THE PERCEPTIONS OF PSYCHOTHERAPISTS-IN-TRAINING REGARDING

PEOPLE WHO STUTTER VERSUS NORMALLY FLUENT SPEAKERS

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It has been shown repeatedly that many people hold personality stereotypes of stutterers. The attitudes of psychotherapists regarding stutterers have never been investigated. The present investigation assessed the degree to which psychotherapists-in-training hold stereotypes of stutterers as compared to normally fluent speakers. Two groups viewed a videotaped vignette of a male. In one, the male interviewee displayed stuttering behaviors. In the other, the same male spoke fluently. Participants then rated the male interviewee on several personality dimensions. Contrary to previous findings, the group viewing the stuttering interviewee rated him no differently than did the group viewing the fluent interviewee. Greater knowledge of stuttering was associated with more positive ratings of the person who stuttered. The clinical and research implications of these findings are then discussed.

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INTRODUCTION

The present investigation sought to determine whether psychotherapists-in-training hold stereotypes regarding the personality characteristics of people who stutter. First, the ways in which stuttering has been defined are discussed, followed by an examination of the stereotypes held regarding people who stutter and the groups of people that hold these stereotypes. Next, the hypothesized origins of the stereotypes are investigated, followed by a review of the literature investigating whether or not the stereotypes held regarding people who stutter are in any way accurate. The methods and results of the present investigation are then outlined, followed by a discussion of these results and their implications on research and clinical work with people who stutter.

Defining Stuttering

Stuttering is a disorder of speech production for which a reliable and valid operational definition has been elusive. For decades, clinicians and researchers have searched for, and debated over, a definition of stuttering that could be used with precision and utility to reliably discriminate stuttering from the normal disfluencies in speech which all people experience. A finding that has been replicated repeatedly is that listeners are unable to reliably judge occurrences of stuttering acceptably; this finding has been replicated in every decade for at least 50 years (Perkins, 1990a).

Bloodstein (1975), an influential figure in stuttering research and therapy in the twentieth century, has commented that it is almost impossible to develop absolute definitions of stuttering and of fluency. In the early 1990s, this difficulty was epitomized

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when stuttering theorists and researchers carried on a sometimes heated debate over

whether stuttering should be defined and identified perceptually by the listener or by the

person who stutters him/herself (e.g., Bloodstein, 1990; Ingham, 1990; Perkins 1990a,

1990b; Smith, 1990).

In the Diagnostic and Statistical Manual of Mental Disorders, Fourth Edition

(DSM-IV), stuttering is defined as:

> A. Disturbance in the normal fluency and time patterning of speech (inappropriate for the individual's age), characterized by frequent occurrences of one or more of the following:
>   (1) sound and syllable repetitions
>   (2) sound prolongations
>   (3) interjections
>   (4) broken words (e.g., pauses within a word)
>   (5) audible or silent blocking (filled or unfilled pauses in speech)
>   (6) circumlocutions (word substitutions to avoid problematic words)
>   (7) words produced with an excess of physical tension
>   (8) monosyllabic whole-word responses (e.g., "I-I-I-I see him")
>
> B. The disturbance in fluency interferes with academic or occupational achievement or with social communication (American Psychiatric Association, 1994; p. 65)

Other definitions have differed, most identifying the distinguishing features of stuttering

as repetitions and prolongations in speech, omitting the condition that they be

involuntary. This trend to disregard the involuntary nature of stuttering as perceived by

the speaker evolved out of early theories of stuttering, especially those of Johnson (1959).

Johnson developed the semantogenic theory of stuttering (also called the diagnosogenic

theory), which has had a profound influence on stuttering theory and therapy. According

to the semantogenic theory, stuttering develops out of the normal disfluencies of

childhood when parents misperceive their child's normal hesitations and repetitions as

abnormal, mistakenly labeling them as stuttering. The parents, therefore, create the problem of stuttering by attaching the pejorative label "stutterer" to their child. Subsequent stuttering, then, is an anxiety-based effort to avoid stuttering. A fundamental assumption of this theory was that stuttering originated in the misdiagnosis by listeners, not in any physiological or psychological characteristic of the person who stutters. Thus, the origin of stuttering was in the ear of the listener, and therefore it was a perceptual problem. Subsequent research on the semantogenic theory was conducted in order to test this theory. Thus, the validity of perceptual judgments of stuttering was not at issue (Perkins, 1990). Johnson's formal definition of stuttering was, "Stuttering is what the speaker does when he (1) expects to stutter, (2) dreads doing it, and (3) reacts negatively – usually by tensing - ...in an effort to avoid doing it" (Johnson, 1967, p. 249). This and many subsequent definitions relied on the listener's perception of stuttered speech in the identification of stuttering, omitting the subjective judgment of involuntariness by the speaker. Stuttering was defined behaviorally, based on the perception of stuttering by the listener. The most definitive evidence about any aspect of stuttering, however, is that listeners are unable to judge specific instances of stuttering acceptably.

In their broad review of the stuttering literature, Andrews et al. (1983) considered three popular definitions of stuttering and concluded that the consensus was that repetitions and prolongations are necessary and sufficient for the diagnosis of stuttering to be made. Perkins (1983, 1990a, 1990b), however, questioned the validity of this definition, arguing that a definition that excludes the word "involuntary" cannot be used to validly differentiate stuttering from normal disfluencies. Normal speakers experience

many instances of repetitions and prolongations in normal gropings for phrasing, wording, and pronunciations. These, however, are the elements considered by consensus to be necessary and sufficient for diagnosing stuttering.

The Stutterer Stereotype

Ham (1990) asserted that a major part of the problem in defining stuttering has been the widespread, empirically documented stereotyping of people who stutter and stuttering. The weakness of definition may contribute to the strength of the stereotype, or stereotyping may interfere with development of a definition. The lack of an accepted definition, a known etiology, and the variable manifestations of the disorder leave the theoretical landscape wide open for theorists from differing fields and schools of thought. Because it is not known what causes stuttering, and because people who stutter do so in many ways, many different and sometimes contradictory theories can be used to attempt to explain the disorder. Some theories are from the field of psychology and propose personality characteristics as explanatory mechanisms. Whatever the reason, an abundance of research spanning many decades has consistently documented that a characterologic stereotype of people who stutter is widespread and pervasive. Furthermore, many aspects of this stereotype are negative in valence and describe characteristics of people who stutter that are unrelated to speech characteristics.

In a study that initiated research into a stuttering stereotype, Yairi and Williams (1970) asked 174 speech clinicians in the state of Iowa to list all words, adjectives, or traits that they thought were necessary to adequately describe school-aged boys who

stutter. They found a strikingly high agreement among clinicians' stereotypes of people who stutter. The 26 most frequently mentioned traits indicated a trend to describe stuttering boys in terms of personality traits rather than speech-related behaviors, physical characteristics, or mental abilities. These traits were then judged by students as to the desirability or undesirability of the trait mentioned. Seventeen traits were judged to be undesirable, whereas nine were judged as desirable. The most frequently cited included traits such as nervous, shy, withdrawn, tense, anxious, and self-conscious. This tendency of speech clinicians to describe people who stutter in terms of personality traits that are, for the most part, negative has been replicated consistently since that time. Woods and Williams (1971) found strikingly similar results when they asked speech clinicians to list adjectives to describe both men and boys who stutter.

Based on the above research, Woods and Williams (1976) devised a 25-item semantic differential checklist with which to investigate people's perceptions of people who stutter in other populations. They administered the checklist to adult persons who stutter, parents of stuttering children, parents of children with other speech pathologies, parents of fluent children, elementary school teachers, public school speech clinicians, and college students. They asked these groups of people to rate four different hypothetical concepts: a typical eight-year-old male, a typical eight-year-old male who stutters, a typical adult male, and a typical adult male who stutters. Their results showed that all groups studied shared a similar stereotype of people who stutter as compared to people who do not stutter, and that this stereotype was primarily negative in nature. Furthermore, they found that the stereotype is unaffected by the actual amount of

exposure to people who stutter. Their study served to expand the generalizability of the stutterer stereotype, as well as to demonstrate the reliability of the semantic differential questionnaire. In the discussion of their findings, the researchers suggested that such a pervasive stereotype about the personalities of people who stutter would certainly have a profound influence upon the self-concept and self-evaluation, as well as on the actions, of a person who stutters.

Woods (1978) sought to explore the stability and generalizability of the above findings by assessing the attitudes of speech clinicians and classroom teachers from a different geographical region and different training backgrounds. He was concerned that the stutterer stereotype may lead these people, who are very influential in the lives of children, to communicate expectations to children who stutter that would lead to self-fulfilling prophecies. Using the same semantic differential checklist, he found strikingly similar results to the past studies. Moreover, he found that classroom teachers rated boys who stutter significantly less favorably than did speech pathologists. Classroom teachers expected boys who stutter to be passive, nonassertive, and of lower intelligence than normally fluent boys. Woods then suggested that the stigma might shape the person who stutters; it is possible that young people who stutter learn this stereotype, believe it to be true, and act accordingly. Given the demonstrated influence that teachers have on a child's self-concept, level of aspiration, and achievement in school (e.g., Schmuck & Van Egmond, 1965), this finding and its implications are particularly disquieting. It has been found that stuttering boys of normal intelligence are commonly academically delayed (Williams, Melrose, & Woods, 1969). As people who stutter do appear more nonassertive

and submissive than normally fluent people when tested, Woods suggested that these traits may be a consequence of internalizing the expectations that teachers hold for stuttering boys. Since the time of this study, similar results have been reported consistently in studies of teachers' and speech clinicians' perceptions of people who stutter (e.g., Cooper & Cooper, 1985; Cooper & Rustin, 1985; Ragsdale & Ashby, 1982; Turnbaugh, Guitar, & Hoffman, 1979).

A similar stereotype has also been found in many other populations. Fowlie and Cooper (1978) administered the semantic differential checklist developed by Woods and Williams (1976) to 34 mothers of children who stutter and 34 mothers of nonstuttering children. They found that mothers of children who stutter perceived their children as being more insecure, sensitive, anxious, withdrawn, fearful, and introverted than did mothers of nonstuttering children. Crowe and Cooper (1977) assessed knowledge of and attitudes toward stuttering in mothers of people who stutter and mothers of fluent speakers. They found that mothers of fluent speakers knew more about stuttering and perceived the personality of people who stutter more positively than did mothers of people who stutter. More accurate knowledge of stuttering was associated with more positive evaluations of people who stutter. Because of the significance placed on parental evaluations in the etiology of stuttering by the semantogenic theory and its derivatives, the researchers concluded that parental expectations based on the stutterer stereotype might be an important factor in the etiology and maintenance of stuttering. Furthermore, the expectations conveyed to the child who stutters by his/her parents would be even more influential in creating a self-fulfilling prophecy within the person who stutters than

would those conveyed by teachers. Together, the stereotypical expectations of these very important people in a child's life could create a powerful influence on the child's self-concept and subsequent behaviors.

Ruscello, Lass, Schmitt, and Pannbacker (1994), in a recent examination of the stutterer stereotype, sought to determine whether the stereotype had changed or remained relatively unchanged since the time of earlier studies. They investigated the stereotypes of special educators in six states, asking them to list adjectives to describe four hypothetical people who stutter: a female child who stutters, a female adult who stutters, a male child who stutters, and a male adult who stutters. They asked their participants to list adjectives describing these people who stutter in order to directly compare their results to those of Yairi and Williams (1970) and Woods and Williams (1971). They found that the adjectives listed by their subjects were remarkably similar, and in many cases identical, to those listed in the previous studies. The majority of adjectives were negative personality traits, such as shy, nervous, anxious, frustrated, and withdrawn. In order to avoid adverse effects on the educational progress of students who stutter, the researchers suggested that special educators, as well as teachers in normal classrooms, be taught the distinction between the person who stutters and his stuttering (i.e., between the speech/nonspeech behaviors associated with stuttering and the person who stutters as a person).

