THE EFFECT OF SPEECH THERAPIST PRESENTATION STYLE ON RATINGS
OF SATISFACTION WITH THERAPIST AND LIKELY ADHERENCE TO
TREATMENT

A Thesis

Presented to

The Honors Tutorial College

Ohio University

In Partial Fulfillment

of the Requirements for Graduation

from the Honors Tutorial College

with the degree of

Bachelor of Science in Communicative Sciences and Disorders

by

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April 2016
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Introduction

The bond between a patient and their health care provider is important in many different aspects of treatment. It has been shown time and time again that without this bond there is little adherence, trust, motivation, or success in treatment. The creation of this bond lies within the ability to successfully pair patients with health care providers who can meet their specific needs. While the client/health care provider bond has been studied in other medical and psychological fields, this connection has not yet been examined within the speech-language pathology field.

Research suggests that the patient-therapist bond is linked to treatment outcome. For example, in a research synthesis of over 200 psychotherapy studies, it was found that the bond between patients and their health care providers highly affects psychotherapy treatment outcome (Hovarth, Del Re, Flückiger, & Symmonds, 2011). Similarly, in a meta-analysis of the medical literature relating the patient-clinician relationship to outcome (Kelley, Kraft-Todd, Schapira, Kossowsky & Riess, 2014), it was found that the bond between a health care provider and a patient plays a small but significant role in patient health outcomes.

For patient adherence to treatment protocol, motivation is a key factor. Without some form of motivation to complete a task, an individual will most likely fail to do so. When the task requires an individual to stay engaged in a certain program of treatment, the individual will most likely disengage if there is no motivation. Motivation from the provider can improve patient adherence. The primary hypothesis of the trans-contextual model is that the social agent involved in the treatment
influences the patient’s motivation, meaning a primary health care provider can motivate a patient (Chan, Hagger, & Spray, 2010; Hagger & Chatzisarantis, 2009). The trans-contextual model stems from self-determination theory, which hypothesizes that individuals who are self-determined will actively pursue their goal and that autonomous motivation is advanced due to the behavior of others (Hagger & Chatzisarantis, 2009; Hall, Roter, & Rand, 1981). This increase in motivation caused by the social agent would then increase the patients’ adherence levels.

Research in the field of psychiatry suggests that the therapist-patient bond is related to patient adherence levels. For example, in a comprehensive review of adherence levels for Bipolar Disorder patients (Leclerc, Mansur, & Brietzke, 2013), it was found that a positive bond between a patient and their health care provider was significantly related to less negative attitude toward medication. Similarly, in a systematic review on adherence levels in mental health care (Thompson & McCabe, 2012) it was shown that the patient-health care provider bond has a positive effect on general medication adherence.

While the effect of patient-therapist relationship on outcome and adherence has not been studied in the speech/language field, it is easy to imagine how important this variable could be in treatment for speech/language disorders. For example, if a patient were being seen for an articulation problem caused by a previous cleft palate and the patient did not bond with their health care provider for a multitude of reasons, their adherence levels may falter. This could be in relation to the homework they are given to do, their motivation while in sessions, or even staying in the program at all. Without
the patient-health care provider bond, levels of adherence can be greatly affected, which then in turn affect treatment outcomes.

**Therapist Factors Affecting the Therapist-Patient Bond**

In the field of psychology and counseling, there has been a strong emphasis on the importance of establishing a bond between the therapist and the client. The bond refers to the degree of trust, respect, and liking for each other, which are necessary elements of successful treatment.

Establishment of a patient-therapist bond may depend on characteristics of the health care provider. For example, in a study conducted by DeGeorge et al. (2012), it was discovered that both male and female clients generally tend to prefer the same clinician characteristics. A total of 154 women and 104 men took part in the study. Participants were asked to “Please select what characteristics you would want in your therapist if you were seeking psychotherapy at this point in your life.” Participants were presented with a list of 300 adjectives with brief descriptions beside them. The main preference for both genders was a therapist with a positive attitude toward life, who enjoys the company of others and feels capable of initiating and carrying through on activities. This study focused on the patient preference for therapist characteristics, showing that the majority prefers a therapist with certain characteristics, with few gender differences in preferred therapist characteristics. However, there has not been any similar work conducted within the speech-language pathology field to determine if these same therapist characteristics would be considered desirable. By identifying the most preferred stylistic approach of a health care provider, there may be an increase in the bond formed between the health care professional and the patient.
Other research suggests that the patient and the health care provider may need to share characteristics in order to establish a bond. For example, in a study focused on the bond between therapist and patient (Taber, Leibert, & Agaskar, 2011), it was found that the higher the congruence in what they wanted in the treatment created a stronger bond in the relationship. In this study, 32 client-therapist dyads were examined. Clients completed a demographics survey and then a 45-question outcome questionnaire (OQ-45), which was a self-reported measure of adult symptoms, syndromes and stressors. The OQ-45 was completed before every session. At the end of the third session, the Self-Directed Search (SDS), which assess Activities, Competence, Occupations, and Self-Estimates, and the Working Alliance Inventory-Short Revised, which assesses bond, goals, and task connection between the therapist and the patient, were completed by the client. The therapist completed the SDS before the first session with the patient. Congruence between the health care provider and the patient were examined for therapy tasks, therapy goals, and personality types. It was found that therapists were primarily of the social type (90%), which made it difficult to look at personality congruence. It was also found that congruence did not predict the number of sessions completed by the clients, but both task and goal congruence correlated moderately with therapeutic outcome. By being able to successfully match a health care provider with a patient in terms of characteristics, therapy goals, and tasks, a stronger, necessary bond is created.

**Nonverbal Communication of the Therapist-Patient Bond**

During treatment, verbal communication is a key factor to the bond shared between a health care provider and their patient, but nonverbal communication is also
very important. For example, in a study conducted by Ambady, Koo, Rosenthal, and Winograd (2002), it was found that nonverbal behaviors of healthcare providers are associated with both the perceptions and therapeutic outcomes of their clients. Nonverbal behaviors are those such as eye contact, facial expression, therapist nodding, and body position. A total of 48 patients 75 years or older worked with 11 physical therapists. In addition, 14 participants (“judges”) aged 63 to 81 years viewed videos of the treatment experienced by the patients. After each video clip, the judges rated the health care provider on a 7-point Likert scale for 6 variables: warm, caring, concerned, empathetic, indifferent, and distancing/infantilizing. The results were evaluated with analysis of variance (ANOVA) for positive ratings and then for negative ratings. These behaviors were then compared to the patients’ treatment results and it was found that nonverbal expressions by the therapist affect treatment outcomes. For example, therapist facial expressiveness (smiling, nodding, and frowning) was associated with an increase in activities of daily living ratings from admission to discharge, as well as a decrease in the level of confusion in the patients. Distancing behaviors such as looking away from the client while speaking was associated with long-term negative consequences for both cognitive and physical functioning. Thus, nonverbal healthcare provider behaviors were related to treatment outcome.

