and treatment credibility.

In another study, controlled video vignettes were used to examine the effect of eye gaze and body orientation on perceptions of physician empathy among adult patients with unspecified diagnoses (Brugel et al., 2015). Results indicated that both types of non-verbal behaviors were strongly related to perceived empathy, with eye gaze demonstrating a stronger effect. Kraft-Todd et al. (2017) replicated these findings by identifying the influence of physicians' non-verbal behavior on perceived empathy and competence (Kraft-Todd et al., 2017). Adult participants were recruited through an online platform (n = 1177) and viewed photographs of "empathic" or "unempathic" physicians. In the "empathic" condition physicians displayed eye contact, open posture, and a concerned facial expression. In the "unempathic" condition physicians looked down, crossed their arms, and displayed an unsupportive facial expression. Physicians who used supportive non-verbal behaviors were rated as significantly more empathic and competent than physicians in the "unempathic" condition, suggesting that non-verbal behavior alone can significantly influence clients' perceptions of empathy.

The non-trivial influence of active listening skills on perceived clinician empathy has been replicated in the field of speech and language pathology. Thistle and McNaughton (2015) implemented an active listening strategy intervention to improve pre-service speech-language pathologists' (SLP) non-verbal (e.g., eye contact) and verbal (e.g., restating parent concerns) communication skills when interacting with parents of children who use augmentative and alternative communication devices. Results indicated significant improvements in participants' use of active listening skills, as well as more positive post-intervention ratings of the interaction from the parents' perspectives. Findings suggest that active listening skills can be acquired and trained, and that use of these skills when interacting with parents of a child with a communication disorder can enhance the therapeutic experience.

1.3.   The importance of clients' perceptions of clinical empathy

In studies conducted in medicine, pharmacy, dentistry, and nursing, investigators have demonstrated that clients' perceptions of clinical empathy predict increased treatment adherence, client disclosure, client trust, and client satisfaction (Decety et al., 2014; Halpern, 2012; Hojat et al., 2011; Kim et al., 2004; Larson & Yao, 2005; Neumann et al., 2011; Mercer et al., 2012; Roter et al., 1998). In a meta-analysis examining the relationship between perceived clinical empathy and client outcomes in psychotherapy, analyses of 82 independent samples and 6138 psychotherapy patients demonstrated a moderately strong effect of self, patient, and observer-rated empathy on client outcome, regardless of the therapeutic approach or presenting concern (Elliott et al., 2018). Perceptions of clinical empathy accounted for approximately 9% of the variance in therapy outcome, thus demonstrating its relevance to the therapeutic process.

Another study (Price et al., 2006) investigated the relationship between acupuncture patients' perceptions of clinician empathy at the initial consultation and patient enablement (i.e., a patient's ability to understand and cope with their diagnosis) and patient outcome. Findings revealed that perceived clinical empathy was significantly related to both enablement and changes in health outcomes eight weeks later. Thus, even the clinician's empathy during the initial consultation potentially influences subsequent coping responses and treatment outcomes.

Perceptions of clinical empathy are also central to the therapeutic alliance, defined as the collaborative, working relationship between the clinician and client (Cunico et al., 2012; Horvath et al., 2011; Plexico et al., 2010). Ratings of the alliance during the first three treatment sessions, by medical and psychotherapy patients, predict therapeutic outcomes (Kaptchuk et al., 2008; Malin & Pos, 2015; Tschuschke et al., 2020), highlighting the importance of establishing strong alliances right from the beginning of a client's therapeutic experience. For example, in an experimental study (Kaptchuk et al., 2008), patients with irritable bowel syndrome were randomly assigned to either an experimental or placebo condition, as well as a limited interaction or augmented relationship condition. In the limited interaction condition, the clinician administered treatment tasks and conversed minimally with the patient. In the augmented relationship condition, the clinician used active listening skills, including restatement of patient concerns, intentional silences, clarifying questions, and a "friendly manner" when interacting with the patient. Results indicated that patients in both the experimental and placebo conditions who engaged in the supportive interaction with the clinician at baseline exhibited significant post-treatment improvements in quality of life, symptom severity, and global measures of well-being compared to those in the limited interaction conditions. These findings further highlight the essential role of empathic communication for establishing relationships that improve client outcomes and suggest active listening as a potential method for influencing perceptions of clinical empathy.

1.4.   Demographic and clinical predictors of perceived clinical empathy

Previous research reveals mixed findings about how demographic and clinical factors contribute to clients' perceptions of clinical empathy (Al Onazi et al., 2011; Borracci et al., 2017; Elliott et al., 2011; Sisk et al., 2020). For example, client age and educational

attainment have been identified as significant predictors of perceived clinical empathy in some studies (e.g., Al Onazi, 2011; Borracci et al., 2017; Rakel et al., 2009), but not in others (e.g., Birhanu, 2012; Hojat et al., 2010). In Borracci et al.'s (2017) study, medical patients who were older and had completed fewer years of education perceived their physicians as having greater clinical empathy. Rakel et al. (2009) obtained similar findings with patients complaining of a common cold. Those who were older and had completed less education were significantly more likely to rate their physicians as more empathic than younger patients and those with more educational experience. In contrast, Hojat et al. (2010) and Matsuhisa et al. (2021) did not find significant influences of age on perceived physician empathy, and Birhanu et al. (2012) found no significant effects of age or educational attainment. Because of the mixed nature of these studies' outcomes, which could be attributed to the varied characteristics and types of populations and measurement methods used, it is important to examine demographic factors that may contribute to variations in clients' perceptions of clinical empathy in studied populations, including those who stutter. Doing so may provide a more refined understanding of how individuals perceive the sensitivity of their healthcare provider (i.e., perceived clinical empathy). Speech-language pathologists serve persons who stutter and their families across the lifespan and across varied levels of education (Richels et al., 2013; Yairi & Ambrose, 2005). Given the potential influence of these demographic factors on perceived clinical empathy as demonstrated in some studies (Borracci et al., 2017; Rakel et al., 2009), and the relationship between perceived clinical empathy and clinical outcomes (Elliott et al., 2011; Price et al., 2006), examining these demographic factors in relation to perceived clinical empathy among persons who stutter and their families is warranted.

Additional factors of particular salience to the present study that may influence perceptions of clinical empathy are clients' reports of concern or distress related to diagnosis, though these findings are also mixed (Borracci et al., 2017; Elliott et al., 2011; Groß et al., 2015; Muntigl, 2020; Rakel et al., 2009; Sisk et al., 2020). For example, studies conducted with individuals who have cancer, and their parents, suggest that patient concern is significantly related to perceptions of the physician's verbal and non-verbal behaviors (Groß et al., 2015) and receptiveness to the physician's empathic cues (Sisk et al., 2020). Some individuals with high levels of concern respond positively to clinicians' empathic responses as indicated by higher ratings of perceived clinical empathy, while others may retreat from expressions of understanding and, instead, seek distance and increased boundaries (Muntigl, 2020; Sisk et al., 2020). This potential relationship between patient concern and perceived clinical empathy was highlighted in a meta-analysis by Elliott et al. (2011), who investigated empathy (as measured by self, observer, and patient perspectives) and psychotherapeutic outcomes. One of the key clinical take-aways was the need to tailor responses to individual patients. For example, "certain fragile clients may find expressions of empathy too intrusive while hostile clients may find empathy too directive…Therapists therefore need to know when – and when not – to respond empathically" (p. 48). This point aligns with that of Muntigl (2020), emphasizing that, in the psychotherapeutic context, when "the therapist does not affiliate in the 'appropriate way' with the client's distress, tension and discord may arise in the relationship" (p. 2). Thus, by understanding how client concern relates to

perceived clinical empathy, clinicians can demonstrate empathy in a manner that best fits their clients.