Researchers have also sought to determine whether the general public holds this stereotype of people who stutter. Ham (1990) randomly contacted 563 persons in Tallahassee, Florida by telephone, surveying their knowledge and opinions regarding

stuttering. He found that respondents could not define stuttering; the majority used non-defining descriptions of stuttering, such as "some sort of speech impediment" (p. 265). He also found that 54% of the respondents ascribed the cause of stuttering to psychological factors and personality types. On the other hand, only 16% of respondents ascribed stuttering to organic or genetic causes. Doody, Kalinowski, Armson, and Stuart (1993) utilized the semantic differential scale developed by Woods and Williams (1976) in assessing the attitudes of randomly selected community members in Newfoundland, Canada toward people who stutter. Their results indicated that these members of the general public held a stereotype of people who stutter, and this stereotype was primarily negative. Surprisingly, 85% of these people reported knowing people who stutter and 39% reported being related to people who stutter. They interpreted their findings to support past studies in showing that exposure to people who stutter or familial relation to people who stutter does not mitigate the stutterer stereotype.

Some researchers have searched for variables that act as moderating influences in listeners' perceptions of people who stutter. These researchers have reasoned that if moderating variables could be found, the origin of the stereotype might be better understood and methods to dispel the stereotype might be discovered.

Burley and Rinaldi (1986) investigated whether the sex of the listener or of the person who stutters had an effect on fluent speakers' subsequent evaluations of people who stutter. They found that sex of the person who stutters had no effect on personality ratings, which were overwhelmingly negative, but that the sex of the listener did effect evaluations. Male subjects rated people who stutter significantly more negatively than did

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female subjects. The researchers offered no explanation for this tendency for males to react more negatively than females to people who stutter, other than to suggest that males may be more aggressive than females or that males are less able than females to be empathic to the speaker. Other studies that investigated the effect of listener gender, however, have found no effects (e.g., Doody, Kalinowski, Armson, & Stuart, 1993; Woods & Williams, 1976). The majority of studies of perceptions of people who stutter did not investigate the effect of gender, and many did not even report the numbers of each gender represented in the samples. This stands out as a methodological weakness in these studies.

Collins and Blood (1990) sought to determine if fluent speakers prefer to interact with people who stutter who openly acknowledge their stuttering, and if fluent people's perceptions of people who stutter are altered as a function of acknowledgment of stuttering. Based on the finding by Burley and Rinaldi (1986) that males tend to rate people who stutter significantly less favorably than females, the researchers employed only females as subjects. Therefore, the results are generalizable only to female fluent speakers. They found that female fluent speakers preferred to interact with severe stutterers who openly acknowledged their stuttering rather than severe stutterers who did not acknowledge stuttering. The difference in preference between mild stutterers who did and did not acknowledge their stuttering was not significant. They also found that mild and severe stutterers who acknowledged their stuttering were rated more favorably regarding intelligence, personality, and appearance than were those who did not acknowledge stuttering. The researchers proposed that acknowledgment of stuttering

reduces listener tension and discomfort with interacting with a person who stutters, thereby improving listener reaction and reducing negative evaluations of the speaker.

Hulit and Wirtz (1994) investigated the effects of various variables on subjects' attitudes toward people who stutter. The subjects were from widely varying educational and professional backgrounds and varied in age from 15 to 89 years. The variables investigated were age, gender, years of education, knowledge about stuttering, number of stutterers personally known, numbering of stuttering courses completed in school, and possession of the Certificate of Clinical Competence in speech-language pathology. The only variable found to be related to attitudes was possession of the Certificate of Clinical Competence, with those holding it rating people who stutter more positively than those not holding it. All of the other variables were not related to attitudes toward people who stutter, leading the researchers to posit that these factors could be eliminated as potential predictors of attitudes toward people who stutter.

In summary, when people are asked to describe people who stutter, there is a tendency to describe them in terms of personality traits rather than speech-related or physical characteristics. There is a general belief that people who stutter possess characteristic personality traits and patterns that distinguish them qualitatively from normally fluent speakers. Furthermore, this stereotype and the expectations that correspond to the stereotype are held by people who are very influential in the lives of people who stutter, including elementary teachers, speech-language clinicians, parents of people who stutter, people who stutter themselves, and members of the general population. This stereotype includes personality traits such as anxious, withdrawn,

frustrated, and nervous. Furthermore, normally fluent speakers tend to believe that stuttering is the result of underlying psychological disturbances. This stereotype is unaffected by subjects' age, prior exposure to people who stutter, years of education, number of stuttering courses completed in school, and the gender of the person who stutters. There is conflicting data on the effect of listener gender, with some studies showing that males rate people who stutter less favorably and others showing no gender difference. The listener's knowledge about stuttering has also produced conflicting results, with some studies showing that more accurate knowledge of stuttering is associated with more positive, less stereotypical, attitudes toward people who stutter; other studies have shown no effect of such knowledge. The only variable found to be strongly related to attitudes toward people who stutter is subjects' possession of the Certificate of Clinical Competence in speech-language pathology, but that was in only one study.

Do people who stutter have characteristic personality patterns? Origins of the stereotype.

A logical question emerging from a discussion of the above research literature is, "Do people who stutter have characteristic personality traits that differentiate them from normally fluent speakers?" There have been numerous attempts to explore this question, and numerous attempts to answer this question without empirical data, with only theory behind the answers postulated. Many have attempted to explain stuttering, either its etiology or its manifestation, in terms of psychological principles and theories. Furthermore, many of the theories of stuttering that have come from the field of speech-

language pathology have employed psychological concepts and constructs. These theories imply the involvement of personality in stuttering, and thus relate to the stuttering stereotype.

Bloodstein (1975), for example, viewed stuttering as a symptom of anticipation of failure: as a "struggle reaction which reflects the speaker's moment of doubt about his ability to say a word...and has its origin mainly in early experiences of speech failure" (p. 3). Stuttering, therefore, is a reaction by the speaker to past failure; thus it is caused by something the speaker wrongly thinks is so. Bloodstein proposed that stuttering must be treated in the same way that other "distorted human behavior" (p. 3) is treated. He suggested that the first step in treating stuttering or preventing it from becoming a problem in adulthood is to prevent the child from developing a self-concept as a person who stutters.

Sheehan (1975) sought to integrate principles of clinical psychology and learning theory in his view of stuttering as an approach-avoidance conflict. He stated that stuttering is the result of opposing urges to speak and to hold back from speaking. The urge to hold back may be due to learned avoidances or to unconscious motives. Stuttering occurs when conflicting approach and avoidance tendencies reach an equilibrium. The person who stutters wants to speak but also fears not being able to communicate. Sheehan states that this interpretation of stuttering fits well with Freud's (1943) classic view of the nature of the neurotic conflict. According to this conceptualization, two urges enter into opposition, meet together again in the symptom, and are reconciled by the compromise contained in the formation of the symptom. In Sheehan's view, the compromise is the

symptom of stuttering; by means of this compromise, the conflict is externalized. He developed an avoidance-reduction therapy, whereby the person who stutters reduces and finally sheds the habits of hiding and avoidance.

Thus, both the Bloodstein (1975) and Sheehan (1975) theories postulate psychological mechanisms in the etiology and maintenance of stuttering. Bloodstein saw stuttering as distorted human behavior and as a symptom of irrational thinking. Sheehan viewed stuttering as a type of neurosis and described the etiology and maintenance of stuttering in Freudian terms. Viewed in the context of these theories, traits such as anxious, conflicted, and fearful can easily be applied to the person who stutters.

There have been numerous theorists, going back to the late nineteenth century, who have attempted to explain the etiology, manifestations, and treatment of stuttering from a psychoanalytic perspective. These theories view stuttering as a type of neurosis, and claim that children begin to stutter because they attempt to cope with some unconscious, repressed, neurotic need in ways that cause them to be dysfluent (Silverman, 1996). These theories assume that stuttering behaviors (the symptom) are symbolic of the repressed need. The needs that stuttering has been interpreted to symbolize have differed, with some authors postulating several different symbolizations within the same work. Frequent needs that have been postulated as being repressed and symbolized by people who stutter are: (1) an infantile need for oral gratification (e.g., Glauber, 1982); (2) an infantile need for anal erotic gratification (e.g., Glauber, 1982); and (3) an aggressive expression of hostile feelings that the person is afraid to express openly (Bloom, 1978). Glauber (1958) stated that stuttering is a neurotic disorder in

which "personality disturbance is in part reflected in disturbance of speech" (p.73). Murphy and Fitzsimmons (1960) claimed to present a psychodynamic, interpersonal approach to stuttering, in which stuttering is seen as a symptom of deep-seated personal difficulties. They asserted that stresses within the person who stutters must be resolved and, with this resolution, the symptom of stuttering will be eliminated. Mandell (1930), claiming that stuttering is merely a symptom of neurosis and nothing else, asserted that stuttering is ultimately caused by a lack of self-confidence or weakness of the will that causes the person to concentrate on producing words instead of on word meaning. The negative self-concept that the person who stutters holds expresses itself through stuttering.

All of the above mentioned theories regarding stuttering utilize concepts and constructs from the field of psychology and imply that people who stutter' have distinct personality characteristics that, in effect, cause them to stutter. Whether these characteristics are self-doubt, inner conflict, a distorted self-concept, or neurotic urges, all portray stuttering as similar to other "distorted human behavior" and the person who stutters as suffering from a "personality disturbance" or a "weakness of the will." These theories continue to influence people's thoughts on stuttering and stuttering therapy (Silverman, 1996) and undoubtedly have contributed to the stereotype. This latter speculation is supported by the fact that many of the hypothesized characteristics of people who stutter mentioned above are included in the stereotype of people who stutter.

Do people who stutter have characteristic personality patterns? The empirical evidence.

As reviewed above, several theoretical perspectives on stuttering have implicated personality disturbance. These theories remain unsupported by empirical studies. However, when the empirical literature is reviewed that addresses whether there is a factual basis to the stereotype, the answer is a resounding "No." These studies will be reviewed next.

In their review of the literature on the personality of people who stutter, Sermas and Cox (1982) concluded that, although it is customary to plead for more research, enough research has been done in the search for predictable, distinguishable personality characteristics of people who stutter to say that "no particular stuttering character structure can be defined" (p. 156). In the search for personality characteristics that distinguish people who stutter from people who do not stutter, many different types of assessment strategies have been used, including both projective and objective measures. The findings from most of the studies employing these measures indicate that people who stutter are more similar to people who do not stutter than they are different. Likewise, people who stutter are more similar to people who do not stutter than they are to persons known to be emotionally disturbed (see Bloch & Goodstein, 1971; Sermas & Cox, 1982; Sheehan, 1970; Van Riper, 1982).

Throughout the literature on personality characteristics of people who stutter, various researchers have found inconsistent results. Some have found particular personality differences between people who stutter and people who do not, and others have found the opposite. Frequently, researchers using the same assessment instrument

have found conflicting results. This may in part be due to the inclusion of items that relate to attitudes toward speaking, such as "Do you find it difficult to speak in public." Most people who stutter are aware that they have poorer speech skills than normally fluent speakers (Silverman, 1996), so they are likely to endorse these items in the "deviant" direction. However, their responses represent reasons that are different from those of fluent speakers who are emotionally disturbed. Another potential reason for inconsistent findings is the tendency of researchers to treat people who stutter as a homogeneous group. In fact, people who stutter have been found to be quite heterogeneous (Bloch & Goldstein, 1971). Consistent with the previously mentioned disagreements on a standard definition of stuttering, the assumption implicit in most personality studies has been that stuttering is a single entity. This assumption may not be valid. The criteria for inclusion in a stuttering group has differed considerably among studies, ranging from signs of any auditorily perceived failure in speech, to diagnosis by speech clinicians or even laypersons (Bloch & Goodstein, 1971). Few studies have operationally defined their criteria for selection of subjects, assuming that no definition of stuttering is needed because everyone knows what stuttering is and can identify it. As highlighted previously, stuttering cannot be reliably identified, even by speech-language pathologists (Perkins, 1990). Therefore, both the internal validity and external validity of these studies are suspect.