The effect of nonverbal behaviors on bond with the health care provider was seen in a study conducted by Cousin and Mast (2013), in which 58 undergraduates were asked to imagine that they were patients of physicians shown in videos. The participants watched videos of actual health care providers, with the verbal
communication silenced. Participants judged the level of affiliativeness in the interaction between the physician and their actual patient. Affiliativeness is how friendly or hostile the communication is between the patient and the health care provider. Participants then rated their satisfaction with the physician, trust in the physician, perception of the physician’s competence, and the level of adherence they would show to treatment suggested by the physician. They found that nonverbal communication (such as smiling, eye contact, and nodding) toward the participant affected ratings of the health care provider and in turn affected trust, belief of competence, and determination to adhere for treatment, showing again the importance of the nonverbal actions of the health care provider.

**Individual Differences Associated with Patient-Provider Bond**

As every person in the world is different, treatment preferences will change specific to those persons’ experiences, personality, and general preferences. Thus, different patients may view different forms of nonverbal and verbal communication from healthcare providers in different ways, which may affect treatment outcomes.

For example, when working with older patients, problems with hearing, vision, or cognition can greatly affect the patient-therapist communication, and more detailed explanations may need to be given by the health care provider. Greene, Adleman, Charon, and Hoffman (1986) found that physicians treat older patients differently than younger ones. Older patients were defined as 65 years or older, while young patients were defined as 45 years or younger. Videos were taken of patient and health care provider interactions. Five different health care providers were video taped with eight different clients each. The Geriatric Interaction Analysis (GIA) was used to assess the
content, process, and behavior during the health care provider-patient interaction, resulting in ratings for information giving, questioning, and support. A total of 80 audiotapes were coded and scored. It was found that medical issues were brought up more than psychosocial issues with older patients, and that psychosocial issues were brought up more often with younger patients overall. They also found that health care providers were generally less respectful, patient, and supportive of their older patients relative to their younger patients.

In another study (Adelman, Greene, Charon, & Friedmann, 1992), 66 clinic audiotapes from routine follow up general medical visits, which were recorded over a three-year period, were analyzed for patronizing behavior toward older patients. The Multi-Dimensional Interaction Analysis system was used to evaluate the audiotapes. Question asking, information giving, and supportiveness were rated for each physician in the audiotapes. Reliability of the coders was tested using the percent agreement method. The researchers found that older patients were less likely to have their concerns addressed, less likely to have necessary psychosocial issues discussed, and less likely to have necessary hygiene issues discussed.

It has also been found that physicians use speech that is overly simplified and patronizing with older patients (Caporael, 1981). Health care providers tend to modify their speech to stereotypes about older adults; it was also discovered that secondary baby talk was used for older patients 20% of the time. Secondary baby talk uses high pitch exaggerated intonation and was indistinguishable from normal baby talk when evaluated by college students. Overall, these studies of older adults suggest that health
care providers might approach their older clients differently, which would affect the patient/provider bond and possibly motivation for and adherence to treatment.

In addition to age, other demographic or even disease factors may be differentially related to health care provider/patient bonds. Benbassat, Pilpel, and Tidhar (1998) reviewed relevant studies searching through the database MEDLINE for the key words patient preferences, autonomy, decision making, consumer participation, and questionnaires, and found that some patients (those with more severe illness and those with less education) prefer their health care providers take a less active role in their treatment. Interestingly, behaviors that may be viewed as demeaning in one context may be viewed differently based on these variables. For example in the study conducted by Ambady, Koo, Rosenthal, and Winograd mentioned above (2002), secondary baby talk was perceived as nurturing and warm if the patient’s level of functioning was lower in the days prior to treatment. They also found that, as a patient’s level of functioning decreases, so does their desire for more respectful health care approaches. Such findings raise the question of whether patient age is related to the desire for a certain health care provider approach.

In addition to these demographic and disease severity factors, patient psychological characteristics may be related to motivation and bond with the therapist. When a patient goes into treatment for a physical or medical problem, they may already be dealing with an additional disorder or mental issue that needs to be addressed before work can be completed. For example, one study of pain treatment found that patient levels of depression can greatly affect adherence levels within treatment, which in turn affects the level of pain at discharge (Lattie, Antoni, Millon,
Kamp, & Walker, 2013). There needs to be a higher level of engagement met by the health care provider within this situation. Patients who participated in the study attended programs that focused not only on their chronic pain treatment but also psychological treatment. Participants attended the program for eight hours a day, five days a week. Patients completed pain questionnaires at the beginning and end of treatment, as well as measures of psychological symptoms. It was found that age, gender, race/ethnicity, location of injury, and time in treatment were not significantly related to any of the pain measures at intake or discharge. Psychiatric indicators such as depression, cognitive dysfunction, and guardedness predicted greater pain scores at discharge. Participants who made successful gains within the pain treatment program had lower pre-treatment depression scores. By identifying separate issues specific to a patient that need to be addressed before moving onto the main focus of treatment, there will most likely be better patient adherence and treatment outcomes.

The emotional state of the patient also plays a role in preferences for therapist type, which has been shown in several studies (Hall, Roter, & Rand, 1981; Street and Wiemann 1987; Graugaard, & Finset, 2000). For example, Hall, Roter, and Rand found that patients and physicians may both be easily perceived as angry when they are experiencing a different emotion. For example, while a physician may not be angry, they may be perceived as angry, which may in turn affect the way a patient responds. This situation may also be reversed where a patient is scared or nervous but is perceived as angry, which may change the approach of the physician. It was also found that the probability of patient return was correlated to expressed anxiety or anger by the patient. This shows that a patient who feels angry or anxious as a result of
their interaction with a physician in a medical appointment will most likely not return (Hall, Roter, & Rand, 1981). Graugaard and Finset (2000) showed that patients who experienced low trait-anxiety responded well to a high-caring health care provider and anxiety levels fell; however patients with high trait-anxiety showed increased anxiety when working with a high-caring health care provider (Graugaard, & Finset, 2000).

