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THE IMPACT OF STEREOTYPES ON PUBLIC SPEAKING

PERFORMANCE AND ANXIETY

by

SIMON KIM, M.A.

Under the Direction of Page Anderson, Ph.D.

ABSTRACT

Public speaking anxiety is a common experience in both community and clinical populations and can have a negative impact on quality of life. Although contemporary treatments have been found to be effective, there is a lack of cultural relevance in existing theories and treatments. The purpose of this study is to examine the impact of stereotypes, a culturally relevant variable, on public speaking performance and anxiety for African Americans and Asian Americans.

Participants (N=97) were randomly assigned to one of two experimental conditions where they either received feedback that was stereotype confirming or non-stereotype confirming. Analyses of variance procedures were utilized to determine whether stereotype confirming feedback would have a negative impact on public speaking performance and anxiety during a speech performance task. Overall, stereotype confirming feedback was not found to have a negative impact on the participants' public speaking performance or anxiety as measured by self-report and observer ratings. In particular, participants who received stereotype confirming feedback reported less prediction of poor performance in public speaking situations

compared to those who received non-stereotype confirming feedback. However, there was a significant positive relation between the participants' concerns for confirming negative stereotypes and self-report measures of public speaking anxiety. African American participants also reported fewer negative self-statements associated with public speaking compared to Asian American participants. These results encourage future studies to further examine the relation between stereotypes and public speaking anxiety.

INDEX WORDS: Public speaking anxiety, Culture, Stereotypes

THE IMPACT OF STEREOTYPES ON PUBLIC SPEAKING PERFORMANCE AND ANXIETY

by

SIMON KIM, M.A.

A Dissertation Submitted in Partial Fulfillment of the Requirements for the Degree of

Doctor of Philosophy

in the College of Arts and Sciences

Georgia State University

2007

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Simon Kim, M.A.
2007

The Impact of Stereotypes on Public Speaking Performance and Anxiety

A Dissertation

Presented in Partial Fulfillment of Requirements for the Degree of Doctor of Philosophy in the

College of Arts and Sciences Georgia State University

by

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August 2007

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In recent years, the field of psychology has emphasized the importance of understanding the interplay between culture and human behavior (Draguns & Tanaka-Matsumi, 2003) and how culture can impact health and illness (Hahn, 1995). Good and Kleinman (1985) more specifically proposed that it is important to examine the interface of culture and anxiety, because anxiety is an emotion that is experienced cross-culturally, yet the ways in which it is experienced and why it occurs may differ across cultures. The purpose of this study is to examine how stereotypes, a culturally relevant variable, can impact an individual's experience of social anxiety.

More specifically, this study will examine whether feedback consistent with racially relevant stereotypes decreases performance and increases the level of anxiety in a public speaking situation for African Americans and Asian Americans. In framing this study, a review of the current research literature on public speaking anxiety will first be provided. Then, a review of the current research literature on African Americans' and Asian Americans' experience of anxiety and why it is important to specifically study these ethnic minority groups will be introduced. The research literature on stereotype threat will then be described. Lastly, a model of social anxiety will be explained and the ways in which stereotypes, a culturally relevant variable, can impact public speaking anxiety will be introduced.

Public Speaking Anxiety

According to the American Psychiatric Association (1994), social phobia, also known as social anxiety disorder, is defined as clinical significant anxiety caused by exposure to specific types of social or performance situations which invariably evoke fears of embarrassing or humiliating oneself and/or exhibiting visible anxiety symptoms in front of others. Over the past decade, social phobia has gained considerable recognition in the psychiatric literature due to its prevalence and negative impact (Weinshenker et al., 1997). Researchers have reported lifetime

prevalence rates for social phobia from as low as 2.73% to as high as 13.3% (Eaton et al., 1991; Magee et al., 1996). Studies also have shown that individuals with social phobia are less likely to be married, to have lower educational attainment, and to have lower socio-economic status than individuals without social phobia (Schneier et al., 1992; Davidson et al., 1994). In addition, compared with the general population, individuals with social phobia report a poorer quality of life (Safren et al., 1996). Finally, social phobia is associated with high rates of depression (Schneier et al., 1992) and substance abuse (Crum & Pratt, 2001; Schneier et al., 1992).

Public speaking anxiety is considered a specific type of social phobia (APA, 1994). Among individuals with social phobia, it is the most commonly feared social situation (Furmark et al., 2000; Hazen & Stein, 1995). Clinical samples indicate that as many as 88% of socially phobic individuals experience fear of public speaking (Mannuzza et al., 1995). It also has been found to be common in the general population (Crum & Pratt, 2001; Stein et al., 2000). In a study examining the impact and prevalence of public speaking fears in a community sample (N=499), 34% of the participants reported experiencing substantial public speaking fears (Stein et al., 1994).

In addition to high prevalence rates in both clinical and community samples, public speaking anxiety is associated with low income and increased likelihood of unemployment (Stein, Walker, & Ford, 1994). In conducting a randomized telephone survey of residents from a Midwestern metropolitan area of Canada, Stein and his collegues (1994) found that respondents with substantial public speaking fears were less likely to be employed and to have lower education attainment than those without public speaking anxiety. Many of these respondents reported that public speaking fears had interfered with their education.