The most widely used approach in research on the personality of people who stutter has been projective tests. Chief among these has been the Rorschach™ test (AG Corporation, Langgass-Strasse 76 Berne 9 Switzerland). This test carries with it some

methodological pitfalls as a research instrument. Perhaps the most obvious problems have been revealed in validation studies that have produced results predictable from the biases of the experimenters (Sheehan, 1970). In his review of studies comparing people who stutter to people who do not stutter with the Rorschach, Sheehan (1970) concludes that no consistent findings and no agreements across researchers have emerged. Meltzer (1944) found no robust differences between people who stutter and those who do not, but offered interpretations of his findings anyway. He found that people who stutter were more productive in their responses, but somewhat less well-balanced than the control group. Richardson (1944) found that people who stutter are more detailed in their approach to problems, engage in an average amount of inner living, are more constricted, and do not respond as impulsively to stimuli when compared to the controls. Speidel (1963) concluded that no "stutter-personality" was found, but that people who stutter offered more during the inquiry phase, behaved more indifferently, and were more inhibited than fluent speakers. Sheehan (1970) suggests that further use of the Rorschach in attempting to find personality differences between people who stutter and people who do not is unwarranted, but that the use of this instrument in investigating response to therapy shows promise.

Other projective instruments have been used with similar findings. Studies using the Thematic Apperception Test (TAT) have failed to distinguish a unique stutterer personality pattern. The TAT traditionally yields much information related to social and family interactions (Sheehan, 1970). Given that stuttering occurs primarily in a social context, the TAT should be able to tap any initial personality differences between people

who stutter and fluent speakers. It should also be able to reveal personality differences

due to the effects of stuttering in a social context. Most investigators using the TAT have

searched for factors such as the needs for achievement and affection, signs of

dependency, and methods of handling feelings of hostility and aggression. As with

Rorschach studies, TAT studies reveal no unique personality pattern for people who

stutter, and no systematic differences between the personalities of people who stutter and

normally fluent speakers (Sheehan, 1970). Richardson (1944) found people who stutter to

be somewhat lower in achievement orientation than normally fluent speakers, whereas

Goodstein, Martitire, and Spielberger (1958) found no differences in achievement

imagery between people who stutter and people who do not. Christensen (1952) found

people who stutter to produce more unfavorable outcomes for pictures in which there was

opportunity to express attitudes of aggression, whereas Lowinger (1952) found no

dynamic pattern of aggression or orality specific to people who stutter. Solomon (1963)

found that people who stutter and normally fluent speakers did not differ in broad

categories of aggression in TAT responses, but that people who stutter expressed more

themes involving less violent forms of aggression. Sheehan (1970) concluded from his

review of TAT studies that the lack of consistent differences between people who stutter

and normally fluent speakers "is primarily due to a simple reality: people who stutter are

normal" (p. 75). It is clear that projective studies intended to reveal unique personality

patterns of people who stutter have yielded very inconsistent results, precluding

generalizations about the personality of people who stutter.

Researchers have also utilized personality inventories in their search for a stuttering-specific personality. In a well-controlled study, Anderson (1967) utilized the Guilford-Zimmerman Temperament Survey and the Gordon Personal Profile to compare the emotional stability of people who stutter to that of normally fluent speakers. He found no significant differences between the groups, concluding that the two groups were similar in general emotional stability. Researchers have also utilized the empirically-derived MMPI™ assessment tool, Minnesota Multiphasic Personality Inventory (Regents of the University of Minnesota Corporation, Minneapolis, Minnesota) in searching for stutterer-nonstutterer personality differences, with the same lack of consistent findings. Thomas (1951) found a group of 29 people who stutter to show mean elevated profiles when compared to the test norms, but their elevations were still well within the normal range of adjustment. Boland (1952) found that people who stutter preferred to express anxiety more overtly than people who do not stutter, and that people who stutter showed a significantly higher level of chronic anxiety than people who do not stutter. He also found that a significant amount of the anxiety shown by people who stutter was accounted for by anxiety related to speaking situations. Thus, he concluded that speech anxiety and general anxiety may be independent constructs in people who stutter. Therefore, the results of studies that have found elevated levels of anxiety in people who stutter when compared to normally fluent speakers may be confounded by a failure to distinguish anxiety related to the relatively narrowly-defined situation of public speaking from the more broadly defined construct of generalized anxiety.

In summary, researchers who have reviewed the research investigating personality differences between people who stutter and normally fluent speakers have come to the same general conclusions: there is no pattern of personality characteristics that reliably differentiates people who stutter from normally fluent speakers. Likewise, people who stutter do not, as a group, possess a characteristic set of personality traits. There is some evidence to suggest that people who stutter are somewhat more anxious, perhaps somewhat less self-confident, and somewhat more socially withdrawn due to speech-related anxiety than normally fluent speakers. However, these results have not been consistent and are made less tenable by studies finding contradictory results. Therefore, the stereotype regarding people who stutter held by a large proportion of the population includes traits that have not been reliably identified in people who stutter. In many cases, these presumptions have been disconfirmed. Hence, the stereotype of people who stutter is unfounded and perhaps blatantly wrong.

The Importance of Determining whether Psychotherapists-in-Training hold the Stutterer Stereotype

Although many different populations have been found to hold the stutterer stereotype, whether or not mental health professionals also hold that stereotype has not been investigated to date. As people who stutter are, in most respects, very similar to people who are normally fluent, the rate of utilization of mental health services by people who stutter is most likely very similar to that of people who do not stutter. Therefore, it is important to determine if the persons who provide mental health services, or who are

being trained to provide these services, hold preconceptions regarding people who stutter. Preconceptions (or stereotypes) can influence clinicians' clinical judgments and guide what clinicians see as important targets of intervention and the intervention strategies used (Turk, Salovey, & Prentice, 1988).

From an information-processing perspective, Turk, Salovey, and Prentice (1988) claimed that practitioners collect information, formulate hypotheses, and make judgments and decisions regarding clients, and that this process begins at intake and continues until termination of treatment. Because the amount of information with which the clinician is confronted is enormous, certain "knowledge structures," or cognitive processes, are utilized to aid the clinician in making sense of the vast amount of information.

One structure that is proposed to help organize information about people is the "trait." A trait is a "label describing personality that is based on a collection of consistent behaviors exhibited by an individual" (Turk, Salovey, & Prentice, 1988; p. 3). The label is then used to summarize the information about individuals' usual behavior and to assist others in their perception of those individuals. Traits represent expectations about how an individual is likely to behave, thus making the social world more predictable and manageable. When people attribute stable traits to other people, they may feel better able to understand the actions and predict the future behavior of those people. For example, if a client is labeled "anxious," therapists working with that person will be likely to perceive other behaviors on the part of the client as indicative of or caused by this trait. Turk, Salovey, and Prentice (1988) contend that "such reasoning is circular in that behavior is used as evidence for the existence of a trait while the trait is simultaneously proposed as

motivating the behavior" (p. 3). When new information is presented that contradicts expectancies based on the trait, the new information is typically discounted or ignored. Berman, Read, and Kenny (1983) found that people formed expectancies about a person based on a single trait and that subsequent information that contradicted this trait was discounted.

Clinicians may hold theories about how traits are associated with each other; these theories represent "implicit personality theories" (Asch, 1946). Implicit personality theories are created by the expectations of the perceiver rather than by the properties of the stimulus person. Such theories are quite resistant to change and likely underlie prejudicial stereotypes. If a clinician subscribes to the stereotype reviewed above, a person who stutters may be judged by the clinician to be anxious, even in the absence of any indication of anxiety. When clinicians use implicit personality theories as labels, contradictory information is likely to be discounted and the theory unaltered.

Turk, Salovey, and Prentice (1988) also discuss "schemas," which are collections of expectations about a stimulus domain, and "scripts," which are schemas outlining a sequence of events that an individual expects to occur based on prior learning and experience. In making clinical decisions, it would be inefficient for a clinician to "search" all relevant schemas and scripts. Therefore, there are "shortcuts," or decision rules, that aid in efficient processing of information. Cognitive psychologists have called these shortcuts or rules "heuristics." Tversky and Kahneman (1974) describe three heuristics commonly used in clinical decision-making.

The first of these heuristics is called the "availability heuristic," and is utilized when a person estimates the probability of an event by the ease with which an instance or example of that event is recalled. Concerning people who stutter, the widely held stereotype of people who stutter and/or the stereotypical portrayal of people who stutter in the popular media may make that stereotypical behavior of the "person who stutters" more likely to be recalled when confronted with a person who stutters. Therefore, the clinician confronted with a person who stutters may automatically recall and use the readily available stereotype when making judgments or predictions about the person who stutters.

The second heuristic is called the "representativeness heuristic" and is employed when clinicians judge how likely a client is to be a member of a certain diagnostic category. Turk, Salovey, and Prentice (1988) explain that "decision makers tend to underestimate the importance of base-rate information and focus instead on salient single-case examples" (p. 7). Base-rate information estimates the likelihood of encountering a member of a certain category in the population by chance. If, for example, the base rate of anxiety disorders is 20 percent, a rational decision maker relying on base rates would assume that a given client (person who stutters or not) has a 20 percent chance of being anxious. The clinician must consider the probability of both encountering someone who does and someone who does not fit this category by chance, given that they both exhibit a diagnostic sign, such as stuttering. For example, a clinician relying on the representativeness heuristic may diagnose a male who stutters who displays a moderate level of fear regarding meeting new people with an anxiety disorder; the same clinician

may diagnose a normally fluent male with the same level and source of fear as "normal." The reason for this bias is that people who stutter are believed to be more representative of "anxious people" than are normally fluent speakers.

The "anchoring and adjustment heuristic" refers to the tendency for decision-makers to rely too heavily on information obtained early in the decision process. These initial estimates and predictions serve as the basis for future judgments. Turk, Salovey, and Prentice (1988) stated that:

> Clinicians may fail to see improvement in a client's condition because they are anchored to an initial judgment of the client's mental state. Alternatively, clinicians might overvalue information revealed about a client during the intake process (at which point exposure to the client is minimal) and ignore subsequent information revealed during therapy (by which time, knowledge of the client is more extensive and reliable) (p. 7).

In the case of a person who stutters, the clinician may make the assessment, during the initial intake interview, that the client is an "anxious" person. When, after therapy has progressed, the person who stutters at the same rate as he/she did during the intake interview, the clinician may judge that the client has not improved. Furthermore, the initial judgment that the client is anxious may cause the clinician to ignore subsequent information or evidence that the person who stutters is not an anxious person. Therapy would be targeted at alleviating anxiety that may not be present and, therefore, lack effectiveness.