In the study conducted by Street and Weimann (1987), patients were given a questionnaire immediately after seeing their doctor and were able to submit the information if they chose to share it. The questionnaire involved information about the doctor (last name, assigned or chosen, number of times seen, number of years at the clinic), information about the patient (age, sex, education, family income, insurance coverage), medical information (type of visit, time of visit, seriousness of illness, levels of worry before and after visit), patients’ perceptions of the doctor’s communication (Interaction Involvement measure and Communicator Style Measure), and satisfaction with the doctor (“personal qualities” subscale and Medical Care Satisfaction measure). It was found that the specific psychological states, goals, and expectancies of a patient affect how they view the level of involvement, expressiveness, and dominance of a health care provider through the health care provider’s verbal and nonverbal behaviors.

Other individual difference variables may influence how patients respond to different types of care providers. A study conducted by Cousin, Mast, Roter, and Hall (2012) focused on how patients reacted to physicians who were categorized as either high caring or low caring, and high sharing or low sharing. The term caring means the level that the health care provider maintained a good relationship with their patient
through warmth, friendliness, interest, empathy, and a desire to help. The term sharing is in reference to shared decision making between the health care provider and the patient, as well as the avoidance of medical jargon, use of open ended questions, and joint setting an agenda. Overall, patients preferred a health care provider who had a high caring communication style. However, participants who rated caring as an important aspect in health care providers were very dissatisfied with the treatment when their clinician was low caring. It was also found that the desire for a sharing health care professional depended on each person and could not be easily categorized, meaning that even though someone was high sharing they may not have preferred a high sharing health care professional, and even though someone may not have been high sharing they may have still preferred a high sharing health care professional. This shows us that, in general, a more empathetic, warm, and friendly health care provider is preferred; however, there is variability based on individual differences in patients.

A similar study focused on how the traits of a patient affected their preference for certain clinician traits (Cousin & Mast, 2013). It was found that patients who were empathetic, friendly, and had a tendency to act altruistically (categorized as agreeable) preferred a clinician who showed those same values during treatment (categorized as affiliative). These participants also trusted this type of clinician more and adhered better to their treatment. These participants also tended to be more sensitive to the level of affiliativeness that their clinician exhibited than their less agreeable counterparts. It was also found that these clinicians had a higher outcome for all participants (regardless of participant preference). This shows that there is generally a
preference for clinicians who are more friendly, empathetic, and warm, but it matters much more for patients who share those qualities (Cousin & Mast, 2013).

Present Study

As can be seen in the review above, research has shown that the patient-therapist connection is an important focus in treatment. It drives the motivation for, the adherence to, and the success of a patient’s treatment. In addition, research has shown that individual patient differences are related to the patient-therapist connection. However, the relation between patient-therapist bond to treatment; preferences for therapist type; and individual differences in patients that may be related to these factors have not yet been studied within the speech-language pathology field. The focus of the present study was to explore this untouched territory in the field of speech-language pathology.

The first aim of the present study was to examine which kinds of therapist characteristics are most desirable in the setting of a speech therapy. Prior literature in psychotherapy proposes that characteristics of personal adjustment, nurturance, endurance, self-confidence, affiliation, and intraception are highly valued in a health care provider (DeGeorge, Constantion, Greenberg, Swift, & Smith-Hansen 2013). Other research has also shown the association between rating similar characteristics higher and positive health care provider nonverbal behavior such as smiling, leaning forward, sitting, etc. (Ambady, Koo, Rosenthal, Winograd, 2002). Thus, the first hypothesis was that that these similar characteristics of warmth, optimism, empathy, enthusiasm, supportiveness, concern, honesty, attentiveness, confidence, and
competence, would also be rated as important characteristics for speech-language pathologists.

The second aim was to examine whether a speech-language pathologist who displays higher desired therapist behaviors would be rated as more trustworthy, more competent, and more satisfactory by patients, and that patients would have higher levels of willingness to adhere to treatment, as compared to a speech-language pathologist with less desired therapist behaviors. Given the results of the literature in other healthcare areas, it was hypothesized that speech language therapists who exhibit higher behaviors of warmth, friendliness, empathy, support, competence, and information-sharing would be favored over health care providers who exhibit lower amounts of the above traits.

The third aim was to examine whether patient individual differences are related to therapist preferences. Given the prior literature that suggests preferences for therapists might vary based on patient individual differences, exploratory analyses were conducted to examine whether age, gender, and specific personality traits relate to ratings of higher levels of trust in the health care provider, competence of the health care provider, satisfaction with the health care provider, and willingness to adhere to the treatments given by the health care provider, within the video clips watched.

**Pilot Study**

To ensure that the videos that were to be used in the main study portrayed the appropriate traits, a pilot study was conducted.

**Participants**
Participants were recruited for the pilot study through the Ohio University Psychpool and granted 0.5 credit toward their class for their participation. There were a total of 119 participants (80 female, 38 male, 1 transgender) aged between 18 and 24 ($M = 18.9$ years, $SD = 1.13$). Of the 119 participants, 103 identified themselves as white, 7 as black or African American, 5 as biracial, 3 as Hispanic or Latino, and 1 as other.

**Methods**

The study was conducted in an Ohio University Department of Psychology lab room. Multiple participants were shown the videos at the same time in one room on a screen. The number of participants in the room at one time ranged from one to eight. Participants were read the informed consent document and offered the opportunity to ask questions. Participants then signed the informed consent document and were given a copy to keep. The study began with several general demographic questions, including age, gender, and ethnicity. A personality questionnaire was then completed, which is described below.

The participants were then given a scenario describing a fluency disorder. They were asked to imagine that they were the patient in the scenario and that they would be seeing a therapist who would be offering them treatment for the disorder. After reading the scenario, the participants were given a list of 17 different adjectives and participants rated how much they would desire their speech/language therapist to have that characteristic.

After rating the adjectives, each participant was shown all four videos in a random order. One male was used to create a video portraying a friendly, empathetic,
and warm clinician, and the same male was then used to create a video of a colder, professional, straightforward clinician. A female was also used to create these two types of videos. The males and females used the same script in each of the warm and cold video types (see Appendix A). Research on both verbal and nonverbal communication that displays these different characteristics was used to inform the video scenarios.

After each video, participants rated their level of trust in the clinician, clinician competence, satisfaction with the clinician, and likelihood they would comply with the treatment suggested (Cousin & Mast, 2013).

**Measures**

Copies of all measures can be found in Appendix B.