In the context of stuttering, parental concern and perceived clinician empathy may be related. To the authors' knowledge, parental concern regarding their children's diagnosis has not been specifically investigated in relation to their perceptions of clinicians' empathy in stuttering assessment or treatment; however, given the central role of parents in the therapeutic process for young children who stutter (Humeniuk & Takowski, 2016; Langevin et al., 2010; Nonis et al., 2021; Plexico & Burrus, 2012), this relationship warrants investigation.

1.5. Clinical empathy in stuttering assessment

Anecdotal (e.g., Manning, 2004; Quesal, 2010) and empirical (e.g., Plexico et al., 2010) studies have long emphasized the importance of both being empathic and communicating empathically when working with people who stutter and their families. Clinicians who demonstrate patience, non-judgment, and care through their verbal and non-verbal behaviors are often perceived as more effective, trustworthy, and competent (Plexico et al., 2010), leading to stronger therapeutic alliances and enhanced treatment outcomes (Byrd et al., 2021; Croft & Watson, 2019; Ebert & Kohnert, 2010; Millard & Cook, 2010). Perceptions of clinical empathy are relevant when working with parents of children who stutter, who often experience challenging cognitive and affective reactions to their child's stuttering while simultaneously serving as key informants and partners in the assessment and treatment process (Humeniuk & Takowski, 2016; Langevin et al., 2010; Plexico & Burrus, 2012; Nonis et al., 2021). Parents' internal experiences are critical, as their thoughts and reactions can ultimately influence their children's communication attitudes, their own feelings of attachment, and how they interact with their children who stutter (Dehqan et al., 2008; Langevin et al., 2010; Lau et al., 2012). Each of these variables can influence pediatric treatment success as well as parents' own qualities of life. However, researchers have yet to investigate how parents of children who stutter perceive clinical empathy, or what specific clinician behaviors may increase perceptions of clinical empathy. Moreover, demographic predictors of perceived clinical empathy have yet to be explored.

1.6. Purpose

The present study is part of a series of investigations examining the effectiveness of Simulated Training in Evidence-Based Practice for Stuttering (STEPS), an online content and learning platform that the second author has developed to provide pre-service and practicing clinicians with innovative and interactive training to achieve best practices for preschoolers, school-age children, older adolescents who stutter, adults who stutter, as well as their families. Through STEPS, participants observe and analyze a variety of authentic clinical scenarios and make complex decisions in the absence of client risk, and instructors can utilize STEPS as a supplement to classroom instruction. An initial pilot study (Byrd et al., in press) investigated whether participation in STEPS improved pre-service SLPs' use of active listening skills when engaging in a diagnostic interview with a standardized patient parent of a child who stutters. Results indicated significantly increased use of client-directed eye gaze and paraphrasing when conducting a diagnostic interview.

The present study utilized pre and post-test videos from Byrd et al. (in press) to determine how parents of children who stutter perceive clinical empathy when a clinician uses a high versus low frequency of active listening skills, and to further determine the effectiveness of STEPS for improving clinical assessment in stuttering. Additionally, given that no previous studies have investigated clinical or demographic predictors of perceived clinical empathy among parents and caregivers of children who stutter, and because these factors could influence how empathy is perceived in the clinical setting (Borracci et al., 2017; Elliott et al., 2011; Muntigl, 2020; Rakel et al., 2009), a secondary purpose was to identify predictors of perceived clinical empathy in the context of a brief portion of a stuttering assessment. To achieve these objectives, we first identified whether a clinician's use of two specific active listening skills, one nonverbal (i.e., client-directed eye gaze) and one verbal (i.e., paraphrasing), influenced parents' perceptions of clinical empathy during one segment of a parent interview. These skills were selected due to their associations with perceived clinical empathy in other populations (e.g., Brugel et al., 2015; Kaptchuk et al., 2008), as well as their trainability among pre-service SLPs following brief intervention (Byrd et al., in press). Based on previous research, we hypothesized that the clinician's increased use of active listening skills would yield higher ratings of perceived clinical empathy by parents of children who stutter. Second, we determined whether demographic or clinical factors including parents' levels of education, age, or reported concern about their children's stuttering predicted perceived clinical empathy. Given the mixed findings regarding the potential influence of demographic and clinical factors on clients' perceptions of empathy, as well as the scarcity of research in the stuttering literature investigating the topic, we did not form an a priori hypothesis. Rather, we sought to discover whether specific demographic or clinical characteristics influenced parents' perceptions of clinical empathy. Results of this study inform the use of STEPS as a concrete method for improving parents' perceptions of clinical empathy in stuttering assessment. Further, this study is a step towards providing an enhanced understanding of factors that contribute to effective versus ineffective stuttering assessment and treatment (e.g., the influence of parents' perceptions of clinical empathy on pediatric outcomes in stuttering treatment), with implications for improving clinical training, enhancing the clinician-client alliance, and facilitating effective assessment and treatment.

2. Methods

2.1. Participants

Eligible participants included parents or guardians of children who stutter. Each participant self-identified as a parent or guardian of a child who stutters by answering "yes" to the following question: "Are you the parent or guardian of a child who currently stutters?" Participants who answered "no" were led to the end of the survey. For the purposes of the present study, all parent and guardian participants are referred to as "parents".

2.2. Recruitment

Participants were recruited by emailing clinic directors of speech-language pathology programs across the USA, SLPs from The Stuttering Foundation referrals list (The Stuttering Foundation, n.d., 2020), and SLPs from the authors' professional networks, and asking them to forward the recruitment letter to eligible participants, including parents or

guardians of children who stutter, independent of current enrollment in stuttering treatment. Thus, SLPs working in a variety of settings (e.g., university, school, private practice) were contacted. The recruitment letter outlined the general purpose of the study, the survey length, and noted that the survey contained audio and video stimuli.

2.3. Survey

2.3.1. Survey flow—All survey materials were presented via an online Qualtrics platform and closely resembled the procedure from Dowell and Berman (2013). The first two pages of the survey noted approval of the study from the university's Institutional Review Board and described informed consent procedures and participant eligibility. All eligible participants were then prompted to view a video featuring a clinical interaction between a clinician and a Standardized Patient actor portraying a Parent of a child who stutters (SP Parent). After viewing the video, parents completed two questionnaires: The *Jefferson Scale of Physician Empathy for Observers* (JSPEO; Mallory et al., 2020) and a modified version of *the Counselor Activity Self-Efficacy Scale* (CASES-M; Victorino & Hinkle, 2018). Next, parents watched a second video featuring a clinical interaction with the same clinician and again, completed the two questionnaires. These two videos were counter-balanced across participants to prevent an order effect. In the final survey section, parents provided demographic information.