The importance of determining whether mental health professionals hold a stutterer stereotype is also illustrated by the now well-known effects of experimenter expectancy in research and self-fulfilling prophecies (or confirmatory bias). A huge body of literature, reviewed by Rosenthal and Rubin (1978), shows that the expectancies of an

experimenter in psychology experiments can significantly affect the results obtained. The results of hundreds of experiments show that experimenters tend to find what they expect to find (Rosenthal & Rubin, 1978), which has led to the advocacy of double-blind experiments to control for experimenter expectancy effects. Presumably, the expectations of the experimenter are somehow communicated to the subjects participating in the experiment, perhaps through means such as unintentional facial expressions, gestures, or provision of reinforcement. The subjects then perform up or down to experimenter expectations. In psychotherapy research, expectancy effects are suspected when the experimenter has a strong investment in the outcome of the study (Kazdin, 1998), and in situations in which interactions are ongoing and emotionally charged (Weinberger & Eig, 1999). Psychotherapy is a situation in which these criteria are present: both therapist and client have a very strong emotional investment in the process and interactions are ongoing and emotionally charged. Expectancies pave the way for a confirmatory bias, which is the human tendency to distort experience to make it coincide with our expectations (Mahoney, 1991).

Mahoney (1991) terms expectancy-based distortion a "feedforward" mechanism. He asserts that feedforward mechanisms serve to prepare the person for a select subset of possible experiences with a stimulus. This subset is based on past experiences with that stimulus and on preconceptions about the stimulus. When that stimulus is encountered, feedforward mechanisms constrain our experience of that stimulus by supplying expectations of that stimulus. Confirmation of these expectancies is subsequently

obtained by selectively attending to aspects of the stimulus that confirm our expectations

and selectively disregarding disconfirming aspects of the stimulus.

A therapist who holds the stereotype of people who stutter will have the

preconception that the person who stutters is anxious, fearful, withdrawn, self-conscious,

nervous, and so forth. These expectations will be confirmed by feedforward, self-

confirming processes. Obviously, this process will have a significant impact on the entire

course of therapy, from the objectives of therapy, to the therapist-client relationship, and

the ability of the therapist to empathize with the client. For instance, the therapist may

attribute the client's current problems to anxiety and target the amelioration of the

client's anxiety as a goal of therapy. Meanwhile, the client who is not truly anxious may,

due to the expectancies of the therapist, come to behave as if, and perhaps even to

believe, anxiety is the problem. Even if the client does not believe she/he is anxious and

expresses this to the therapist, the therapist (due to the confirmatory bias) may attribute

this to denial or see it as a symptom of anxiety itself. Furthermore, the preconceptions

held about people who stutter will impede the therapist's ability to empathize effectively.

The therapist would see the world through the eyes of the stereotype, not through the eyes

of the client. The therapist-client relationship will then be negatively affected, because

the client will come to believe that the therapist does not understand her/him. Effective

communication, vital to psychotherapy, will be impossible.

The therapist-client relationship has been found to account for more outcome

variance than any other variable (Cf. Weinberger & Eig, 1999). Therefore,

preconceptions regarding people who stutter may impede therapeutic progress and may

even do harm to the person who stutters, causing her/him to "live up to" the expectations of the therapist.

Hypotheses

It was hypothesized that psychotherapists-in-training would rate personality characteristics of a person who stutters in an intake interview as being significantly different than those of a normally fluent speaker in the same situation. Specifically, those characteristics rated as being more present in the person who stutters will include traits judged in past research as being negative. Second, it was hypothesized that the subject variables of age, gender, number of psychotherapy courses taken and passed, hours of practical clinical experience, and number of people who stutter personally known would have no effect on subjects' ratings of people who stutter. Finally, it was hypothesized that subjects' factual knowledge of stuttering will correspond to rating the person who stutters more positively.

METHOD

Participants

Participants were recruited from graduate programs that provide training in psychotherapy and from which graduates are eligible for licensure as practicing psychologists. Programs included clinical psychology, counseling psychology, and behavioral medicine. Participants ranged in age from 22 to 40 and included 34 females and 6 males, for a total of 40 participants. People enrolled in these programs at the University of North Texas (UNT) were solicited for participation. After permission was obtained, a paper announcement was put into the mailbox of each eligible student, and sign-up sheets were attached. Volunteers were then contacted by telephone by an undergraduate research assistant who determined the best time for each participant. Participants were run in the largest groups available for a certain time. The largest group consisted of six participants and the smallest consisted of one participant. The actual announcement that was distributed is shown in Appendix A. Participants were not offered any monetary compensation for participation, but were offered the chance to contribute to psychological research and, in effect, the advancement of knowledge of clinical psychological processes.

All participants read and signed an informed consent form (Appendix B). Treatment of participants was in accordance with the ethical standards of the American Psychological Association (APA, 2002). Prior to participation in the study, participants were not told the purposes of the study; they were told that they would be participating in

an investigation of clinicians' perceptions of a person in a videotaped vignette of an intake interview. All participants were debriefed immediately after participation.

Videotaped Vignettes

The two videotaped vignettes were recorded on a Sony® Video8 Handycam™ (Sony Corporation, Tokyo, Japan) video camera, model number CCD-TRV 11, and shown to participants on a 20 inch television. The videotaping procedure paralleled that of Hastorf, Wildfogel, and Cassman (1979) and Blood and Blood (1982). Both vignettes consisted of a male in his twenties simulating being the subject (interviewee) of an intake interview at a psychology clinic. In both, the male was seen from a front view, from the chest up, seated at a table. The person simulating conducting the intake interview (the intake worker) was only seen from behind, and only her head was visible.

The two vignettes differed only as a function of the fluency of the interviewee. In the first vignette, the male spoke fluently. In the second vignette, the same person portraying an interviewee spoke with a moderate amount of primary stuttering behaviors (blocks, repetitions, and prolongations) and secondary stuttering behaviors (i.e., facial tensions, struggle behaviors). In a study by Andrews and Ingham (1972), a moderate amount of stuttering behavior was calculated on actual people who stutter as being 7.39% of syllables stuttered (primary stuttering behaviors) with some secondary stuttering behaviors accompanying all primary behaviors. That calculation was used in the present study by summing the number of syllables in each line of the script spoken by the actor, and then dividing that sum by 7.39 to produce the number of syllables that should be

stuttered for each line of script. Syllables to be stuttered were randomly chosen by the experimenter.

To preclude speculation that some subtle personality trait of the interviewee may have contributed to the outcome of the study, a fluent graduate student enrolled in the speech-language pathology program at the University of North Texas played the role of the interviewee. The student was trained in pseudostuttering by the present researcher, who is familiar with the practice in a clinical setting and who himself is a stutterer. This technique was used in a study by Turnbaugh, Guitar, and Hoffman (1981) and was found to be effective.

The same script was used for both vignettes to insure identical content of each vignette. Thus, the interview participants and dialogue spoken was approximated across the vignettes constructed. The length of the vignettes varied only as a function of the stuttering of the interviewee; each vignette was approximately 10 minutes long. The exact script used is shown in Appendix C.

Rating of the videotaped vignettes.

Both actors rehearsed their roles from scripts until performances were judged to be approximate simulations of issues presented in intake situations. Four independent graduate students enrolled in the Clinical Psychology Program at the University of North Texas who frequently conduct actual intake interviews did this judging. These same judges rated the quality of audio and video characteristics of the vignettes, in order to make sure that both actors could be heard and seen adequately. Only when all judges

agreed that both content and quality were very good and approximated the real intake situation were the vignettes used in the experimental situation.

<div align="center">Test Instruments</div>

The Adjective Checklist.

In the measurement of attitudes and perceptions of people who stutter, the semantic differential technique has been the most widely used format for paper-and-pencil questionnaires. Smith (1962), in discussing methodology for measuring meanings for speech correction concepts, noted that meanings for concepts are easily and reliably measured with the semantic differential technique, which was developed by Osgood, Suci, and Tannenbaum (1957). Erickson (1969) noted that an instrument used to assess attitudes or perceptions regarding communication should be as free as possible from potential sources of error. To this end, he suggested that preconceptions or theoretical biases regarding the nature of possible relationships among "desirable" or "undesirable" attitudes and stuttering behavior should not limit the scope of such an instrument; they should be empirically derived. Woods and Williams (1971) developed a semantic differential checklist, the Adjective Checklist, specifically for the measurement of attitudes regarding people who stutter following Erickson's (1969) guidelines. Since that time, their questionnaire has been used extensively in studies investigating perceptions of people who stutter (i.e., Fowlie & Cooper, 1978; Ruscello, Lass, & Brown, 1988; Turnbaugh, Guitar, & Hoffman, 1979; Woods, 1978; Woods & Williams, 1976). Because of this widespread usage and demonstrated reliability and validity, the same instrument

was used in the present study. This allowed comparisons to past studies investigating the stutterer stereotype in other populations.

The Adjective Checklist, shown in its entirety in Appendix D, was constructed by selecting the 25 traits (adjectives) which speech clinicians had used most frequently to describe the typical person who stutters in research conducted by Yairi and Williams (1970) and Woods and Williams (1971). These adjectives were then paired with antonyms selected from dictionary listings and graduate students' choices, so that one adjective is a negative trait and the other is a positive trait. Each negative trait and its corresponding positive antonym are separated by seven equal-appearing intervals, creating 25 bipolar adjective scales. The seven intervals separating the bipolar adjectives are unnumbered, and read from left to right: <u>very much</u>, <u>quite a bit</u>, <u>slightly</u>, <u>neutral</u>, <u>slightly</u>, <u>quite a bit</u>, and <u>very much</u>. Participants were instructed to circle the interval that they feel best described the interviewee in the videotaped vignette. For example, the adjectives in item 1 were "open" and "guarded," separated by the seven intervals outlined above. Therefore, a participant who circled the interval marked <u>very much</u> that is closest to "open" was indicating that they feel that the interviewee seemed very open, or honest and willing to discuss issues openly. Conversely, a participant who circled the interval marked <u>very much</u> that is closest to "guarded" was indicating that they feel that the interviewee was very guarded, or suspicious and unwilling to discuss issues openly.

After all the data were collected, the seven intervals separating the adjectives were assigned numerical values in order to facilitate statistical analysis. The interval labeled <u>very much</u> that is closest to the positive pole was assigned a value of 1; the next

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interval, labeled quite a bit, that is closer to the positive pole was assigned a numerical

value of 2, and so on until all intervals were assigned a numerical value. The interval

labeled neutral was therefore was assigned a numerical value of 4. Quantified in this way,

on any item scale the minimum score was 1 and the maximum score was 7, with lower

scores indicating a more positive evaluation of the interviewee and higher scores

indicating a negative evaluation. Therefore, the minimum cumulative score for all 25

item scales for any one participant was 25, while the maximum cumulative score was

175.

Alabama Stuttering Knowledge Test.

Because it has been shown that people with greater knowledge about stuttering tend to

rate the personalities of people who stutter more positively (i.e., Conlon, 1965; Crowe &

Cooper, 1977), it was important to determine whether the present participants'

personality ratings were influenced by knowledge about stuttering. The Alabama

Stuttering Knowledge Test (ASK Test), developed by Crowe and Cooper (1977) at the

University of Alabama, was chosen for this purpose. The ASK Test (shown in its entirety

in Appendix E) consists of 26 statements originally chosen to measure parents'

knowledge of stuttering. These statements were chosen from reviewing the literature and

choosing those facts about stuttering that received consistent and unequivocal research

support. The ASK Test utilizes a true-false response format and the score is determined

by the total number of correct responses, with unanswered questions scored as incorrect.

Therefore, the minimum score possible is 0 and the maximum score possible is 26

In composing the ASK Test, Crowe and Cooper (1977) utilized the true-false response format in order to minimize clinician influence and judgment concerning the scores obtained. Furthermore, they kept the number of questions composing the test to a minimum (26) so as not to present a task which seemed too time consuming or formidable to the person completing the test. These characteristics were particularly useful for the present investigation, as participants completed three different instruments and more questions would have potentially resulted in random error due to possible participant fatigue or boredom. Although the authors cite the lack of studies of the validity or reliability of the ASK Test, they utilized this instrument in two studies and found significant positive correlations between subjects' ASK Test scores and their subsequent personality ratings of people who stutter. Because it has been found that the more subjects know about a handicap, such as stuttering, the more positive will be their attitudes toward people with that handicap and their personalities, these correlations are evidence for the construct validity of the ASK Test as utilized in the present investigation.