The measure used to identify personality traits was the Big Five Inventory (BFI) (Rammstedt & John, 2007). This measure was constructed in the 1980s as a short instrument to evaluate five main personality traits. Participants completed 10 questions to identify the levels of their five domains of personality. These domains include Extraversion, Conscientiousness, Neuroticism, Agreeableness, and Openness. The retest reliability was found to be at a respectable level of .75 and was conducted eight weeks after the first test was administered (Rammstedt & John, 2007). In terms of internal consistency, each personality domain contains two items, and the two-item intercorrelations ranged from .74 to .89. The five personality scores correlated well with additional measures of the same personality variables (correlation average of .67) (Rammstedt & John, 2007). To test for external validity, peer ratings of these same personality traits were conducted by either a friend or a partner and found to be an
average correlation of .45. The overall mean correlation between the 10-item BFI and the longer (44-item) BFI was .83 (Rammstedt & John, 2007).

The adjective checklist was modeled off of the list of adjectives in Ambady, Koo, Rosenthal, & Winograd (2002). Each of the 17 adjectives on the list was rated on a 5-point Likert scale (with 1 being not at all important and 5 being very important) in terms of the degree to which the participants would desire their speech-language pathologist to have that characteristic.

The measures used to evaluate the videotaped clinician were satisfaction with the clinician, trust in the clinician, perception of the clinician’s competence, and the level of adherence participants would show to treatment suggested by the clinician, modeled off the research design of Cousin and Mast (2013). Within these four categories, there were a total of three questions. Each statement listed was measured on a 5-point Likert scale (with 1 being completely disagree and 5 being completely agree).

**Results**

To test whether the videos portrayed the desired characteristics (warmth, friendliness, empathy, support, competence, and information-sharing), four within subjects t-tests were performed. The female video that showed the anticipated desired characteristics will be labeled as Female 1 for the remainder of this section, and the female video that did not will be labeled as Female 2. The male video that showed the anticipated desired characteristics will be labeled as Male 1 for the remainder of this section and the male video that did not will be labeled as Male 2.
As expected, Female 1 was rated significantly higher than Female 2 in trust, $t(114) = 3.56, p < .001$, satisfaction, $t(116) = 4.09, p < .001$, willingness to adhere to treatment, $t(115) = 2.93, p = .004$, and competency, $t(113) = 2.13, p = .04$). Similarly, Male 1 was rated higher than Male 2 in trust, $t(115) = 3.46, p < .001$, satisfaction, $t(115) = 3.39, p < .001$, willingness to adhere to treatment, $t(116) = 3.08, p = .003$, and competency, $t(115) = 2.29, p = .02$.

Given that the results of the pilot study showed that the videos seemed to elicit the proper outcomes, the main study was then conducted.

**Main Study**

**Participants**

Participants were recruited through speech-language pathology social media sites as well as highly ranked university programs with an emphasis on research. A total of 88 people participated in the study. Of those 88, only 73 had completed at least part of the study, and those who did not complete the full study were excluded from the analyses. Of the 73 included participants, 72 were female, and one was male. Because there was only a single male participant, he was excluded from the data to eliminate any potential skew of results. Participants’ age ranged from 21 to 64 years ($M = 33.4, SD = 9.88$), and their level of experience in the field of speech-language pathology was primarily professional (59 professionals), with some participants still in school (3 undergraduate students, 10 graduate students). Of the 72 participants, 63 identified themselves as white, 3 as Hispanic/Latino, 3 as Asian/Pacific Islander, and 3 as biracial. Participants were also asked about previous experience with therapies; 39 had experienced speech-language therapy, 35 had physical therapy, 27 had
psychological therapy, 11 had occupational therapy, 8 had nutrition therapy, 4 had respiratory therapy, 2 had exercise therapy, and 4 have had some other type of therapy not mentioned above.

**Procedure**

The study took place through an online survey. Participants read an invitation to participate in the study (see Appendix C). Participants were given two links to access the survey. The link they chose decided the order in which they watched the videos. Twenty-six participants chose the link that had them watch the warm clinician video first, followed by the cold clinician video. Forty-seven participants chose the link that had them watch the cold clinician video first, followed by the warm clinician.

The survey began with the presentation of the consent form. Participants continued on to the survey if they agreed to consent. Participants were then presented with demographic questions (age, gender, race/ethnicity). Next, participants selected previous therapies they had experienced, followed by selecting their experience with speech-language pathology. They then moved on to complete the same personality instrument as was administered in the pilot study.

Participants then read a scenario where they were asked to pretend that they were a patient with a fluency disorder seeking help from a speech-language pathologist. See Appendix D for the wording of the scenario. After reading the scenario, participants were asked to rate 17 clinician characteristics on a 5-point Likert scale of importance, with 5 being very important, and 1 being not at all important (same scale as the pilot study). Participants then selected their preferred gender for the speech-language pathologist. The gender that they chose affected which two videos
were shown. Participants who chose female were shown the two female videos, and if participants chose male they were shown the two male videos. Of note, all female participants selected the female videos for viewing. The videos used in the study were the same videos given in the pilot study.

After watching each video, participants ranked the clinician on satisfaction with the clinician, trust in the clinician, willingness to adhere to treatment, and perceived level of competency of the clinician, using the same scale as in the pilot study.

**Measures**

Measures of therapist adjectives, personality traits, and video ratings were the same as in the pilot study and are listed and described above.

**Analyses**

The first hypothesis was that characteristics of warmth, optimism, empathy, enthusiasm, supportiveness, concern, honesty, attentiveness, confidence, and competence would be rated as most important for speech language therapists. Average ratings on all 17 characteristics were examined descriptively and placed in order.

The second hypothesis was that speech-language pathologists who exhibit higher behaviors of warmth, friendliness, empathy, support, competence, and information-sharing would be rated higher for 1) trust, 2) competence, 3) satisfaction, and have higher levels of 4) willingness to adhere to treatment by patients over health care providers who exhibit lower amounts of the above traits. Four within subjects t-tests were performed to test this hypothesis for each of the above dependent variables.
Finally, to explore whether age and specific personality traits relate to therapist preferences, bivariate correlations were calculated, and differences in correlations were examined using Fisher’s r to z test. Because there were no male participants, we were not able to analyze gender differences.