2.3.2. Consent and eligibility—The informed consent document outlined the general purposes of the survey and procedures related to anonymity, risks and benefits, and the freedom to stop the survey at any time. Participants indicated consent by clicking the arrow at the bottom of the page. Next, participants indicated whether they were or were not the parent or guardian of a child who stutters. After confirming eligibility, participants were prompted to complete the rest of the survey.

2.3.3. Video stimuli—Prior to viewing the videos, parents were given the following instructions: "You will watch **two** videos of a clinician interviewing the parent of a child who stutters. After **each** video, you will complete two questionnaires regarding the clinician that you observed." The two videos reflected two, distinct experimental conditions: high and low frequency of active listening behaviors during a clinical interaction with the SP Parent.

2.4. Experimental conditions

2.4.1. Clinical scenario—Both experimental conditions featured an undergraduate student clinician interacting with a SP parent. To control for viewer bias, the same student clinician was featured in both the high and low active listening videos (See Clinician Description and Preparation). To control for parent behavior (e.g., familiarity with an SP parent) while providing the opportunity to view two, distinct clinical exchanges, each of the two videos featured a different standardized patient actor portraying the parent of a child who stutters, similar to Dowell and Berman (2013). Two SP Parents were depicted across the two conditions to provide participants with the experience of distinct clinical exchanges and to prevent "demand characteristics" (i.e., participants' awareness of the researchers' hypothesis or anticipated findings; McCambridge et al., 2012; Orne, 1962). Given that each participant viewed both videos in a repeated measures design, we anticipated that viewing

two videos with the same clinicians, same initial interview question, and same parent actor would decrease the ecological validity of the clinical scenario, as a clinician typically would not ask a parent the same interview question twice. Doing so could have increased participants' awareness of the expected study outcomes as they search for differences across the two videos. Across both conditions, the clinician entered the room, said "nice to meet you," and sat at the table. The clinician then asked, "What brings you in today?" This question was selected because it is typical of a diagnostic interview across healthcare settings, including with parents of children who stutter. To control for the potential influence of clinician-client interaction time on perceptions of clinical empathy, the interactions across conditions were equal in length, each lasting for a total of 62 s.

2.4.2.   High and low active listening frequency—Experimental conditions featured two active listening skills (client-directed eye gaze and paraphrasing) that are core to the perception of clinical empathy and to building a strong clinician-client alliance (Brugel et al., 2015; Dowell & Berman, 2013; Plexico et al., 2010). Client-directed eye gaze was defined as the clinician looking at the parent while the parent was talking (Brugel et al., 2015; Dijkstra et al., 2013). In the high active listening condition, the clinician engaged in client-directed eye gaze for 88% of the interaction (54.56 out of 62 s). In contrast, in the low active listening condition, the same clinician directed eye gaze toward the client for 40% of the interaction (24.80 out of 62 s). For the other 60% of the interaction in the low active listening condition, the clinician looked down at her clipboard as she wrote notes.

Paraphrasing was operationally defined as statements that "capture and clarify the speaker's meaning without judgment or distortion" by restating content as well as related thoughts or ideas (Nemec et al., 2017). This definition is similar to terms in the Motivational Interviewing literature, such as "reflecting content" and "reflecting affect" (Mcfarlane, 2012; Resnicow & McMaster, 2012), however, it also includes related thoughts and ideas. In the present study, the clinician paraphrased once in the 62-second high active listening condition. Specifically, after the parent's response to the opening question, the clinician restated the feeling and content of the parent's concerns by saying, "Okay, so you are worried about how this is affecting [your child] developmentally and socially." In the 62-second low active listening condition, the clinician did not paraphrase.

Across both experimental conditions, the clinician backchanneled (i.e., said "yeah" or "mhm" as the SP Parent was speaking) three times. Aside from smiling during the initial greeting (i.e., "nice to meet you"), the clinician maintained a neutral facial expression during both experimental conditions. Camera angles were consistent across videos, as both showed the clinician sitting at a table from the waist-up, holding a clipboard (see Section 2.4.6).

2.4.3.   Clinician description and preparation—The clinician featured in the video stimuli, a 21-year-old female, had participated in a different study evaluating the effectiveness of STEPS for enhancing student clinicians' counseling competence (Byrd et al., in press). The difference in the clinician's behavior in the high (e.g., increased use of eye gaze and one paraphrasing statement) and low (e.g., reduced eye gaze due to note-taking and no paraphrasing) active listening conditions reflected her authentic pre- and post-intervention behavior. Given the natural, yet notable difference in the clinician's use

of active listening skills in the two conditions, these videos were selected post-hoc for the present study. Thus, the clinician did not undergo additional preparatory training to play the role of the clinician. Prior to participation, the clinician consented to be video and audio recorded and signed a video release document.

2.4.4. SP parents—The SP Parents included two females, ages 22 and 35 at the time of the study. Both actors portrayed the role of a parent of a child who stutters. Both actors had extensive experience as standardized patients in the university medical school's Standardized Patient Program, an experiential learning program in which actors are trained to portray physical and emotional characteristics of real patients and family members to provide students with opportunities to practice clinical skills in simulated environments (E. O'Gara, personal communication, August 21, 2022). They also each demonstrated typical speech, language, vocal quality, and resonance as judged independently by three certified speech-language pathologists. Given that each SP Parent was depicted in only one of the two experimental videos, both actors underwent extensive training to calibrate verbal and non-verbal behavior and protect against the potential effects of either actor on observer perceptions and associated threats to internal validity.

2.4.5. SP parent training and script preparation—Prior to learning the scripts, the SP Parents viewed authentic clinical videos of parents of children who stutter (different from those used in the present study) and made observations about parent behavior. In each video, an actual parent of a child who stutters was shown answering questions in a diagnostic interview. The researchers highlighted the parent's verbal and non-verbal behavior such as response content, body position, facial expression, tone, and affect. The training objective was for the SP Parents to gain an accurate understanding of how parents and caregivers of children who stutter behave in a diagnostic, clinical interview so they also would demonstrate these behaviors in their respective acting roles.

Following this initial training session, each SP Parent was given a scripted response to the clinician's question, "What brings you in today?". The scripts were developed based on analyzing over 50 videos of initial interviews with parents of children who stutter, as well as the second author's 20+ years of experience working with people who stutter and their families. In both scripts, the SP Parent identified their presenting concern (i.e., child's stuttering) and expressed uncertainty regarding what to do. Each script contained four fillers (e.g., "um"). See the Appendix for the SP Parent transcripts.