Demographic data questionnaire.

In measuring college students' perceptions of people who stutter, Ruscello, Lass, and Brown (1988) developed a demographic questionnaire with questions relevant to the present investigation. That same questionnaire, with some modification, was utilized in the present investigation (Appendix F). Because the present study concerned psychotherapists-in-training (a different population than that studied by Ruscello et al., 1988), some questions regarding psychotherapy training were added. Specifically,

participants were asked, "How many psychotherapy training courses have you taken and passed?" and "How many hours of actual psychotherapy experience have you accumulated during your training?"

Procedure

Participants were randomly assigned to groups with the restriction that an equal number of cases of each gender were assigned to each condition. Despite past research that has shown that gender, age, number of years of education, and number of people who stutter personally known has no effect on people's attitudes toward or perceptions of people who stutter (Doody, Kalinowski, & Armson, 1993; Hulit & Wirtz, 1994), one study did find differences between gender on ratings of a stuttering speaker (Burley & Rinaldi, 1986). In the Burley and Rinaldi (1986) study, males rated people who stutter significantly less favorably on a number of personality dimensions than did females. Therefore, in the present study the two groups were matched on gender, thereby equalizing any influence of gender on the dependent variable.

This random assignment with a gender restriction was accomplished by assigning participants, as they agreed to participate, to the groups in an unbiased fashion based on gender. There were two lists of participants, one for females and one for males. Each member of a list was then randomly assigned to a group, creating two groups with equal numbers of participants and an equal ratio of male and females. Matching groups on other variables was unnecessary, as all participants likely represented similar socioeconomic status as measured by number of years of education. Age, as previously

mentioned, has been shown not to influence listeners' perceptions. Also, it was insured

that all participants are fluent in the English language by only including those volunteers

whose native language was English.

Testing was conducted when participants' schedule allowed and took place in a

research room at The Psychology Clinic at the University of North Texas. The person

conducting the experiment was an independent research assistant who was masked to the

purposes of the study in order to avoid any demand characteristics or experimenter bias.

When participants arrived, they were asked to sit where they could see the television

screen. Before the vignettes were shown, all participants were asked if they could

adequately see the television screen and the vignette was not shown until all confirmed

that they could see the screen adequately.

> The instructions given by the research assistant were the same for both groups:
> You are going to see a videotaped vignette of an intake interview with a male at a
> mental health clinic. The male was self-referred. After you watch the vignette,
> you will be given some sheets of paper that contain some rating scales, each with
> seven choices. I would like you to make a rating of this person on each of the
> scales provided by circling the point on the scale that you think best describes
> him. Please do not skip any of the scales. After completion of the rating scales,
> you will be given a demographic questionnaire and a short true-or-false
> questionnaire. Please fill these out without skipping any questions. Remember,
> you will never be identified by name.

After the vignette was viewed in its entirety, the sheet containing the scales was

passed to all participants. There was no time restriction on completing the scales, so that

all participants had as much time as needed to complete them. When all were completed,

the demographic questionnaire was passed out and subjects were reminded to complete it

without skipping any questions. The subjects were then given the ASK Test and asked to

complete it in its entirety. After all measures were collected by the research assistant, the

participants were told of the purpose of the study. Any questions participants had were

then answered.

RESULTS

The participants in both groups rated the interviewee in the videotaped vignette on 25 personality dimension scales in semantic differential format. The semantic differential scales were counterbalanced for valence of the trait being measured; the side on which the more positive trait occurs was randomly determined. Each participant's completed instrument consisted of 25 scale scores ranging from 1 to 7 on each of the 25 personality dimensions (4 = neutral, 3 and 5 = slightly, 2 and 6 = quite a bit, and 1 and 7 = very much). Low scores, therefore, corresponded to more positive personality trait attribution and higher scores corresponded to more negative personality trait attributions. Reliability analyses on the Adjective Checklist revealed that the checklist displayed an internal-consistency reliability (alpha) of .80.

A composite of the item ratings was computed for each participant, consisting of the average of the ratings on all 25 personality dimensions. There were no missing values. A group mean was then computed, consisting of the average total rating of the members of each group. Means, standard deviations and effect sizes for all 25 items for both groups are listed in Table 1.

Assuming a normal distribution of ratings within each group and heterogeneity of variance between the groups, these data were then subjected to a one-tailed analysis of variance (ANOVA). With the alpha level set at .05 for this and all subsequent tests (unless otherwise noted), it was predicted that there would be a significant difference between groups' composite ratings. However, the results indicated that the two groups did

not rate the interviewees as being significantly different in personality characteristics overall, (overall mean = 3.66, $\underline{SD}$ = .422) $\underline{F}$ (1, 38) = .577, $\underline{p}$ = .226.

As a follow-up to the main analysis, one-tailed ANOVAs were used to explore differences on each trait separately. Because 25 separate tests were used for this purpose, a Bonferroni correction was utilized, bringing the alpha level needed for significance to .002. With this conservative alpha level, it was found that the groups did not differ significantly in their ratings of the interviewee on any of the 25 personality dimensions, with $\underline{p}$ values ranging from .0045 (sensitive – insensitive) to .5 (bragging – self-derogatory). Therefore, based on the above analyses, participants rated the stuttering interviewee as being more similar to than different than the normally fluent interviewee. As a measure of effect size for each of the 25 personality dimensions, Cohen's $\underline{d}$ was computed for each dimension. Effect sizes ranged from 0 (Bragging-Self-derogatory) to .87 (Open-Guarded and Sensitive-Insensitive). Based on a set of conventions proposed by Cohen (1988), an effect size of .80 is generally viewed as a large effect size. It can be seen in Table 1 that, while none of the differences between groups' ratings of personality variables reached statistical significance, four of the 25 effect sizes exceed .80: Shy-Bold, Open-Guarded, Sensitive-Insensitive, and Passive-Aggressive.

The subject characteristics explored consisted of age, hours of practical clinical experience, number of psychotherapy courses taken and passed, hours of assessment experience, number of assessment courses taken and passed, and number of people who stutter personally known (see Table 2). Overall, participants ranged in age from 22 to 40 years, with a mean age of 26.73 ($\underline{SD}$ = 3.87). The mean age of participants in the

experimental group (i.e., the group who rated the interviewee who stuttered) was 26.15 ($\underline{SD}$ = 3.911), and the mean age of participants in the control group (i.e., participants who rated the fluent interviewee) was 27.3 ($\underline{SD}$ = 3.84). The two groups did not differ significantly in age, $\underline{t}$ (38) = -.938, $\underline{p}$ = .354. Thirty four participants indicated that they knew at least one person who stutters, with an overall mean of 1.68 ($\underline{SD}$ = 1.05) stutterers known and a range of 0 – 4 stutterers known. The two groups differed significantly in number of stutterers known, with the control group (mean = 2.0, $\underline{SD}$ = 1.17) indicating that they knew more people who stutter than the experimental group (mean = 1.35, $\underline{SD}$ = .813), $\underline{t}$ (38) = -2.041, $\underline{p}$ = .048. One participant had a father who stutters, two had a brother who stutters, three had a cousin who stutters, 27 had a friend who stutters, 11 knew a coworker who stutters, two had psychotherapy or assessment clients who stutter, and 12 knew someone other than those acquaintances listed who stutters. Overall, number of psychotherapy classes taken and passed ranged from 0 to 63, with a mean of 4.93 ($\underline{SD}$ = 10). For the experimental group, the mean number of psychotherapy courses taken and passed was 3.5 ($\underline{SD}$ = 3.204); the mean for the control group was 6.35 ($\underline{SD}$ = 13.804). The two groups did not differ significantly in number of psychotherapy classes taken and passed, $\underline{t}$ (38) = -.899, $\underline{p}$ = .374. Overall, hours of practical therapy experience ranged from 0 to 1000, with a mean of 151.5 hours ($\underline{SD}$ = 241.7). For the experimental group, the mean hours of therapy experience was 102.35 ($\underline{SD}$ = 159.5); the mean for the control group was 200.65 ($\underline{SD}$ = 299.03). The two groups did not differ significantly in hours of practical therapy experience, $\underline{t}$ (38) = -1.3, $\underline{p}$ = .202. Overall, number of assessment courses taken and passed ranged from 1 to 5, with a mean of 2.65 ($\underline{SD}$ = 1.001). The

mean for the experimental group was 2.7 (SD = 1.03); the mean for the control group was 2.6 (SD = .995) assessment courses taken and passed. The two groups did not differ significantly in number of assessment courses taken and passed, t (38) = .312, p = .757. Overall, hours of assessment experience ranged from 0 to 1000, with a mean of 159.03 (SD = 221.5). The mean for the experimental group was 116.8 (SD = 203.64); the mean for the control group was 201.25 (SD = 235.48) hours of assessment experience. The two groups did not differ significantly in hours of assessment experience, t (38) = -1.213, p = .233.

Correlations between each of the demographic variables listed above and composite ratings for both groups combined were then explored. Age (r = .226, p = .161), number of stutterers known (r = .033, p = .840), number of therapy classes (r = .02, p = .905), hours of practical therapy experience (r = .024, p = .885), number of assessment classes (r = -.023, p = .89), and hours of practical assessment experience (r = .084, p = .607) were all found not to be significantly correlated with composite ratings. These correlations were then explored for each group separately. For the group who rated the male who stuttered, age (r = .147, p = .537), number of stutterers known (r = -.117, p = .623), number of therapy classes (r = .165, p = .487), hours of practical therapy experience (r = -.071, p = .766), number of assessment classes (r = .024, p = .919), and hours of practical assessment experience (r = .009, p = .97) were not significantly correlated with composite ratings. For the group that rated the fluent male, age (r = .343, p = .139), number of stutterers known (r = .125, p = .601), number of therapy classes (r = -.061, p = .797), hours of practical therapy experience (r = .061, p = .797), number of

assessment classes (r = -.091, p = .704), and hours of practical assessment experience (r = .149, p = .531) were also not significantly correlated with composite ratings.

Analyses of covariance (ANCOVAs) were then conducted, with each of the demographic variables entered independently into separate equations as potential covariates. Because the demographic data were highly skewed, participants were divided into three groups based on percentiles (i.e., participants were split at the 33rd and 66th percentiles of each variable to form three groupings). Therefore, the independent variable for these analyses was group (experimental versus control group), the covariates were the trichotomized groupings on each of the demographic variables, and the dependent variable was composite ratings. It was predicted that none of the demographic variables would be found to significantly covary with the independent variable of group, meaning that none of these variables would have a significant effect on subjects' ratings of the interviewee. As was predicted, none of the variables were found to significantly covary with the independent variable of group. The results for each covariate were as follows: age (Table 3), F (1, 37) = .307, p = .583; number of stutterers known (Table 4), F (1, 37) = .439, p = .512; number of therapy classes (Table 5), F (1, 37) = .543, p = .466; hours of practical therapy experience (Table 6), F (1, 37) = .617, p = .437; number of assessment classes (Table 7), F (1, 37) = .582, p = .450; hours of practical assessment experience (Table 8), F (1, 37) = .571, p = .454. The power to find a significant difference was low for all variables, ranging from .051 (number of assessment classes) to .214 (age).

To further explore the effect of these variables on participants' ratings of the male who stuttered, the group that saw the male who stuttered was divided into two groups

using a median split for each variable. Separate t-tests were then performed for each characteristic using the new groupings as the independent variable and the composite ratings of the group who saw the male who stuttered as the dependent variable. No significant differences between the groups were found: age, t (18) = .253, p = .621; number of stutterers known, t (18) = .458, p = .507; number of therapy classes, t (18) = .109, p = .745; hours of practical therapy experience, t (18) = .028, p = .868; number of assessment classes, t (18) = .006, p = .942; hours of practical assessment experience, t (18) = .439, p = .666.