**Results**

For the first hypothesis, as predicted, it was found that patients most valued the following traits in their speech-language pathologists: Accepting, Attentive, Competent, Concerned, Confident, Empathetic, Enthusiastic, Honest, Likeable, Optimistic, Professional, Supportive, and Warm. Each of the listed values was rated as important by the participants with a score of 4.32 or higher. This can be found in Table 1. Participants did not desire traits such as Aloof, Dominant, Infantilizing, and Nervous.
Table 1

*Adjective Checklist Ratings (N=62 who completed this part of the study)*

<table>
<thead>
<tr>
<th>I would prefer a speech language pathologist who is</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
<th>Mean</th>
<th>Std. Deviation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepting</td>
<td>62</td>
<td>1</td>
<td>5</td>
<td>4.68</td>
<td>0.805</td>
</tr>
<tr>
<td>Aloof</td>
<td>62</td>
<td>1</td>
<td>5</td>
<td>1.53</td>
<td>0.844</td>
</tr>
<tr>
<td>Attentive</td>
<td>62</td>
<td>4</td>
<td>5</td>
<td>4.77</td>
<td>0.422</td>
</tr>
<tr>
<td>Competent</td>
<td>62</td>
<td>4</td>
<td>5</td>
<td>4.95</td>
<td>0.216</td>
</tr>
<tr>
<td>Concerned</td>
<td>62</td>
<td>2</td>
<td>5</td>
<td>4.32</td>
<td>0.825</td>
</tr>
<tr>
<td>Confident</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.61</td>
<td>0.554</td>
</tr>
<tr>
<td>Dominant</td>
<td>62</td>
<td>1</td>
<td>4</td>
<td>2.18</td>
<td>0.779</td>
</tr>
<tr>
<td>Empathetic</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.61</td>
<td>0.61</td>
</tr>
<tr>
<td>Enthusiastic</td>
<td>62</td>
<td>2</td>
<td>5</td>
<td>4.42</td>
<td>0.714</td>
</tr>
<tr>
<td>Honest</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.73</td>
<td>0.485</td>
</tr>
<tr>
<td>Infantilizing</td>
<td>62</td>
<td>1</td>
<td>5</td>
<td>1.68</td>
<td>1.113</td>
</tr>
<tr>
<td>Likeable</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.63</td>
<td>0.52</td>
</tr>
<tr>
<td>Nervous</td>
<td>62</td>
<td>1</td>
<td>3</td>
<td>1.63</td>
<td>0.683</td>
</tr>
<tr>
<td>Optimistic</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.45</td>
<td>0.645</td>
</tr>
<tr>
<td>Professional</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.69</td>
<td>0.499</td>
</tr>
<tr>
<td>Supportive</td>
<td>62</td>
<td>4</td>
<td>5</td>
<td>4.79</td>
<td>0.41</td>
</tr>
<tr>
<td>Warm</td>
<td>62</td>
<td>3</td>
<td>5</td>
<td>4.73</td>
<td>0.518</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>62</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
The most highly rated trait was competent ($M = 4.95$, $SD = 0.22$), followed by supportive ($M = 4.79$, $SD = 0.41$), attentive ($M = 4.77$, $SD = 0.42$), honest ($M = 4.73$, $SD = 0.49$) and warm ($M = 4.73$, $SD = 0.52$). It was noted that concerned, enthusiastic, and optimistic were not rated as highly as the other desired traits. The lower desire for a concerned speech-language pathologist may be related to the negative connotations that “concern” has in a medical setting. The lower rating for enthusiastic and optimistic may be related to the fact that this was a sample of professionals rather than people seeking treatment.

The lowest rated trait was aloof ($M = 1.53$, $SD = 0.81$), followed by nervous ($M = 1.63$, $SD = 0.68$), infantilizing ($M = 1.68$, $SD = 1.11$), and dominant ($M = 2.18$, $SD = 0.779$). Each of these traits, though rated lower, had at least one person who rated them between 3-5. Because dominant is higher than the other three traits, it may be assumed that more people may desire dominance in their speech-language pathologist.

As predicted in the second hypothesis, a speech-language pathologist who showed warmth, friendliness, empathy, support, competence, and information-sharing (Female 1 as noted earlier) was favored over a speech language pathologist who showed a lower amount of the above listed traits (Female 2). Female 1 was rated significantly higher than Female 2 in satisfaction ($F(1,22) = 41.68$, $p < .001$), trust ($F(1,22) = 44.68$, $p < .001$), competence ($F(1,22) = 10.61$, $p = .004$), and patients’ willingness to adhere to treatment ($F(1,22) = 33.99$, $p < .001$). This desire for Female 1 over Female 2 can be seen in Table 2.
Table 2

*Clinician Rating Results*

<table>
<thead>
<tr>
<th></th>
<th>Warm Clinician Mean (SD)</th>
<th>Cold Clinician Mean (SD)</th>
<th>F (1,22)</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Satisfaction</td>
<td>13.7 (2.11)</td>
<td>7.91 (3.48)</td>
<td>41.68</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Trust</td>
<td>13.91 (1.53)</td>
<td>10.30 (2.88)</td>
<td>44.86</td>
<td>&lt; .001</td>
</tr>
<tr>
<td>Perceived Competency</td>
<td>14.21 (1.78)</td>
<td>12.35 (2.62)</td>
<td>10.61</td>
<td>= .004</td>
</tr>
<tr>
<td>Willingness to Adhere to Treatment</td>
<td>13.09 (1.81)</td>
<td>10.00 (2.65)</td>
<td>33.99</td>
<td>&lt; .001</td>
</tr>
</tbody>
</table>
Correlations among individual difference variables and therapist ratings are shown in Table 3. With regard to the relation of age to therapist ratings, it was found that the older a participant is, the more competent they found Female 1 (warm), whereas the less competent they found Female 2 (cold). The Fisher r to z test was significant, suggesting this was a meaningful difference. Experience in the field was also compared to clinician ratings and was found that with more experience, patients believed that Female 1 was significantly more competent than female 2.

The correlations among personality characteristics suggested some potential differences. For example, the more extroverted an individual is, the more they are willing to adhere to Female 2. It was also found that the more open a person is the more competent they find Female 1. There were also some potential differences in ratings of the two different therapist videos based on personality; this can be seen highlighted in Table 3. However, Fisher r to z tests showed these were not actually significantly different correlations from one another (see Table 4). With a larger sample size, however, they may be found to be significant.
Table 3