The authors instructed the SP Parents to practice script delivery with the goal of reciting it naturally from memory. SP Parents also practiced their responses with pointed feedback from the researchers. Feedback centered on script accuracy, naturalness of delivery, and calibrating tone, affect, and speech rate across the SP Parents. For example, during the first practice session, one SP Parent appeared to be less worried about the child's stuttering than the other SP Parent. This actor was provided with feedback to adopt a more concerned tone. Both actors then practiced at home for one week before completing another practice session. During this session, both SP Parents practiced the standardized interaction with the first author, with a second, certified SLP with extensive clinical experience with parents of children who stutter who was not otherwise involved in the study, and with three

undergraduate student clinicians. The first author, the certified speech-language pathologist, and the student clinicians all reported that both SP Parents portrayed accurate, believable representations of parents of children who stutter and displayed similar tone and affect. These video-recorded practice sessions were then shown to the second author with 20+ years of experience working with people who stutter, who approved the SP Parent portrayals as accurate representations of parents of children who stutter. In the video stimuli used for the present study, each SP Parent spoke with a speech rate of 173 and 162 words per minute, respectively.

2.4.6.   Recording equipment and positioning—The videos were recorded using a Cannon Vixia HFM500 with a Sennheiser AVS Wireless Lavalier microphone. In both videos, the camera was positioned behind the actor's head with a focus on the student clinician. Thus, viewers saw the back of the actor's head with occasional views of the actor's profile. In contrast, viewers could see the student clinician sitting at a table from a frontal view, visible from the waist-up. This video angle was selected because it minimized the view of the SP Parent while allowing for observation of the clinician's verbal and non-verbal behaviors, thus reducing the potential effect of the SP Parent's appearance or facial expressions on observer perceptions.

2.5.   Measures

Two measures were selected for the present study to provide objective, third-person observer perceptions of clinical empathy including: 1) general perceptions of clinical empathy assessed through the *Jefferson Scale for Physician Empathy for Observers (JSPEO),* and 2) specific use of active listening skills, assessed using the *Counselor Activity Self-Efficacy Scales – Modified (CASES-M)*, respectively.

2.5.1.   Jefferson scale for physician empathy for observers (JSPEO)—After viewing each video, participants completed the JSPEO, a 5-item instrument designed to measure perceptions of clinician empathy and understanding from a third-person observer perspective (Mallory et al., 2020). The JSPEO was developed by Mallory et al. (2020) as a modified version of the *Jefferson Scale of Patient Perceptions of Physician Empathy*, a widely used and well-validated instrument that measures patients' perceptions of healthcare providers' empathy (Berg et al., 2011; Glaser et al., 2007; Kane et al., 2007; Hojat et al., 2018). The modified JSPEO was selected for the present study because of its strong psychometric properties and its intended use to assess empathy in a simulation-based encounter via video review (Mallory et al., 2020). Modified versions of this scale have also been used in other studies examining observers' perceptions of clinician empathy of different professionals (Brugel et al., 2015).

Responses are provided on a 7-point Likert scale (1 = completely disagree, 7 = completely agree) and then summed, with higher total scores reflecting greater perceived empathy and understanding. Items reflect an underlying, unidimensional construct of perceived clinical empathy, for example: "The clinician understands the patient's emotions, feelings, and concern"; "The clinician could view things from the patient's perspective (see things as they saw them)"; "The clinician seemed concerned about the patient and their family". In

the present study, the term "caregiver" was used instead of "patient", and the word "child" was used instead of "family" to more accurately reflect the clinical scenario depicted in the videos.

2.5.2. Counselor activity self-efficacy scales – modified (CASES-M)—
Participants also completed a modified version of the *Counselor Activity Self-Efficacy Scales* (CASES-M) after watching each clinical scenario. The original, unmodified CASES was developed by Lent et al. (2003) to assess counseling students' self-efficacy and was later modified by Victorino and Hinkle (2018) to reflect counseling competencies for speech-language pathologists. The full scale contains 35 items that reflect five subscales: Emotional Support Skills, Session Management Skills, Helping Skills: Insight, Helping Skills: Exploration, and Helping Skills: Action. Items across these subscales ask SLPs how confident they feel about using a variety of counseling skills effectively over the next week.

The CASES-M included several additional modifications for the purpose of the present study. First, item wording was modified to reflect a third-person observer perspective. Specifically, instructions were to "indicate the extent to which you agree that the clinician in the video demonstrated each of the behaviors below." Items described active listening behaviors, such as: "The clinician restated (repeated or rephrased what the caregiver said in a way that was succinct, concrete, and clear)". Second, only two of the original subscales (i.e., Helping Skills: Exploration, and Helping Skills: Action) were included in this study, yielding a total of 13 items. These items were selected because they most accurately reflected the active listening behaviors targeted across experimental conditions. Third, the original scale asks participants to provide responses using a 0–5 Likert scale (0 = I'm not familiar with that concept, 1 = Not at all confident, 5 = Completely confident). Given that participants were observing these skills in others, rather than providing ratings of themselves, response options were modified. Specifically, responses to the CASES-M items were provided on the same 0–5 Likert scale, but with the anchors, 0 = "Completely disagree" and 5 = "Completely agree". Ratings across the 13 items were then averaged for a total CASES-M score.

2.5.3. Survey pre-check—
Prior to distributing the survey to parents and caregivers of children who stutter, five parents of children who do not stutter were asked to complete the survey and assess survey flow, clarity, and time necessary for completion. Specific feedback was sought regarding wording and ease of understanding of the questionnaires, particularly the CASES-M, given that this scale was modified and adapted for the present study. Feedback indicated consistently high levels of clarity and understanding with no significant issues, indicating the survey was ready for dissemination.

2.5.4. Demographics—
In the final survey section, participants reported their children's ages and were asked, "Please rate the degree to which you are concerned about your child's stuttering" on a scale from 1 (Not at all concerned) to 7 (Extremely concerned), consistent with similar measures of parental concern about stuttering that have been used in previous research (e.g., Pellowski & Conture, 2002; Tumanova et al., 2018). Additionally, participants were asked to report their children's current or previous treatment status. In the final demographics section, participants reported their age, gender, race, ethnicity, and

years of education. In line with the research questions, two demographic variables, the participants' ages and levels of education, and parents' self-ratings of levels of concern about their children's stuttering were analyzed as possible predictors of perceived clinical empathy.

2.6. Statistical analyses

The assumption of normality was assessed through visual inspection of histograms and use of the Shapiro-Wilk test. To ensure that participants' ratings of perceived empathy were not influenced by the order in which the high and low competency videos were viewed, independent samples t-tests comparing perceived use of counseling skills (i.e., CASES-M) and perceived empathy (i.e., JSPEO) based on video order were conducted. Levene's test was run to assure homogeneity of variance across the dependent variables. Cronbach's alpha coefficients were calculated to determine reliability for the CASES-M and JSPEO-M.