Next, the impact of participant knowledge of stuttering was explored by conducting correlational analyses of the ASK Test scores of participants in the experimental group with their personality ratings of the stuttering interviewee. It was predicted that these variables would be significantly negatively correlated, with higher scores on the ASK Test being associated with lower total, and therefore more favorable, scores on the Adjective Checklist. This hypothesis was supported, r = -.43, p = .029. Therefore, greater participant knowledge of stuttering was associated with more favorable personality ratings of the interviewee who stuttered. To explore whether ASK Test scores were correlated with more positive interviewee ratings in general, across groups, or whether this association was found only in relation to the interviewee who stuttered, a correlational analysis was conducted between ASK Test scores of the group that saw the fluent interviewee. This correlation was found to be not significant, r = -.015, p = .949. Therefore, greater knowledge of stuttering was associated only with rating the

interviewee who stuttered more positively and was not associated with rating the fluent

interviewee more positively.

DISCUSSION

The present study found that psychotherapists-in-training judge the personality characteristics of a male who stutters no differently than they judge the personality characteristics of a male who does not stutter. Furthermore, the participant variables of age, number of stutterers personally known, number of psychotherapy courses taken and passed, hours of practical therapy experience, number of assessment courses taken and passed, and hours of practical assessment experience have no effect on personality ratings of a male who stutters. Lastly, greater knowledge of stuttering is associated with rating personality characteristics of a male who stutters more positively.

The finding that psychotherapists-in-training do not judge the personalities of stutterers as being different than normally fluent speakers also means that psychotherapists-in-training do not view stutterers as having more negative personality traits relative to fluent speakers. The Adjective Checklist employed in the present study was constructed by asking speech-language clinicians for adjectives that describe a typical male stutterer (Woods & Williams, 1971), and many of the traits offered by these clinicians were negative in nature. In the present study, the psychotherapists-in-training did not judge the male who stuttered as being significantly different than the fluent male on any of the 25 personality dimensions included on the Adjective Checklist. Therefore, they did not believe the male who stuttered to be more anxious, withdrawn, shy, tense, introverted, or guarded than the fluent male – traits that have been linked again and again to people who stutter in past research looking at perceptions of stutterers.

The results of the present study can also be interpreted as showing that psychotherapists-in-training, regardless of background and experience, do not believe that people who stutter have a certain characteristic personality pattern distinct from that of fluent speakers. In other words, they do not hold a negative stereotype of people who stutter. Further, when judging a person who stutters, a person with more knowledge about the facts regarding stuttering tends to judge the stutterer less negatively than people with less knowledge regarding the facts of stuttering. Psychotherapist-in-training in general, therefore, view people who stutter as being very similar in personality to non-stutterers, especially when the psychotherapist-in-training has greater knowledge regarding the facts of stuttering.

The results of the present study are in disagreement with all studies reviewed regarding perceptions of stutterers. Beginning in 1976 and well into the 1990's, researchers have consistently reported finding a stutterer stereotype that is negative in nature in many different samples of many different and diverse populations, using the same or very similar measures (e.g., Cooper & Cooper, 1985; Cooper & Rustin, 1985; Crowe & Cooper, 1977; Doody, Kalinowski, Armson, & Stuart, 1993; Fowlie & Cooper, 1978; Ragsdale & Ashby, 1982; Ruscello, Lass, Schmitt, & Pannbaker, 1994; Turbaugh, Guitar, & Hoffman, 1979; Woods & Williams, 1976; Woods, 1978).

Woods and Williams (1971) began research into attitudes toward people who stutter and developed the Adjective Checklist utilized in the present study. They, and researchers that followed them, found that parents of children who stutter, parents of children with other speech pathologies, parents of fluent children, elementary school

teachers, speech clinicians, college students, and even people who stutter themselves all

rated males who stutter significantly different and more negatively than males who do not

stutter. They found that these groups of people believed that people who stutter possess

such traits as insecurity, anxiousness, fearfulness, and introversion to a significantly

greater degree than do people who do not stutter. In the present study, psychotherapists-

in-training did not judge the male who stutters as possessing these traits to a greater

degree than males who do not stutter. Many times, psychotherapists-in-training judged

the male who stuttered to possess less of these negative traits than the male who did not

stutter, though not to a significant degree.

One must then wonder why the results of the present study are in disagreement

with such a large body of supporting literature. A reason may be the population from

which the present sample was taken. Graduate students in psychology are selected for and

given training in empathic skills development; it may be that psychotherapists-in-training

have a highly developed sense of empathy, or ability to take the perspective of another

person, and that their initial ability in this regard is why they are selected for further

training in graduate school. In addition to being selected initially for further training

based partly on their perceived empathic abilities, those selected are given further

training in this domain. Researchers have found that graduate students in psychotherapy

and counseling improve in empathic ability as they progress in their training. Lyons and

Hazler (2002) conducted a cross-sectional study exploring the influence of year in a

counseling program and affective/trait-based empathy and cognitive/skill-based empathy.

They found that students' levels of both types of empathy increased significantly from

their first to second year in the counseling program. Hattan (2001) investigated the impact of a counseling skills course on counselor trainees' level of empathy, and found that trainees' scores on a measure of empathy were significantly higher at the end of the course than at the beginning.

A highly developed sense of empathy may lead one to be able to take the perspective of, or to "get into the mind" of, another person. This undoubtedly entails being able to consider the personality, experience, and feelings of another person. Carl Rogers (1980) described empathy as follows:

> It means entering the private perceptual world of the other and becoming thoroughly at home in it. It involves being sensitive, moment by moment, to the changing felt meanings which flow in this other person, to the fear or rage or tenderness or confusion or whatever that he or she is experiencing. It means temporarily living in the other's life, moving about in it delicately without making judgments (p. 142).

Perhaps because the psychotherapists-in-training sampled in the present study were selected for and involved in professional psychotherapeutic training, their ability to understand the other's feelings, desires, ideas, and actions (i.e., their empathic ability) may be more advanced than that of previous samples. Furthermore, there have been no past studies examining the perceptions of mental health workers regarding stuttering; perhaps, then, psychotherapists-in-training represent a unique population in that regard.

The finding that the participant background variables investigated, including number of stutterers known, have no effect on personality ratings of stutterers is in agreement with past research examining possible moderating variables of the stutterer stereotype. Doody, Kalinowski, Armson, and Stuart (1993) found that 85% of their sample reported knowing people who stutter and that knowing a person who stutters has

no effect on the personality ratings of people who stutter. In the present study, 85% (34 of 40) of participants reported knowing someone who stutters as well, and three reported having a family member who stutters; this had no effect on their ratings of the speaker. Hulit and Wirtz (1994), using a large and diverse sample, found that the participant variables of age, years of education, number of people who stutter personally known, and number of stuttering courses completed in school had no effect on participants' ratings of a person who stutters. These variables were roughly approximated in the present study and were found to have no effect on participants' ratings. Age and number of people who stutter known had no effect, nor did number of courses passed on psychotherapy or assessment and approximate hours of actual psychotherapy or assessment. Of course, given the lack of a prominent stutterer stereotype, the lack of moderator effects is largely uninformative.

The only variable found in past research to have a moderating influence on personality ratings of a person who stutters is knowledge of stuttering (Crowe & Cooper, 1977; Hulit & Wirtz, 1994). The findings of the present study support this, as those participants who scored higher on the ASK Test (thereby displaying more factual knowledge about stuttering) rated the male who stuttered more positively than did those participants who scored lower on the ASK Test (thereby displaying less factual knowledge about stuttering). This effect was found to be specific to the group who rated the male who stuttered, as the ASK Test scores of the group who rated the fluent male were not correlated with their overall ratings of the fluent male interviewee.

Beside the findings outlined, some exploratory findings are worth outlining. As can be seen from Table 1, if the Bonferroni correction had not been utilized, analyses would have revealed that there was a significant difference between groups on 4 of the 25 personality dimensions (open-guarded, sensitive-insensitive, passive-aggressive, perfectionistic-careless). Interestingly, on the dimensions of open-guarded and sensitive-insensitive, the higher (more negative) ratings (more guarded and sensitive) were given to the male who did not stutter. Only on the dimensions of passive-aggressive and perfectionistic-careless would the male who stuttered have been judged significantly more negatively (more passive and perfectionistic). It is difficult to determine why these patterns emerged (of course, their strength within the multiple t-tests indicates that they could be spurious). In past research, people who stutter have been judged to be more guarded and sensitive than were people who do not stutter; in the present study, these results are reversed. The only personality characteristic judged in the present study to be more present in the male who stuttered that has also been assigned to people who stutter in past research is the characteristic of passivity. Perfectionism is a characteristic that has not been assigned to people who stutter in past research; in fact, carelessness was the characteristic on this dimension that had been assigned to people who stutter significantly more so than people who do not stutter. One possibility is that participants were rating the actor, unknowingly, based on his acting skill. Perhaps the two vignettes differed as a function of acting skill. The actor did lack formal training in acting and, therefore, may have acted differently on the two tapes in these personality dimensions. Indeed, he had more formal training in "acting like a stutterer" than in "acting fluent."

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Clinical Implications

The perceptions of mental health workers regarding people who stutter has not been researched prior to the present study. Because people who stutter make up one percent of the United States population as a whole, many mental health workers will come into contact with people who stutter through the course of their clinical work. The results of the present study imply that psychotherapists-in-training do not hold the same negative stereotype of people who stutter that many other people hold. They also imply that this is true regardless of age, practical experience, and training background. This should be good news to the stuttering community. This may mean that people who stutter will not be prematurely judged negatively by psychotherapists and decisions about treatment will not be based on characteristics or traits that are not present in the person who stutters. Clinicians would listen to the reasons people who stutter come to psychotherapy without a tendency to believe their mental health problems involve or are due to any of the negative characteristics that are a part of the stutterer stereotype.

The present findings also suggest that a key goal in combating the stutterer stereotype and, therefore, in combating the influence of the stereotype in making clinical decisions, is education about the facts of stuttering. Participants who viewed the male who stuttered and who had greater factual knowledge about the causes and characteristics of stuttering rated the male who stuttered more positively than did those who viewed the male who stuttered but had less factual knowledge of stuttering. This is consistent with past research and so may tentatively be regarded as a fact. Therefore, educating people who may potentially come into contact with stutterers and who are in position to make

important suggestions and decisions regarding their lives may be a key factor in combating the stutterer stereotype.

Stuttering is included in the DSM-IV (APA, 1994) in the section entitled "Disorders Usually First Diagnosed in Infancy, Childhood, or Adolescence." Its inclusion in the DSM-IV implies that stuttering is a mental disorder. Clinicians-in-training who see that stuttering is included in the DSM-IV may assume that the mere presence of stuttering constitutes a mental disorder. At the same time, none of the participants had heard discussion of stuttering as part of their training and none had read more than a very little about stuttering. The clinician-in-training, in effect, is left to his or her own devices in thinking about and conceptualizing stuttering and the person who stutters, without learning of the facts about stuttering. Because stuttering is a category in the field's diagnostic system, more effort should go into teaching clinicians-in-training the facts and the myths about stuttering to ensure that stuttering per se is not viewed as a mental disorder, that people who stutter are not viewed as having a mental disorder merely because they stutter, that stuttering is not an automatic target of psychological intervention, and that intervention focuses on the reasons people who stutter seek psychological treatment rather than on assumed causes or sequelae of stuttering.