*Correlations Between Patient Individual Difference and Clinician Ratings*

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction</th>
<th>Trust</th>
<th>Perceived Competence</th>
<th>Willingness to adhere to treatment</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Female 1</td>
<td>Female 2</td>
<td>Female 1</td>
<td>Female 2</td>
</tr>
<tr>
<td>Age r</td>
<td>.09</td>
<td>-.03</td>
<td>-.01</td>
<td>-.24</td>
</tr>
<tr>
<td>Age p</td>
<td>.66</td>
<td>.90</td>
<td>.99</td>
<td>.26</td>
</tr>
<tr>
<td>Experience r</td>
<td>.28</td>
<td>.08</td>
<td>.30</td>
<td>-.23</td>
</tr>
<tr>
<td>Experience p</td>
<td>.32</td>
<td>.79</td>
<td>.28</td>
<td>.44</td>
</tr>
<tr>
<td>Openness r</td>
<td>.23</td>
<td>-.09</td>
<td>.23</td>
<td>-.20</td>
</tr>
<tr>
<td>Openness p</td>
<td>.27</td>
<td>.67</td>
<td>.26</td>
<td>.35</td>
</tr>
<tr>
<td>Conscientiousness r</td>
<td>.27</td>
<td>-.02</td>
<td>.37</td>
<td>.11</td>
</tr>
<tr>
<td>Conscientiousness p</td>
<td>.19</td>
<td>.92</td>
<td>.07</td>
<td>.60</td>
</tr>
<tr>
<td>Extraversion r</td>
<td>-.14</td>
<td>.08</td>
<td>-.01</td>
<td><strong>.25</strong></td>
</tr>
<tr>
<td>Extraversion p</td>
<td>.52</td>
<td>.73</td>
<td>.97</td>
<td>.24</td>
</tr>
<tr>
<td>Agreeableness r</td>
<td>.19</td>
<td>.07</td>
<td>.15</td>
<td>.28</td>
</tr>
<tr>
<td>Agreeableness p</td>
<td>.34</td>
<td>.75</td>
<td>.47</td>
<td>.18</td>
</tr>
<tr>
<td>Neuroticism r</td>
<td>.01</td>
<td>.01</td>
<td>-.03</td>
<td><strong>.25</strong></td>
</tr>
<tr>
<td>Neuroticism p</td>
<td>.99</td>
<td>.99</td>
<td>.89</td>
<td>.25</td>
</tr>
</tbody>
</table>

Note. Female 1 (Warm) and Female 2 (Cold)
Table 4

*Fisher r to z Correlation Results*

<table>
<thead>
<tr>
<th></th>
<th>Satisfaction z</th>
<th>Satisfaction p</th>
<th>Trust z</th>
<th>Trust p</th>
<th>Perceived Competence z</th>
<th>Perceived Competence p</th>
<th>Willingness to adhere to treatment z</th>
<th>Willingness to adhere to treatment p</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>0.78</td>
<td>0.44</td>
<td></td>
<td></td>
<td>2.01</td>
<td>0.04</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experience</td>
<td>1.97</td>
<td>0.048</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Openness</td>
<td>1.02</td>
<td>0.3</td>
<td>1.39</td>
<td>0.16</td>
<td>1.54</td>
<td>0.13</td>
<td>1.74</td>
<td>0.08</td>
</tr>
<tr>
<td>Conscientiousness</td>
<td>0.96</td>
<td>0.34</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Extraversion</td>
<td>-0.83</td>
<td>0.41</td>
<td></td>
<td></td>
<td>1.03</td>
<td>0.3</td>
<td>0.98</td>
<td>0.33</td>
</tr>
<tr>
<td>Agreeableness</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Neuroticism</td>
<td>0.88</td>
<td>0.38</td>
<td></td>
<td></td>
<td>1.33</td>
<td>0.18</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Discussion

Consistent with hypothesis 1, participants valued the personality traits of Accepting, Attentive, Competent, Concerned, Confident, Empathetic, Enthusiastic, Honest, Likeable, Optimistic, Professional, Supportive, and Warm for their speech-language pathologists. This result is also consistent with prior literature in psychotherapy (Ambady, Koo, Rosenthal, & Winograd, 2002; DeGeorge et al., 2012). The implications of this finding are that by portraying these desired traits in a speech therapy session, a therapist will have higher satisfaction rates and likely adherence to treatment.

Furthermore, consistent with hypothesis 2, participants viewed a speech-language pathologist who showed warmth, friendliness, empathy, support, competence, and information-sharing during their session as more satisfactory, trustworthy, and competent relative to one who did not, and were more willing to adhere to their treatment. This is also consistent with prior literature (Cousin, Mast, Roter, & Hall, 2012; Cousin & Mast, 2013; DeGeorge et al., 2012; Taber, Leibert, & Agaskar, 2011), and implies that speech language pathologists need to have a warm and friendly attitude with their patients to have higher levels of the above categories and strengthen the patient-therapist bond.

Finally, related to hypothesis 3, while age showed some differential relationship to trust in speech-language pathologists who were warm versus not warm, there was not support for any other individual difference factors being related to patient preferences for different types of speech-language pathologists. Due to the research showing that older patients are treated differently with less issues addressed
(Adelman, Greene, Charon, & Friedmann, 1992) and the use of patronizing baby talk (Caporael, 1981), it might have been anticipated that older adults would value the colder clinician. The findings of hypothesis 3 specific to age were not consistent with this theory, although it should be noted that the participants in the present study were themselves speech-language pathologists rather than patients, which might explain the discrepancy. Furthermore, because as years of experience as a therapist increases, so does age; thus, the age findings may have been explained by level of experience in the field.

Although the exploratory analysis regarding gender could not be conducted, it was interesting to note that all of the participants, who were all female, stated that they would rather have a female speech-language pathologist. Of note, the one male participant who was excluded from analyses indicated a preference for a male speech-language pathologist. Further research needs to be done to figure out if males would have the preference for males, or if they would also prefer females. Research could also be conducted as to why females prefer a female speech-language pathologist.

Overall, these results do suggest that speech-language pathologists should consider the ways in which they present information to their patients and how this might impact their patients’ engagement in treatment, adherence, and outcome. This is important to take into account because it shows the importance of creating that bond from the initial visit, and how that initial visit can impact the rest of the treatment.

Although the results for the individual difference variables were limited by low sample size and thus low power, results were suggestive that someone who is very extraverted overall prefers a speech-language pathologist who is more dominant, less
information-sharing, less warm, and less friendly. This was also found for patients who have strong neuroticism. This needs to be researched further because of the lack of statistical significance in both areas by using larger samples.

Some limitations to the present study were the lack of male participants, the incompletion of the study by many of the participants, and the simulation aspect. First, by not having both male and female participants we were not able to identify any differences when working with males. This is extremely important information to know, as more children and adults with many types of speech disorders are male. For example specific language impairments are more prevalent in males (Flax et al., 2003), as well as adult voice disorders (Ramig & Verdolini, 1998), strokes for men of all backgrounds (Leblanc, 1996), cleft lips, traumatic brain injury, fluency disorders, and autism spectrum disorders, which often affect speech (Owens, Metz, & Farinella, 2011).

A second limitation was the incompletion of the study by many of the participants, which resulted in a much smaller sample size. With a much smaller sample size, there is a limitation on generalizability for the data, as well as statistical power. In future studies where simulation research or online studies are conducted, researchers should look into providing compensation for participants to encourage completion of the study. Lastly, because this was purely a simulation we are unable to truly know if current patients would feel the same way. Use of a patient population as participants might have changed study results.