To confirm that participants perceived significantly different clinician behavior across experimental conditions (i.e., CASES-M total score), the Wilcoxon Signed Rank Test compared participants' perceptions of active listening skills in the high and low active listening conditions. Additionally, the Wilcoxon Signed Rank Test was used to identify significant differences by CASES-M items across experimental conditions. Effect sizes were calculated by dividing the standardized Z by the square root of the number of matched pairs (n = 51) and interpreting according to Cohen's *r* (Cohen, 1988; Pallant, 2011), as utilized in previously published studies that calculate effect sizes for the Wilcoxon Signed Rank Test (e.g., Atabey & Topcu, 2018). Effect sizes of .10 were considered small, .30 were considered medium, and .50 were considered large (Cohen, 1988).

To determine whether the clinician's use of active listening skills influenced parents' perceptions of clinician empathy during a stuttering assessment, we conducted a paired samples t-test that compared perceived empathy ratings in the high and low active listening conditions as revealed by the JSPEO. Cohen's *d* was calculated for all significant *t*-values to obtain effect sizes. To identify the influence of perceived counseling skills and demographic variables on perceived clinician empathy, simple linear regression analyses examining the influence of participant level of education and participant age on perceived clinical empathy (JSPEO) were conducted. To determine whether parent concern predicted perceived clinical empathy, we split the sample into two groups: "high concern" and "low concern". The "high concern" group reflected parents' whose reported level of concern was above the sample's average level of 4.49 on the 1–7 scale. The "low concern" group consisted of parents whose reported level of concern was below 4.49. This method has been used in previous studies to establish "high" and "low" groups based on a given characteristic (DeCoster et al., 2011; Farrington & Loeber, 2006). T-tests were then conducted to identify whether parental concern influenced perceptions of clinical empathy, as measured by the JSPEO.

Prior to the study, power analyses were conducted in G* Power to determine a sufficient sample size (Faul et al., 2007). For the paired samples t-tests, we used an alpha level of 0.05, a power of 0.80, and an effect size of 0.37. This effect size was based on a preliminary data analysis with 15 participants. Results indicated a desired sample size of 47 participants. For the simple linear regression with one predictor, we used an alpha of 0.05, a power value

of .80, and a medium effect size of 0.25. Results indicated a desired sample size of 34 participants.

3.   Results

3.1.   Final participant pool

The final participant pool included 51 parents or guardians, ranging from 32–67 years old (*M*: 42.86, *SD*: 6.49), of children who stutter. This sample size exceeded the minimum number of participants as indicated by the power analyses. See Table 1 for additional participant demographics.

3.2.   Assumptions

JSPEO data were observed to be normally distributed on the basis of visual inspection of histograms and a non-significant *p*-value on the Shapiro-Wilk test ($p = 0.141$). Thus, parametric statistics subsequently were used to analyze JSPEO outcomes. A significant *p*-value on the Shapiro-Wilk test ($p = 0.001$) test suggested a non-normal distribution for the CASES-M data. Additionally, CASES-M items reflect an ordinal level of measurement. Given the inclusion of item-level analyses, non-parametric statistics were used to analyze CASES-M outcomes.

The Mann-Whitney U-test was used to compare differences between participants' perceptions of the clinician's counseling skills (CASES-M) based on the order in which the two high and low competency videos were viewed, yielding *p*-values of .161 and .168 for the high and low videos, respectively. An independent samples t-test was used to compare differences in participants' empathy ratings (JSPEO) based on video order, yielding *p*-values of .106 and .592 for the high and low active listening videos. These findings suggests that video-viewing order was not a likely source of bias in the present study. Levene's test demonstrated non-significant variances for the CASES-M across the high ($p = 0.949$) and low ($p = 0.807$) videos, as well as for the JSPEO across the high ($p = 0.758$) and low ($p = 0.628$) videos, thus satisfying the assumption of homogeneity of variances.

Cronbach alpha coefficients for the JSPEO-M for the high and low active listening videos were 0.90 and 0.95, respectively. The Cronbach alpha coefficients for the CASES-M for the high and low active listening videos were both 0.89, suggesting that these modified measures were highly reliable in the present study.

3.3.   Perceptions of clinical empathy across high and low active listening conditions (JSPEO)

Paired t-tests demonstrated significantly higher ratings of perceived clinician empathy in the high active listening condition (*M*: 20.73) compared to the low active listening condition (*M*: 16.10), $t(50) = 3.563$, $p = 0.001$, $d = 0.548$ (medium effect size) as indicated by responses to the JSPEO. See Table 2 for JSPEO ratings, including means, standard deviations, *p*-value, and effect size across the high and low active listening conditions.

3.4. Perceptions of counseling skills across high and low active listening conditions (CASES-M)

The Wilcoxon Signed Rank Test demonstrated that parents perceived the clinician using significantly different counseling skills across experimental conditions as indicated by CASES-M ratings across the high active listening (*M*: 2.24) and low active listening (*M*: 1.65) videos ($p < 0.000$, $r = 0.688$). This finding indicates that parents viewed the high and low competency conditions to be significantly different based on the clinician's use of active listening skills, the key experimental variable.

Wilcoxon Signed Rank tests using the CASES-M ratings revealed significant differences in the parents' perceptions of the clinician's use of restating ($p < 0.000$, $r = 0.792$), asking open questions ($p = 0.001$, $r = 0.453$), reflecting feelings ($p < 0.000$, $r = 0.682$), silence ($p = 0.001$, $r = 0.466$), and interpretations ($p = 0.001$, $r = 0.453$), as occurring more often in the high than in the low active listening condition. Parents did not perceive significant differences in the clinician's physical orientation towards the caregiver ($p = 0.083$), overall listening ($p = 0.021$), revealing of personal information ($p = 0.832$), pointing out discrepancies ($p = 0.793$), disclosing immediate feelings ($p = 0.944$), and giving direct guidance ($p = 0.784$) across the high and low active listening conditions. See Table 3 for medians, standard deviations, *p*-values, and effect sizes for itemized CASES-M scores.

3.5. Demographic and clinical predictors of perceived clinical empathy

Simple linear regression analyses indicated parents' levels of education did not predict perceived clinical empathy in the high active listening ($p = .884$) or low active listening ($p = 0.592$) conditions, as measured by the JSPEO. Additionally, parents' ages did not significantly predict perceived clinical empathy on the same measure in the high active listening ($p = 0.638$) or low active listening ($p = 0.388$) conditions. Independent samples t-tests indicated that parents' levels of concern about their children's stuttering did not significantly influence their ratings of the clinician's empathy (JSPEO) in the high active listening ($p = 0.968$) or low active listening ($p = 0.258$) conditions. Thus, these demographic and clinical factors did not seem to influence parents' perceptions of the clinician's empathy in the context of the opening phase of a parent interview within a stuttering assessment.