Further, since it has been found in past research that people who stutterer themselves may hold negative stereotypes regarding people who stutter, another goal may be to educate those who stutter regarding the facts about stuttering. If clinicians are educated in this regard, they would be in position to then help educate people who stutter themselves. This act of helping to educate the person who stutters may go a long way in

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helping to develop the therapeutic relationship, in that the clinician would be communicating understanding and acceptance of stuttering and of the person who stutters, as well as conveying the idea that the person who stutters will not be judged based on her/his stuttering. It may also help the person who stutters not to view stuttering as a mental disorder per se.

Research Implications

Because this is the first study investigating the perceptions of people in the mental health field regarding people who stutter, more research needs to be done in this area in order to determine if the present findings will be supported. Given that the semantic differential questionnaire used in the present study displayed good reliability, this may be used in future research so that results can be compared across settings. In that way, its construct validity can also be investigated.

An obvious first question for further research concerns the effect of education regarding the facts about the nature and causes of stuttering. Because it has been found presently and in past research that knowledge in this area results in more positive ratings of people who stutter, future research may examine the effects of differing ways of increasing factual knowledge regarding stuttering. A longitudinal study investigating personality ratings of people who stutter before and after an educational course on stuttering may go far in this regard. In this way, extraneous factors other than the effects of the stuttering course could be ruled out. Research may also measure attitudes toward people who stutter at various points throughout the course, so it may be determined just

how much education regarding stuttering it takes to counteract the negative stereotypes associated with stuttering.

Because clinicians-in-training are selected for further training in graduate school partly based on traits such as empathic ability, this population may represent a unique population in that they may be more skilled in empathic ability than the general population, or may be less judgmental of people than the general population. If future research efforts investigating perceptions of mental health workers regarding people who stutter bear out the present findings, then efforts should be made to study the mental health workers themselves to determine why they are not susceptible to the bias. Perhaps some personality trait, or combination of personality traits, is responsible for the insusceptibility to the bias. Perhaps some aspect of their upbringing, such as moral or ethical training, is responsible. If some factor is found to act as a buffer against the acquisition of the stutterer stereotype, efforts could be made to instill this buffer in other groups of people, so that the stutterer stereotype may potentially be eradicated.

A possible fruitful line of research may also be investigating the perceptions of mental health workers regarding people who stutter after an actual encounter with a person who stutters, rather than after watching a videotaped vignette. The effects of acting skill would then be eliminated and the results would be more realistic and informative. It is quite a different experience to interact in "the real world" with someone who displays a certain behavior than it is to watch someone display that behavior on a television screen. One could then also incorporate naturalistic behavioral observations

regarding the mental health worker, thereby introducing qualitative aspects into the analyses and results.

An important question that was not addressed in the present study is how the behavior of stuttering might influence important diagnostic and treatment decisions, and how attitudes toward people who stutter may influence those decisions. The importance of accuracy and diagnosis in treatment planning has long been established. Might the behavior of stuttering influence the diagnosis of certain disorders? And if so, what disorders are applied to people who stutter? Is there a characteristic disorder that might be applied to people who stutter based only on their stuttering behaviors? What treatments might be suggested by clinicians who encounter a person who stutters? Are those treatments different than the treatments that would be suggested to someone who does not stutter but who is seen for the same referral questions? Many questions regarding diagnosis and treatment of people who stutter remain unaddressed.

Limitations

The results of the present study may have been affected by various threats to the internal and external validity of the study. First, the sample was very homogeneous and, therefore, the generalizability of the results is limited. All participants in the study were students at the University of North Texas enrolled in graduate programs in psychology. Therefore, the results may not generalize beyond graduate students in psychology. Also, 34 of the 40 participants were females and six were males. Past research in this area has found that gender had no effect on personality ratings of people who stutter, but the

inability to statistically evaluate gender differences in the present study stands out as a threat to the generalizability of the findings to both sexes.

Second, the artificiality of the videotaped vignette situation may limit the generalizability to "real world" attitudes toward people who stutter. As shown in several classic social psychological studies (e.g., LaPiere, 1934), people's attitudes toward a certain group of people in and not in the presence of a member of that group may differ. Furthermore, the way they say they would behave toward a member of that group and how they actually do may also differ.

Third, social desirability and participant expectancy may also have affected the results. Psychotherapist-in-training are expected to be empathic, nonjudgmental, free of preconceptions regarding persons who are members of certain groups, and sensitive to people with disabilities. Psychotherapists-in-training are evaluated based partly on these characteristics and their future careers are affected by these evaluations. It may have been that the participants in the present study are so sensitive to these areas of evaluation that they did not want to appear insensitive, judgmental, and unempathic. Therefore, they may have elevated their personality ratings of the person who stuttered to fit with these expectations. Psychotherapists-in-training also have high expectations of themselves in these areas. Their ratings may have also been elevated to accommodate these self-expectations. Thus, some covert amount of stutterer bias may exist, but be masked by the expectancy-based self-presentations.

Another aspect of the experiment that may have influenced participant ratings in a socially desirable direction is the fact that the present researcher is both a graduate

student at the University of North Texas and is a person who stutters. This could have had unintended influences on the results. Although a research assistant introduced the experiment, gave instructions, and collected the completed outside the presence of the researcher, most participants knew who the principal investigator was and had had contact with him in the past. It may have been that participants in the experimental condition knew that the researcher was a person who stuttered and, therefore, they may have associated the study with the researcher and elevated their ratings in response to this knowledge. Likewise, the presence of the researcher (and at least one other person who stutters) among the trainees in graduate psychology at the University of North Texas may have legitimately sensitized student clinicians to stutterer biases. This sensitization may have yielded colleagues with fewer stutterer-related biases than might be found in training contexts that have no people who stutter as trainees.

Conclusion

The present research was conducted in order to assess the perceptions of psychotherapists-in-training regarding people who stutter. No past research has investigated perceptions of people in the mental health field regarding people who stutter. Past research has found that teachers, special educators, parents of people who stutter, people who stutter themselves, and speech-language clinicians all hold a stereotype of people who stutter and that this stereotype is predominantly negative in nature. These people are all very important and influential in the lives of people who stutter. Furthermore, it has been shown repeatedly and reliably that people who stutter do not have a characteristic personality pattern. Therefore, the stereotype is false. People who

stutter represent one per cent of the population; psychotherapists are likely to come into contact with people who stutter throughout their careers as psychotherapists. It is important, then, to determine if psychotherapists-in-training hold a negative stereotype of people who stutter. A negative stereotype may influence all aspects of psychological treatment, from diagnosis and therapeutic alliance to intervention planning and implementation. In contrast to previous research, the present study found that psychotherapists-in-training do not judge a male who stutters as being significantly different in personality characteristics than a male who does not stutter. Therefore, they do not appear to judge people who stutter as possessing negative personality traits to a greater extent than people who do not stutter. The present study also found that the participant variables of age, number of psychotherapy and assessment courses taken and passed, total hours of practical clinical experience, and number of people who stutter personally known had no appreciable effect on the personality ratings of a male who stutters. Greater knowledge of the facts about stuttering was associated with rating the male who stuttered more positively.

Although a stereotype of people who stutter has been found in many different populations, it appears as if psychotherapists-in-training do not hold that stereotype, regardless of the subject variables listed above. Although more research is needed, these findings offer reassurance to people who stutter seeking psychotherapy, and may help guide the development of educational efforts to combat the stutterer stereotype in other contexts.

Table 1

Means (Standard Deviations) for Participants' Adjective Checklist Composite Scores for

all 25 Personality Traits

Personality Dimension	G1 (N=20)[1]	G2 (N=20)[1]	p value*	effect size (d)
Shy-Bold	4.10 (.52)	3.75 (.30)	.25	.85
Inflexible-Flexible	2.95 (1.05)	3.40 (1.10)	.19	.41
Self-conscious-Self-assured	4.30 (1.13)	4.35 (1.09)	.89	.05
Anxious-Composed	4.30 (1.63)	4.25 (1.21)	.91	.04
Bragging-Self-derogatory	4.15 (.37)	4.15 (.37)	1.00	0
Intelligent-Dull	3.25 (.85)	3.35 (.75)	.70	.13
Open-Guarded	1.95 (.69)	2.85 (1.39)	.01	.87
Friendly-Unfriendly	2.50 (1.00)	3.05 (.76)	.06	.63
Introvert-Extrovert	3.95 (.89)	3.55 (.94)	.18	.44
Emotional-Bland	4.10 (.97)	4.65 (1.14)	.11	.52
Daring-Hesitant	4.70 (.86)	4.20 (.77)	.06	.61
Cooperative-Uncooperative	1.70 (.92)	2.20 (1.11)	.13	.49
Fearful-Fearless	3.80 (.83)	3.90 (.79)	.67	.12
Loud-Quiet	4.40 (.82)	4.05 (.76)	.17	.44
Pleasant-Unpleasant	2.65 (1.35)	2.90 (.79)	.48	.23
Sensitive-Insensitive	3.15 (.75)	3.90 (.97)	.01	.87

(table continues)

Table 1: (table continued)

Personality Dimension	G1 (N=20)[1]	G2 (N=20)[1]	p value[*]	effect size (d)
Calm-Nervous	3.60 (1.35)	3.55 (1.47)	.91	.04
Withdrawn-Outgoing	3.70 (1.17)	3.55 (.89)	.65	.15
Talkative-Reticent	3.25 (1.21)	3.95 (1.40)	.10	.54
Tense-Relaxed	4.25 (1.30)	4.85 (.67)	.07	.61
Passive-Aggressive	4.45 (.76)	3.90 (.55)	.01	.84
Perfectionistic-Careless	4.00 (.46)	.60 (.60)	.02	.76
Secure-Insecure	4.15 (1.23)	3.70 (1.03)	.22	.40
Confident-Afraid	3.70 (1.17)	3.65 (.93)	.88	.05
Avoiding-Approaching	3.15 (1.14)	3.50 (1.05)	.32	.32
Overall Group Mean (SD)	3.61 (.52)	3.71 (.30)	.45	.24

Note. G1 = Experimental group; G2 = Control group.

[1]Higher scores indicate less favorable judgments of the stimulus person.

*Bonferroni correction yielded a critical alpha level of .002; p value is one-tailed; there were no p values that reached significance.

Table 2

Means (Standard Deviations) of Participants' Background Characteristics

Background Variable	G1 (N = 20)	G2 (N = 20)	Overall
Age	26.15 (3.911)	27.3 (3.84)	26.73 (3.87)
Number of Stutterers Known	1.35 (.813)	2.0 (1.17)	1.68 (1.05)
Therapy Classes	3.5 (3.204)	6.35 (13.804)	4.93 (9.996)
Hours of Therapy	102.35 (159.5)	200.65 (299.03)	151.5 (241.73)
Assessment Classes	2.7 (1.03)	2.6 (.995)	2.65 (1.001)
Hours of Assessment	116.8 (203.64)	201.25 (235.48)	159.025 (221.5)

Note. G1 = Experimental group; G2 = Control group

Table 3

Analysis of Covariance for Age

Source	df	F	p
Age	1	1.708	.199
Group	1	.307	.583
Error	37	(.177)	

Note. Value enclosed in parentheses represents mean square error.

Table 4

Analysis of Covariance for Number of Stutterers Known.

Source	df	F	p
Stutterers Known	1	.037	.848
Group	1	.439	.512
Error	37	(.185)	

Note. Value enclosed in parentheses represents mean square error.

Table 5

Analysis of Covariance for Number of Therapy Classes.

Source	df	F	p
Therapy Classes	1	.187	.668
Group	1	.543	.466
Error	37	(.184)	

Note. Value enclosed in parentheses represents mean square error.

Table 6

Analysis of Covariance for Hours of Therapy Experience.