Future research should look specifically at outcome for patients who are exposed to different speech-language pathologists approach styles. Outcome is the
most important area to research, and while adherence plays a part in outcome, we can not know for sure the effects without researching outcome. In addition, future research should also be conducted across disorders, as the severity of the disorder and type of the disorder may also affect what the patient desires.

Some specific future directions for the research will be to work with actual patients researching outcome, as well as working across different disciplines. This will include cross visit data to show outcome over time and whether it is related to the patient-therapist bond established at the start of treatment. The main focus will be to identify if the same traits and presentation styles are favored in an actual therapy session. Patient individual preferences would continue to be explored to see if they might be related to the patient-therapist bond and/or to outcome in a real life setting. In addition, efforts would be made to recruit both genders and a wider range of ages of participants. Because it is difficult to identify if self-reported results are accurate when working with patients who have a cognitive disorder that affects their speech and language, such as aphasia, any such disorders will be omitted from this next step of research.
References


Taber, J. B., Leibert, T. W., Agaskar, V. R. (2011). Relationships among client-
therapist personality congruence, working alliance, and therapeutic outcome.


Thompson, L., McCabe, R. (2012). The effect of clinician-patient alliance and
communication on treatment adherence in mental health care: A systematic
review. *BMC Psychiatry*, 12, 87.
Appendix A

**Script 1:**

Smile

“Hi! It’s nice to see you again!”

Clasp hands together. Then point to a chair as you say…

“Please have a seat and we can start off by discussing some treatment goals and techniques that I thought would be a good way to start your treatment. Let me know if these goals align with what you would like to accomplish during your treatment as well.”

Look more serious while still happy while you say:

“Our ultimate goal will be to have no fluency problems in all situations. “

Wave hands across chest in a verbal no.

“More specifically meaning no stuttering during conversation,“

Move hands in a circle motion

“speaking over 90 words a minute, and not showing any type of noticeable sound or physical movement during a stutter that may distract from what you’re saying. If these goals don’t align with what you would like to do we can discuss any changes.”

“Some ideas I think will be good for your treatment based on what I saw and what you told me during our last session were first working on your own empowerment and confidence in your abilities when speaking to larger groups of people or authority figures. Also doing some regrouping techniques when issues do arise, slowing speech using a metronome, and going over ways to increase the fluency of your speech. “

Lighten face and raise eye brows in understanding and then smile during last line.
“If after a while, you feel that there hasn’t been as much improvement with a technique and would like to try to tackle the problem in another way, let me know so that we can explore those options together.”

smile

“First, just so you have a better understanding of stuttering I thought we could quickly go over the mechanics of what stuttering is and how it works. Basically a tightening of the muscles occurs in your throat, chest, and stomach and air is prevented from escaping. For example if I say the word salad with a severe stutter it may sound something like this:

Say the word with a more severe stutter

“So as you can see the muscles in my throat and chest tense up as I stutter.”

Point to the muscles

“when you relax the muscles the air is able to escape smoothly as you can see when I say salad’”

say salad smoothly

This first technique we are working on is easy onset speech, where the first sound is elongated to ease into the word. Now it’s your turn, so try intentionally to have tension as I just did and then mentally try to calm and relax those muscles and say it again smoothly.

Smile and listen
Script 2:

“Hello welcome back”
Small close-lipped smile.

“Please have a seat and we can start going over treatment techniques that will be used.“

Look down at “file”

“I know we previously discussed the anxiety you experience when talking in front of large groups of people, and people of importance because of your stutter, “

Look back up with a straight face

So that will be something we address in your treatment. We will also be using regrouping techniques, working on rate of speech, cursive speaking, and easy onset techniques.

Clasp hands together in front of self on desk

“The final goal will be to have no fluency prolongations or repetitions in your speech with 95% accuracy when speaking in private and public situations. No physical or audible reactions should be made during conversation and stutters should not exceed one second.”

“Now, stuttering occurs when tension builds in the muscles of your throat, chest and stomach, and air is not able to pass through the vocal tract. By relaxing your muscles air is able to move through the vocal tract easily. So we will start today by working on techniques to relax your muscles.”

“easy onset is when you move slowly into the word, exaggerating the first phoneme. For example if we were to say “salad”
say *salad* with easy onset speech.

“Now focus on elongating the first sound, relaxing your
Appendix B

**Demographic Form:**

Please enter in your age below:

Please select your identified gender below:

Female

Male

Transgender

Please select your ethnicity:

White

Hispanic or Latino

Black or African American

Native American or American Indian

Asian / Pacific Islander

Biracial

Other

**Therapy Experience**

Please select all previous therapies that you have experienced:

Psychotherapy/counseling

Physical therapy

Speech therapy

Occupational therapy
Exercise therapy
Respiratory therapy
Nutrition therapy
Other

Field Experience

Undergraduate
Select the number of years experienced
1
2
3
4
5

Graduate
Select the number of years experienced
1
2
3
4
5

Professional
Enter the number of years you have worked in the field
### Big Five Inventory:

<table>
<thead>
<tr>
<th></th>
<th>Disagree strongly</th>
<th>Disagree a little</th>
<th>Neither agree nor disagree</th>
<th>Agree a little</th>
<th>Agree strongly</th>
</tr>
</thead>
<tbody>
<tr>
<td>… is reserved</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… is generally trusting</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… tends to be lazy</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… is relaxed, handles stress well</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… has few artistic interests</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… is outgoing, sociable</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… tends to find fault with others</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… does a thorough job</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… gets nervous easily</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>… has an active imagination</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
</tbody>
</table>

### Adjective List:

<table>
<thead>
<tr>
<th>Having this trait in my healthcare provider is…</th>
<th>Not at all important</th>
<th>Slightly Important</th>
<th>Important</th>
<th>Fairly Important</th>
<th>Very Important</th>
</tr>
</thead>
<tbody>
<tr>
<td>Accepting</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Aloof</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Attentive</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
<tr>
<td>Competent</td>
<td>(1)</td>
<td>(2)</td>
<td>(3)</td>
<td>(4)</td>
<td>(5)</td>
</tr>
</tbody>
</table>
Concerned (1) (2) (3) (4) (5)
Confident (1) (2) (3) (4) (5)
Dominant (1) (2) (3) (4) (5)
Empathetic (1) (2) (3) (4) (5)
Enthusiastic (1) (2) (3) (4) (5)
Honest (1) (2) (3) (4) (5)
Infantilizing (1) (2) (3) (4) (5)
Likeable (1) (2) (3) (4) (5)
Nervous (1) (2) (3) (4) (5)
Optimistic (1) (2) (3) (4) (5)
Professional (1) (2) (3) (4) (5)
Supportive (1) (2) (3) (4) (5)
Warm (1) (2) (3) (4) (5)