4. Discussion

The value of demonstrating empathy when working with people who stutter and their families is well documented (Ebert & Kohnert, 2010; Plexico et al., 2010; Humeniuk & Takowski, 2016; Lieberman, 2018; Manning, 2004; Quesal, 2010). Specific strategies for increasing methods for and related perceptions of clinical empathy when working with parents of children who stutter are explored for the first time in this study. Specifically, our purpose was to determine whether a clinician's use of (non)verbal active listening skills (i.e., eye gaze and paraphrasing) influenced parents' perceptions of clinical empathy during a parent interview for a stuttering assessment. We also examined selected demographic (i.e., age and education of parents) and clinical predictors (i.e., parents' levels of concern about their children's stuttering) in relation to perceived clinical empathy. Findings provide a first

step toward improving clinical practice and training and identifying the influence of clinical empathy on stuttering assessment and treatment outcomes.

4.1. The influence of eye gaze and paraphrasing on perceived clinical empathy

The present study revealed that the clinician was perceived as significantly more empathic in the high active listening condition than in the low active listening condition. Specifically, according to the items on the JSPEO, the clinician was perceived as more concerned, better able to view things from the SP Parent's perspective, better at understanding the SP Parent's thoughts and feelings, and being a more understanding healthcare provider. Results align with previous studies citing a strong relationship between use of active listening skills and perceived empathy (Will et al., 2016).

It is important to note that, generally, the concept of "active listening" can encompass a variety of verbal and non-verbal behaviors, such as client-directed eye gaze, open body posture, physical orientation, a gentle tone, and/or summarizing, paraphrasing, or restating the client's concerns. The present study manipulated only two of these behaviors in the high and low active listening conditions – client-directed eye gaze and paraphrasing – while controlling for other behaviors, and for video length. Given that each video lasted approximately one minute, the clinician paraphrased only once in the high active listening condition. Thus, results suggest that using these two active listening skills in unison, even within the first minute of a diagnostic interview conducted with an SP Parent, can significantly influence clients' perceptions of clinical empathy.

According to social interaction research, eye gaze is linked to perceptions of responsiveness or readiness to receive information (Burgoon et al., 1984; Murray et al., 2006; Reis et al., 2000). Specifically, individuals who use more eye gaze are rated as more responsive than those who use less eye gaze. Being perceived as responsive is particularly important in the clinical setting, as responsive behaviors communicate the clinician's readiness to receive and respond to the client's needs (Dowell & Berman, 2013). Importantly, previous studies were conducted in a Western cultural context, where eye gaze is typically maintained between speaker and listener across different communication settings (LaFrance & Mayo, 1978; McCarthy et al., 2006; Uono & Hietanen, 2015). The same is true for the present study where parents rated the clinician who used increased eye gaze as more empathic, reflecting readiness to listen to needs and concerns, which in turn, increases perceptions of clinical empathy. Perceptions of eye gaze as related to perceived clinical empathy might be different among other cultural groups. Generalization of these findings to other cultures should be limited to how positively or negatively eye gaze is interpreted within the cultural context (Gregory et al., 2020; Helou et al., 2022; Na & Lee, 2022).

Previous research also highlights why use of paraphrasing might have increased parents' ratings of clinical empathy. In one study conducted with career coaches and their clients, investigators showed that restating the client's message demonstrates an unbiased, unconditional acceptance of the client's experience, uniquely influencing clients' perceptions of empathy (Will et al., 2016). By restating the client's concerns without imposing one's own views, clinicians can communicate that they heard and understood the client, but are not judging them or interpreting their experiences (Carkhuff, 1972; Nemec et

al., 2017). Given the commonly reported feelings of guilt and self-judgment that parents of children who stutter may feel (Berquez & Kelman, 2018; Plexico & Burrus, 2012; Langevin et al., 2010), the use of paraphrasing may be beneficial for attending to parents' concerns while communicating a sense of non-judgment. Findings might suggest that when a clinician working with a parent of a child who stutters communicates understanding while suspending judgment, the parent perceives that the clinician better understands their thoughts, feelings, and experiences (i.e., perceived clinical empathy).

Interestingly, the low active listening condition in the present study featured a clinician looking down (i.e., reduced eye gaze) and taking notes. Taking notes could be viewed as another form of active listening and thus, lead to increased perceptions of clinical empathy (Price, 1991). Note-taking is also critical for information-gathering and clinical planning, and a key aspect of clinical development. Future studies should determine the influence of taking notes versus eye gaze and other non-verbal behaviors (e.g., nodding, hand gestures) on perceived clinical empathy to isolate the influence of this common and important clinical behavior.

4.2. The influence of demographic and clinical factors on perceived clinical empathy

Results from the present study indicated that parents' perceptions of clinical empathy did not depend on parents' ages, years of education, or reported levels of concern about their children's stuttering. Thus, regardless of these demographic and clinical characteristics, parents of children who stutter perceived the clinician as more understanding and concerned when client-directed eye gaze and paraphrasing were used. These findings reinforce previous studies reporting non-significant relationships between these factors and perceived clinical empathy (e.g., Birhanu, 2012; Hojat et al., 2010; Matsuhisa et al., 2021), but diverge from studies citing strong, predictive relationships (e.g., Al Onazi et al., 2011; Borracci et al., 2017; Muntigl, 2020; Rakel et al., 2009).

With regard to demographic predictors of perceived empathy, it is possible that the brevity and nature of the interaction (i.e., the first minute of a video-recorded, standardized clinical encounter) influenced the lack of an observed relationship between participants' ages, education levels, and perceived clinical empathy. Two studies that found significant relationships between these demographic factors and perceived clinical empathy (Borracci et al., 2017; Rakel et al., 2009) examined medical patients' perceptions of clinical empathy in the outpatient setting, where longer, first-hand interactions between the physician and patient had occurred. For example, in Rakel et al. (2009), participants completed their ratings of the physician's empathy after reporting a history of their illness (i.e., common cold), providing information about past medical history, engaging in a physical exam, and receiving a diagnosis from the physician. Thus, it is possible that the standardized clinical encounter depicted in the present study was not long or specific enough for participants' ages and levels of education to assert their influence on perceptions of clinical empathy. In the context of a stuttering assessment, this might mean that participants' ages and education levels are most relevant in longer interactions or at different points in the interaction, such as when parents are providing their children's speech and language histories or when speech-language pathologists are relaying a diagnosis of stuttering.

With regard to clinical factors, the present study did not find significant differences in perceived clinical empathy in relation to self-reported levels of parental concern about children's stuttering. Even with exploratory post-hoc analyses including only the most extreme ratings of parental concern (i.e., no neutral ratings of "4"), this null finding was maintained. Specifically, when the analysis included parental concern scores of "5" and greater and "3" and lower (n = 42 participants), p-values were .987 and .276 in the high and low active listening conditions, respectively. When parental concern scores were "6" and greater and "2" and lower (n = 27 participants), p-values were 0.992 and 0.273 in the high and low active listening conditions. However, given the reduced sample sizes in each post-hoc analysis, the influence of parental concern on perceived empathy should be investigated with a larger sample size with sufficient statistical power to confirm or disconfirm these findings. It is also possible that the relationship between parental concern and perceived clinical empathy was not captured due to the length of the experimental video (i.e., 62 s), and that longer exposures to clinician behavior are needed to reveal the relationship between concern and perceived empathy.