Source	df	F	p
Therapy Experience	1	.076	.784
Group	1	.617	.437
Error	37	(.185)	

Note. Value enclosed in parentheses represents mean square error.

Table 7

Analysis of Covariance for Number of Assessment Classes

Source	df	F	p
Assessment Classes	1	.030	.864
Group	1	.582	.45
Error	37	(.185)	

Note. Value enclosed in parentheses represents mean square error.

Table 8

Analysis of Covariance for Hours of Assessment Experience.

Source	df	F	p
Assessment Hours	1	.015	.903
Group	1	.571	.454
Error	37	(.185)	

Note. Value enclosed in parentheses represents mean square error.

APPENDIX A

SIGN-UP SHEET

Research Participants Needed

If you are enrolled in a Ph.D. program in Clinical Psychology, Counseling Psychology, or Behavioral Medicine, your participation is requested in a study examining perceptions of a person in a clinic intake interview. You will be required to view a 10 minute videotaped vignette and then complete a questionnaire. Testing will total approximately 30 minutes. If you can afford to take the time, please help a fellow student.

Sign your name and telephone number below, or contact Dan Tomczyk in the UNT Psychology Department.

1._____   11._____

2._____   12._____

3._____   13._____

4._____   14._____

5._____   15._____

6._____   16._____

7._____   17._____

8._____   18._____

9._____   19._____

10._____   20._____

APPENDIX B

INFORMED CONSENT FORM

UNIVERSITY OF NORTH TEXAS
COMMITTEE FOR THE PROTECTION OF HUMAN SUBJECTS
RESEARCH CONSENT FORM

Subject Name:_____ Date: _____

Title of Study: **The Perceptions of Psychotherapists-in-training Regarding Clients in an Intake Situation**

Principal Investigator: **Daniel A. Tomczyk**

Before agreeing to participate in this research study, it is important that you read and understand the following explanation of the proposed procedures. It describes the procedures, benefits, risks, discomforts of the study. It also describes the alternative treatments that are available to you and your right to withdraw from the study at any time. It is important for you to understand that no guarantees or assurances can be made as to the results of the study.

PURPOSE OF THE STUDY AND HOW LONG IT WILL LAST:

The purpose of the study is to determine how accurately psychotherapists-in-training can judge the personality of a male in an intake interview situation. It will last a maximum of approximately 45 minutes.

DESCRIPTION OF THE STUDY INCLUDING THE PROCEDURES TO BE USED:

You will be asked to view a videotaped vignette of a male in an intake interview situation at a Psychology clinic. You will then be asked to rate him on several personality dimensions using a semantic differential scale and to supply some demographic information on a separate form.

DESCRIPTION OF PROCEDURES/ELEMENTS THAT MAY RESULT IN DISCOMFORT OR INCONVENIENCE:

NONE

DESCRIPTION OF THE PROCEDURES/ELEMENTS THAT ARE ASSOCIATED WITH FORESEEABLE RISKS:

NO FORESEEABLE RISKS

BENEFITS TO THE SUBJECTS OR OTHERS:

Possible benefits include practice in evaluating clients in an intake interview situation.

CONFIDENTIALITY OF RESEARCH RECORDS:

Your name will not appear on any materials, including subsequent publications, or in any way be associated with information gleaned from this study. At the conclusion of this study, all materials that include your name will be destroyed. Under this condition, you agree that any information obtained from this research may be used in any way thought best for publication or education.

REVIEW FOR PROTECTION OF PARTICIPANTS:

RESEARCH SUBJECTS' RIGHTS: I have read or have had read to me all of the above. _____ has explained the study to me and answered all of my questions. I have been told the risks or discomforts and possible benefits of the study. I have been told of other choices of treatment available to me.

I understand that I do not have to take part in this study, and my refusal to participate will involve no penalty or loss of rights to which I am entitled. I may withdraw at any time without penalty or loss of benefits to which I am entitled. The study personnel can stop my participation at any time if it appears to be harmful to me, if I fail to follow directions for participation in the study, if it is discovered that I do not meet the study requirements, or if the study is canceled.

In case there are problems or questions, I have been told I can call:

Daniel A. Tomczyk	or	Kenneth Sewell, Ph.D.
Psychology Dept.		Psychology Dept.
University of North Texas		University of North Texas
Phone: (940) 565-2671		Phone: (940) 565-2671

I understand my rights as a research subject, and I voluntarily consent to participate in this study. I understand what the study is about and how and why it is being done. I will receive a signed copy of this consent form.

_____   _____
Subject's Signature   Date

_____   _____
Signature of Witness   Date

Please place your initials here acknowledging receipt of a copy of this consent form.
_____

For the Investigator or Designee:

I certify that I have reviewed the contents of this form with the person signing above, who, in my opinion, understood the explanation. I have explained the known benefits and risks of the research.

_____   _____
Principal Investigator's Signature   Date

APPENDIX C

SCRIPT FOR VIDEOTAPES

Interviewer (IN): Now that I've explained what we do here at the Clinic and gone over your confidentiality, why don't you tell me a little bit about why you're here today.

Client (CL): Well, I have just been having some problems in school…you know, with the work and adjusting to school – you know, just leaving home and stuff.

IN: What kinds of problems exactly?

CL: Well, I'm in this algebra class, and I am really having problems in there. I feel like I just can't get it, even though everyone else around me seems to get it. On the tests, I study for days before the test and go in for some extra help, but I still get Cs or Ds. I can't figure it out.

IN: Have you talked to the professor about the problems you're having?

CL: Yeah. She is the one that sent me here. She said maybe I should get tested to see if I have a real problem. I just need some help – I have to be able to pass algebra and math to study what I want to study and do what I want to do.

IN: Have you always had problems in math, like when you were a child?

CL: Well, kind of. I always got good grades, but my worst grades were in math. I always had problems sort of doing math problems in my head. I always need to write it down and then go over it again and again.

IN: Okay, now I'm going to ask you some other questions – questions about your childhood, birth, etcetera. Okay?

CL: Sure.

IN: Did your mother or father ever tell you if your birth was normal, or if it was a Cesarean section or something?

CL: I'm pretty sure it was normal, but my mother never said anything. My father died when I was very young – about 2 or 3.

IN: Oh, I'm sorry. (Client looks down). Anyway, did your mother ever tell you if you reached your developmental milestones on time – like walking, talking, and that sort of thing?

CL: Well, I think she said I walked early – at about 10 months. Everything else was normal, right on time, I think.

IN: Any illnesses or hospitalizations when you were a child?

CL: Well, I was hospitalized once when I was in junior high. I was playing fottball and got a pretty bad concussion. They kept me there for a day. That's it though.

IN: Do you take any medications?

CL: Only an inhaler for my asthma. That's it.

IN: What was your relationship like with your parents, as far as you can remember?

CL: Well, with my dad, I don't really remember. I know that he was pretty strict with me and my brothers. And my mother was always overprotective.

APPENDIX D

ADJECTIVE CHECKLIST

Circle one response following each number that best describes the person interviewed in the vignette.

1. **Shy** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Bold**

2. **Inflexible** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Flexible**

3. **Self-conscious** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Self-assured**

4. **Anxious** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Composed**

5. **Bragging** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Self-derogatory**

6. **Intelligent** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Dull**

7. **Open** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Guarded**

8. **Friendly** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Unfriendly**

9. **Introvert** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Extrovert**

10. **Emotional** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Bland**

11. **Daring** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Hesitant**

12. **Cooperative** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Uncooperative**

13. **Fearful** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Fearless**

14. **Loud** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Quiet**

15. **Pleasant** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Unpleasant**

16. **Sensitive** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Insensitive**

17. **Calm** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Nervous**

18. **Withdrawn** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Outgoing**

19. **Talkative** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Reticent**

20. **Tense** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Relaxed**

21. **Passive** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Aggressive**

22. **Perfectionist** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Careless**

23. **Secure** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Insecure**

24. **Confident** _very much_ _quite a bit_ _slightly_ _neutral_ _slightly_ _quite a bit_ _very much_ **Afraid**

APPENDIX E

THE ALABAMA STUTTERING KNOWLEDGE TEST (ASK TEST)

Instructions: Please circle the letter "T" if you believe the statement to be true and circle the letter "F" if you believe the statement to be false.

True **False**

T   **F**   1. More girls than boys stutter.

T   F   2. Most people who stutter find that they are totally fluent in a few situations.

T   **F**   3. In many cases, the cause of stuttering can be traced to a specific event in the child's life

T   **F**   4. The onset of stuttering is usually sudden in nature.

T   **F**   5. The average person who stutters stutters on approximately one third of the words spoken.

T   F   6. Most moments of stuttering (the time it takes to complete the word) are less than two seconds in duration.

T   F   7. Approximately five percent of the population will stutter at some time in their lives.

T   **F**   8. In general, people who stutter have about the same amount of difficulty with all speech sounds.

T   F   9. A person who stutters tends to stutter on the same words.

T   F   10. Stuttering and intelligence are not related.

T   F   11. people who stutter frequently are able to predict the words on which they will stutter.

T   F   12. If people who stutter read aloud the same passage several times in a row, their stuttering decreases with each reading.

T   **F**   13. Stuttering generally is thought to be the result of a physical problem.

T   F   14. Because most people who stutter begin stuttering in early childhood and stop stuttering before adulthood, most authorities consider stuttering to be a disorder of childhood.

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T F   15. Most specialists think that there are different kinds of stuttering.

T   **F**   16. people who stutter have been found to talk less than non-people who stutter.

T F   17. At any given time, slightly less than one percent of the population stutters.

T   **F**   18. Stuttering occurs most frequently on the middle or second syllable of words with more than one syllable.

T F   19. Speaking in a singsong rhythm will usually help the person who stutters be more   fluent.

T   **F**   20. The louder a person who stutters speaks, the more he stutters.

T   **F**   21. The majority of people who stutter begin stuttering before the age of three.

T F   22. It appears that as many as four out of five people who stutter recover from stuttering without help.

T F   23. Stuttering seems to "run in families."

T   **F**   24. Stuttering is more commonly found among families of the highest social and economic levels.

T F   25. people who stutter may recover from stuttering at any age.

T   **F**   26. people who stutter have been found to exhibit certain identifiable personality traits.

APPENDIX F

DEMOGRAPHIC QUESTIONAIRRE

1. Age: _____

2. Gender:

   Female   _____
   Male   _____

3. Do you have, or have you ever had, any speech, language, and/or hearing problems?

   Yes_____
   No _____

       If yes, please check all problems that you have, or had:

          _____stuttering   _____language
          _____articulation   _____hearing
          _____voice   _____other (specify:_____
                                               _____)

4. Have you ever received speech therapy for your speech, language, and/or hearing problems?
   _____Yes
   _____No

5. Do you know, or have you ever known, any people who stutter?

   _____Yes
   _____No

   If yes, how many different people who stutter do you know, or have you known?
   _____

   What is your relationship to these people who stutter? (check all that apply)

   ____mother   ____uncle
   ____father   ____cousin
   ____sister   ____friend
   ____brother   ____co-worker
   ____grandmother   ____teacher
   ____grandfather   ____other (specify:_____
   ____aunt   _____)

6. Have you ever had a course in school that included a discussion of stuttering?

    ____Yes
    ____No

If yes, how much discussion? (check only one)

Very little   ____
Moderate amount ____
Very much   ____

7. Have you ever read material (articles, books, etc.) on stuttering?

    ____Yes
    ____No

If yes, how much?

Very little   ____
Moderate amount ____
Very much   ____

8. How many graduate courses on psychotherapy have you taken and passed?_____

9. Approximately how many hours of actual psychotherapy experience have you accumulated? _____

10. How many graduate courses on assessment have you taken and passed?_____

11. Approximately how many hours of actual assessment experience have you accumulated?_____

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