Please select your preferred Speech Language Pathologist Gender

Male
Female

Clinician evaluation:

<table>
<thead>
<tr>
<th>Completely Disagree</th>
<th>Somewhat Disagree</th>
<th>Neutral</th>
<th>Somewhat Agree</th>
<th>Completely agree</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would be</td>
<td>(1) (2) (3) (4) (5)</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

44
satisfied with this clinician’s behavior

I think I would trust him or her

I had the feeling that this clinician had all the necessary knowledge to treat his or her patients

I would certainly adhere to his or her treatment recommendation

I would judge his or her behavior as disagreeable

I would carefully comply with the treatment

I would find him
or her trustworthy

<table>
<thead>
<tr>
<th>I felt that this clinician lacked competence</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>I would like the way he or she behaves</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>This clinician seemed competent to me</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I would be hesitant to follow his or her recommendations</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
<tr>
<td>I would mistrust him or her</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
</tr>
</tbody>
</table>
Consent Form:

Title of Research: Judging Speech Language Pathologist Behavior

Researchers: Haley Trottier, Dr. Julie Suhr

You are being asked to participate in research. For you to be able to decide whether you want to participate in this project, you should understand what the project is about, as well as the possible risks and benefits in order to make an informed decision. This process is known as informed consent. This form describes the purpose, procedures, possible benefits, and risks. It also explains how your personal information will be used and protected. Once you have read this form and your questions about the study are answered, you will be asked to participate in this study.

You may print a copy of this document to take with you.

Explanation of Study

This study is being conducted to examine how different speech language pathologists’ communication styles are viewed by individuals who are simulating having a speech language disorder. In addition, the study will examine whether individual differences (such as age and gender and personality style) are related to how participants rate the speech language pathologists they view on videos.

If you agree to participate, you will be asked to answer demographic questions, report on your history of exposure to speech language therapy and other therapies, and answer personality questions. You will then be given a brief scenario to read that asks you to simulate being a patient who requires speech language therapy. After you read the scenario, you will rate a list of adjectives with regard to how important you would view them to be in a speech language pathologist and you will also select the gender you would prefer in your speech language pathologist. You will then watch two very
brief videos and answer questions regarding your opinions of the speech language pathologists you see in the videos.

You should only participate in this study if you can speak English fluently and are 18 years of age or older.

Your participation in the study will last approximately 30 minutes.

**Risks and Discomforts**

No risks or discomforts are anticipated.

**Benefits**

This study is important to science/society because it will enhance the knowledge about patient preference with regard to communication style utilized by speech language pathologists. Prior research in medical and psychological fields have shown that health care provider characteristics are related to patient adherence levels and treatment outcome, but no prior research has examined this in the speech language pathology field.

You may not benefit, personally by participating in this study.

**Confidentiality and Records**

Your study information will be kept confidential by keeping all information completely anonymous.

For maximum confidentiality, please clear your browser history and close the browser before leaving the computer.

Additionally, while every effort will be made to keep your study-related information confidential, there may be circumstances where this information must be shared with:
* Federal agencies, for example the Office of Human Research Protections, whose responsibility is to protect human subjects in research;

* Representatives of Ohio University (OU), including the Institutional Review Board, a committee that oversees the research at OU;

Contact Information

If you have any questions regarding this study, please contact the investigator [Haley trottier, ht637311@ohio.edu, 724-327-9053] or the advisor [Dr. Julie Suhr, Suhr@ohio.edu, 3-1091].

If you have any questions regarding your rights as a research participant, please contact Dr. Chris Hayhow, Director of Research Compliance, Ohio University, (740)593-0664 or hayhow@ohio.edu.

By agreeing to participate in this study, you are agreeing that:

• you have read this consent form (or it has been read to you) and have been given the opportunity to ask questions and have them answered;

• you have been informed of potential risks and they have been explained to your satisfaction;

• you understand Ohio University has no funds set aside for any injuries you might receive as a result of participating in this study;

• you are 18 years of age or older;

• your participation in this research is completely voluntary;

• you may leave the study at any time; if you decide to stop participating in the study, there will be no penalty to you and you will not lose any benefits to which you are otherwise entitled.
Appendix C

Research attraction statement:

Hi! My name is Haley Trottier and I am working on my undergraduate thesis research study. My study is examining how presentation styles of speech language pathologists are viewed by observers. In this study, individuals with experience with speech language pathology (students and professionals in the field) will pretend to have a speech/language disorder and will view videotapes of speech language pathologists and rate them on several therapist characteristics. In addition, I am interested in whether certain individual differences (such as gender and age and personality traits) are related to the ratings that individuals make about the videotaped therapists. This online study will take no more than ½ hour of your time to complete and you can access the study here (https://ohio.qualtrics.com/SE/?SID=SV_bezleUZ9vwkb0hv) or here (https://ohio.qualtrics.com/SE/?SID=SV_6G4zrTS1qt5qPUF). Please if you can take the survey you would not only be furthering research but helping a hard working undergraduate student! Thanks!
Appendix D

Scenario:

Imagine that you are your current age, gender, and race/ethnicity, but that you are experiencing a fluency disorder, which is commonly known as stuttering. You have had a stutter for as long as you can remember. You often have more difficulty when speaking in front of large groups of people, people you have never met before, or people of importance such as your boss. You will avoid conversations, or specific words if you are able to, so that you can refrain from stuttering as much as possible.

In this scenario you have already met your speech language pathologist one time to evaluate the severity of your stuttering. During the previous session, you were evaluated during the course of casual conversation, and the pathologist completed a fluency severity rating scale. On the scale there are ratings for three domains; 1) the number of words you stuttered per minute or frequency of prolongations and repetitions, 2) the total words you spoke per minute or the average number of time you spent stuttering, and 3) secondary characteristics such as sounds, head movements, and facial grimaces you may have made. Your scores show that your stuttering difficulties are at a level 3 or moderate level, meaning you stuttered 6-10 words per minute, you spoke 70-89 words per minute, and that you had some secondary characteristics that distracted from the content being communicated.

You are now at your second session and will hear the speech language pathologist’s treatment plan and begin your first treatment session.

You will listen to the speech language pathologist in the first video. You will then rate them on your level of satisfaction, your trust in them, your likelihood of
adherence to the treatment they suggest, and how you perceive the clinician’s competence.

You will then watch the second video, which includes the same treatment approach in a different style, and will then again rate the speech language pathologist on the same characteristics listed above.