Overall, results from the present study are encouraging in that the positive influence of client-directed eye gaze and paraphrasing on perceived clinical empathy, behaviors linked to improved outcomes, does not seem to be specific to parents of a given age, educational level, or level of concern. Rather, using these active listening skills with parents of children who stutter, even across these demographic and clinical characteristics, could increase parents' perceptions that the clinician understands and cares about their concerns.

4.3. Implications for clinical practice and training

Given the study's use of two, experimental videos that were each 62 s in length, clinical implications relate most to clinicians' behavior in the first minute of a diagnostic interview with the parent of a child who stutters. Clinically, speech-language pathologists working with parents of children who stutter should be aware that ample use of client-directed eye gaze and paraphrasing in the initial minute of a diagnostic interview may increase parents' perceptions that the clinician understands and cares about their concerns. Considering the complex and often difficult feelings that parents of children who stutter might experience, including anxiety, guilt, and dissatisfaction with previous treatment experiences (Langevin et al., 2010), parents may uniquely benefit from the clinician's sense of engagement, readiness to receive information, and non-judgmental stance. Results of research with other populations (e.g., medical and psychotherapy patients) include that perception of increased empathy may positively affect the clinician-client interaction (Decety et al., 2014; Elliott et al., 2018; Mercer et al., 2012), such that the parent is more willing to disclose information and share thoughts, feelings, and experiences (Derksen et al., 2013). For example, it is possible that a parent of a child who stutters would provide a more comprehensive report related to factors surrounding stuttering onset, the child's experience of stuttering such as bullying, teasing, and emotional reactions to stuttering, and their own associated fears and concerns, when interacting with a clinician whom they perceive as empathic. Each of these factors has distinct implications for the persistence of stuttering, quality-of-life outcomes, and treatment efficacy (Byrd et al., 2021; Erickson & Block, 2013; Leech et al., 2017; Yairi & Ambrose, 2005).

Results from the present study hold promising implications for clinical training. Despite advances in coursework and competency-based training in the area of stuttering (Yaruss et al., 2017), SLPs continue to report alarmingly low levels of self-confidence and competence when working with people who stutter and their families (Coalson et al., 2016) as demonstrated by fear of using the word "stuttering" in diagnostic evaluations (Byrd et al., 2020). This lack of expertise can lead to adverse outcomes, including client (and parent) frustration and dissatisfaction (Manning, 2004; Yaruss & Quesal, 2002). As we work towards enhanced academic and clinical training in stuttering, we must consider additional skills such as active listening that complement and enhance SLPs' clinical practice. The use of active listening increases observers' perceptions of clinical empathy, as demonstrated by preliminary findings in the present study. Findings of additional research suggests these skills are trainable, even among individuals with minimal expertise (McNaughton et al., 2008; Nemec et al., 2017; Pehrson et al., 2016; Thistle & McNaughton, 2015). The present study provides empirical support for the use of STEPS, an accessible training platform available to users at no cost, as a viable method for improving active listening skills that foster improved perceptions of clinical empathy among parents of children who stutter (Byrd et al., in press).

Finally, demonstrating clinical empathy through use of active listening skills (i.e., behavioral empathy) should not undermine the value of experiencing cognitive or affective empathy, as each type of empathy plays a unique role in the therapeutic encounter. While behavioral empathy is visible to the client, both cognitive and affective empathy help guide critical clinical decisions and actions and should not be dismissed. As described in Elliott et al. (2011), behavioral empathy in the absence of genuineness is ineffective; rather, demonstrations of empathy and understanding must also be accompanied by authentic caring in order to achieve maximum clinical effectiveness.

4.4.   Additional considerations and future directions

The present, preliminary study should be interpreted with the following considerations related to study aims, population, and methods. This study reflects a first step towards understanding how clinical empathy is communicated and perceived in the clinical setting. We do not yet know how perceived clinical empathy influences outcomes in stuttering treatment, including client retention, treatment adherence, and client satisfaction. Investigating the relationship between perceived empathy and client outcomes is an important future research direction that will lead to a better understanding of how a clinician's use of empathic communication skills, such as active listening, influence stuttering assessment and treatment effectiveness. It is also worth investigating how clinicians working with persons who stutter and their families can cultivate empathy, and the nature of relationships between self-reported empathy, active listening behaviors, and perceived clinical empathy.

The sample in the present study was rather homogeneous regarding race, ethnicity, gender, and each participant's specific relationship to the child beyond identifying as a parent or guardian. These characteristics and/or the participant's type of relationship to the child may influence how understood or misunderstood clients feel in healthcare settings (Ishikawa

et al., 2006; Larson & Yao, 2005; Prout & Wadkins, 2014). Thus, replications of the present study with more diverse samples and across different cultures, and collection of additional participant demographics (e.g., relationship to the child) are needed. It would also be worthwhile to investigate the influence of other relevant factors that could influence perceptions of empathy, such as the participant's emotional intelligence (Ioannidu & Konstatikaki, 2008), self-stigma, anxiety, self-efficacy (Yang et al., 2018), or history of stuttering.

In light of recent research suggesting that perceptions of clinical empathy vary across context (e.g., receiving a prognosis versus discussions of general distress), future studies might also determine how perceived clinical empathy varies according to clinical situation (Nazione et al., 2020). For example, researchers could examine how clinical empathy is perceived across a variety of indirect and direct stuttering treatment tasks. The present study investigated parents' perceptions of empathy after viewing a 62-second, standardized clinical encounter with only one paraphrased statement. While previous research suggests that observer judgments following brief exposures to behavior (e.g., under half a minute) may be as accurate as longer exposures to behavior (Ambady & Rosenthal, 1992), understanding parents' perceptions of empathy following longer exposures to the clinician's behavior, including increased use of paraphrasing both in the initial assessment and throughout the therapeutic process (e.g., after engaging in treatment for a given period of time) warrants further study. Further, the present study assessed perceived empathy from an observer perspective; future studies should assess perceived clinical empathy in first-person contexts to assess the degree of alignment or divergence.

It is also critical to consider that the experimental conditions in the present study presented two active listening behaviors: client-directed eye gaze and paraphrasing. Given that the clinician demonstrated both or neither of these behaviors in the high and low active listening conditions, we cannot determine which behavior, if either, was more effective in influencing parents' perceptions of clinical empathy, suggesting the need to examine individual variables more closely. Additionally, two actors portrayed the role of a parent of a child who stutters across two, distinct experimental conditions (high and low frequency use of clinician active listening). The use of two actors allowed participants to view two, distinct experimental scenarios. To minimize potential differences, both actors engaged in multi-step training to calibrate verbal and non-verbal behaviors, and the camera was positioned to focus on the clinician, thus minimizing the view of the SP Parent actor. However, it is possible that participants were influenced by subtle differences across the SP Parents, suggesting a need for future studies to investigate perceived clinical empathy while controlling for the SP Parent across conditions and/or to present a variety of videos with different clinicians and parents in a randomized order.

5. Conclusion

Parents of children who stutter often report difficult and complex reactions to their child's stuttering. The purpose of this study was to determine the influence of a clinician's use of active listening skills in a stuttering assessment on parents' perceptions of clinical empathy and to identify demographic and clinical predictors of perceived clinical empathy.

Results indicated that parents of children who stutter viewed the clinician as significantly more understanding, concerned, and caring when active listening behaviors were used more rather than less often. Specifically, the clinician's use of client-directed eye gaze and paraphrasing increased parents' perceptions of clinical empathy. Additionally, results revealed that parent age, years of education, or self-reported concern did not predict perceptions of clinical empathy in a brief encounter, suggesting that parents with varying levels of these demographic and clinical characteristics may benefit from the clinician's initial demonstration of empathy. In the clinical setting, SLPs should consider using active listening skills to communicate a sense of understanding and concern to parents of children who stutter, as doing so could build a strong foundation for the therapeutic alliance. Furthermore, results suggest that the active listening skills, strengthened through participation in STEPS (Byrd et al., in press), positively influence parents' perceptions of empathy, contributing to the development of effective clinical training methods and enhanced effectiveness in stuttering assessment and treatment.

Acknowledgments

Funding statement

Appendix

Standardized Patient Parent Transcripts

Low active listening transcript:

Um, so my son Jack is four and he started stuttering about five-six months ago. Um, at first I thought it was normal because he has an older brother who did the same thing, but Jack's stuttering hasn't really gone away and he's starting to get upset. Like if his brother, you know, interrupts him while he's trying to say something, Jack will get really frustrated – he'll go up into his room and refuse to talk for a little bit. And when I brought all of this up to the pediatrician, he suggested that, you know, we kind of just wait and see…he said that he would probably outgrow it, but it just doesn't seem like he has…this was different than what I saw with his brother, so I guess that's why I'm here.

High active listening transcript:

Um, well specifically my son, Ryan, and his stuttering. Um, we have already noticed that he's kind of a shy person. So I'm concerned that – he is such a smart kid and he has a lot to say and when he's confident, he's very talkative and a lot of the things that he says are

just so bright. He's such a bright kid. So, with his stuttering, I'm really concerned that he's not reaching his full potential, or that, um, there's something more I could be doing to help. That's my biggest concern, especially with his interaction with the other kids at school. You know, I'm just worried that this will affect him later in life and I just don't know what to do.

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Table 1

Participant demographics (n = 51 parents/guardians of children who stutter).

Variable		
n		**51**
Participant age, *M* (SD; range)		42.86 (6.48; 32–67)
Participant's child's age, *M* (SD; range)		10.94 (3.98; 4–23)
Participant years of education, *M* (SD; range)		17.38 (2.01; 14–22)
Participant level of concern, *M* (SD; range)		4.49 (1.9; 1–7)
Participant gender	Females	43 (84%)
	Males	5 (10%)
	No response	3 (6%)
Participant race	White	44 (86%)
	Black or African American	1 (2%)
	No Response	6 (12%)
Participant ethnicity	Hispanic or Latino	9 (18%)
	Not Hispanic or Latino	38 (74%)
	No Response	4 (8%)
Participant's child's treatment status	Currently receiving treatment	29 (57%)
	Previously received treatment	20 (39%)
	No previous treatment	1 (2%)
	No response	1 (2%)

Table 2

JSPEO ratings across high and low active listening conditions.

Item	High activelistening		Low active listening		*t*	*p*	Cohen's *d*
	M	**SD**	**M**	**SD**			
Understands perspective	4.76	1.85	3.51	1.96			
Asks about daily life	3.27	2.07	2.86	1.93			
Exhibits concern	4.29	1.88	3.31	1.93			
Understands feelings	4.24	1.73	3.10	1.98			
Understanding healthcare provider	4.16	1.80	3.31	1.96			
Total score	20.73	7.90	16.10	8.95	3.56	0.001	0.548 (medium)

Note. JSPEO = Jefferson Scale of Physician Empathy for Observers. Thomas Jefferson University, 2001. Permission to modify this scale for research was obtained from Thomas Jefferson University. All rights reserved. The wording presented above is paraphrased and is not the precise wording on the JSPEO. Effect size was interpreted according to Cohen's *d* (Cohen, 1988).

Table 3

Wilcoxon signed rank test item-level differences on the CASES-M in high and low active listening conditions for n = 51 parents of children who stutter.

CASES-M Item	High frequencyactive listening			Low frequencyactive listening			*p*-value	Effect Size *r*
	Median	Mean	SD	Median	Mean	SD		
1. The clinician attended (oriented herself physically toward the caregiver).	4	3.75	1.28	3	3.33	1.45	0.083	0.243 (small)
2. The clinician listened (captured and understood the message that the caregiver communicated).	4	3.75	1.27	3	3.20	1.30	0.021	0.323 (medium)
3. The clinician restated (repeated or rephrased what the caregiver said in a way that was succinct, concrete, and clear).	4	3.71	1.30	1	1.27	0.83	<0.000[*]	0.792 (large)
4. The clinician asked open questions (questions to help the caregiver clarify or explore their thoughts and feelings).	3	2.71	1.62	1	1.84	1.38	0.001[*]	0.453 (medium)
5. The clinician reflected feelings (repeated or rephrased the caregivers' statements with an emphasis on their feelings).	3	2.96	1.51	1	1.24	0.76	<0.000[*]	0.682 (large)
6. The clinician revealed personal information about their history, credentials, or feelings.	1	1.14	0.72	1	1.10	0.46	0.832	0.029
7. The clinician used silence (to allow the caregiver to get in touch with thoughts and feelings).	4	3.67	1.31	3	3.06	1.53	0.001[*]	.466 (medium)
8. The clinician pointed out discrepancies in the caregiver's response.	1	1.10	0.67	1	1.04	0.49	0.793	0.037
9. The clinician made interpretations (statements beyond what the caregiver overtly stated to give the caregiver a new way of looking at thoughts and feelings).	1	1.80	1.23	1	1.06	0.58	0.001[*]	0.453 (medium)
10. The clinician disclosed past experiences in which they had gained insight.	1	1.12	0.62	1	1.08	0.52	0.793	0.037
11. The clinician disclosed immediate feelings about the client, the therapeutic relationship, or themselves in relation to the caregiver.	1	1.14	0.69	1	1.10	0.50	.944	.010
12. The clinician gave information (taught or provided the caregiver with data, opinions, facts, resources, or answers to questions).	1	1.18	0.68	1	1.12	0.52	0.590	0.075
13. The clinician gave direct guidance (suggestions, directives, or advice that imply actions for the caregiver to take).	1	2.12	0.68	1	1.08	0.48	0.784	0.038
CASES-M Scale	2.23	2.24	0.66	1.62	1.65	0.51		

[*] Indicates significance at the Bonferroni-adjusted *p*-value .05/13 = 0.004.

Note. The CASES-M was adapted from Victorino and Hinkle (2018) with permission from the American Speech-Language Hearing Association. Effect sizes were interpreted according to Cohen's *r* (Cohen, 1988; Pallant, 2011).