Despite the distress and impairment associated with social phobia, individuals with social phobia often do not seek treatments. Pollard and his colleagues (1989) reported that as few as 8% of individuals with social phobia or fears of social situations sought help from professionals. In the National Comorbidity Survey, only 19% of the individuals with social phobia sought professional help for their anxiety at some period in their lives (Magee et al., 1996). This is unfortunate, as studies have shown that cognitive–behavioral treatments (CBT) for social phobia significantly reduce symptoms of social anxiety (Chambless & Gillis, 1993; Gould et al., 1997; Heimberg et al., 1990; Heimberg & Juster, 1994; Hofmann & Barlow, 2002).

Cognitive-behavioral group treatment (CBGT) is considered to be one of the more effective forms of treatment for social phobia (DeRubeis & Crits-Christoph, 1998). In comparing CBGT to psychoeducation for the treatment of social phobia, Heimberg and his colleagues (1990) found that at six-months post treatment, individuals treated with CBGT showed significantly greater improvements than individuals in the psychoeducation control group. Participants who received CBGT maintained their treatment gains at a five-year follow-up and reported fewer symptoms of anxiety than those who received psychoeducational treatment (Heimberg et al., 1993).

Although there is strong support for the use of CBT, more specifically CBGT, in treating social phobia, some individuals with social phobia do not benefit from treatment. Mattick and Peters (1988) found that only 38% of the participants who completed CBT for social phobia (n=25) were considered to have optimally improved, as measured by low avoidance, low self-rating of phobia severity, and successful completion of a behavioral avoidance task, at a three month follow-up. In a study comparing medication (phenelzine) and CBGT for social phobia, less than 60% of participants who received CBGT responded to treatment (Heimberg et al.,

1998). As such, these findings suggest that although there are effective forms of treatment for social phobia, there is room for improvement. Research should focus on examining why some individuals do not benefit from current treatments for social anxiety by exploring variables that may impact social anxiety, but have not yet been extensively studied thus far.

In summary, current research indicates that social anxiety disorder, which includes public speaking anxiety, is a serious and common anxiety disorder in both clinical and community populations. Research suggests that social anxiety negatively impacts daily functioning and overall quality of life, even when specific social fears, such as public speaking anxiety do not meet criteria for a formal diagnosis. Despite the negative impact of social phobia, individuals with social anxiety rarely seek professional support. In addition, although there are effective forms of treatment for social phobia, not all individuals benefit from the available treatments. Given these findings, it is important to continue research examining social anxiety disorder, and specifically public speaking anxiety. It also is important to examine relatively unexplored variables that may impact social anxiety, such as culturally relevant factors, with the larger goal of amending existing treatments in order to benefit a larger percentage of individuals with social anxiety.

Social Anxiety Research: African Americans and Asian Americans

Although considerable empirical support has accumulated for various treatments, including social phobia, relatively few studies have addressed the experiences of ethnic minority populations (Sue et al., 1994). In a review of scholarly journals in clinical psychology over a 17-year period beginning in 1980, Iwamasa and her colleagues (2002) found that less than a third of the published articles included ethnic minority populations. Even fewer articles (less than 5%) in

the clinical psychology literature focused specifically on ethnic minority populations (Iwamasa et al., 2002).

More specifically, relatively little is known about how social anxiety is manifested in African American and Asian American ethnic minority groups (Draguns & Tanaka-Matsumi, 2003; Okazaki, 2003; Neal-Barnett & Smith, 1997). In the studies that were previously mentioned, results were either based on a majority European American sample (Davidson et al., 1994) or ethnic group differences were not reported (Weinshenker et al., 1997; Stein et al., 1996; Stein et al., 2000). It is important to examine the experience of social phobia with ethnic minority groups, namely African Americans and Asian Americans, for several reasons including higher prevalence rates of social anxiety among these two groups compared to European American peers and the underutilization of mental health services within these ethnic minority groups.

Research suggests that African Americans report higher rates of social anxiety than European Americans. Using data from two sites of the National Institute of Mental Health (NIMH) Epidemiological Catchment Area (ECA) survey (Reiger et al., 1984), Brown and his colleagues (1990) found that African American adults (n=2340) reported significantly more recent phobias, defined as simple phobia, social phobia, or agoraphobia experienced within the past month, than European Americans (n=3936). With regard to social anxiety, Brown and Eaton (1986) found significantly higher prevalence rates of social phobia among African Americans compared to European Americans from surveys collected in Baltimore, Maryland.

Similarly, in a study comparing ethnic differences on measures of social anxiety, Asian American college students (n=165) reported significantly higher levels of social anxiety, as measured by the Social Avoidance and Distress Scale (SAD; Watson & Friend, 1969) and the

Fear of Negative Evaluation Scale (FNE; Watson & Friend, 1969), compared to their European American peers (n=183) (Okazaki, 1997). Okazaki and her colleagues (2002) also found that Asian American college students (n=40) reported significantly higher levels of trait social anxiety, as measured by the Social Phobia and Anxiety Inventory (SPAI: Turner et al., 1989), than their European American peers (n=40).

Despite higher prevalence rates of social anxiety, African Americans and Asian Americans have been shown to underutilize mental health services (Cheung, 1991; Neighbors, 1985, 1988). When experiencing symptoms of anxiety and emotional distress, members of both ethnic minority groups are more likely to seek assistance from their general physician, pastor, or fortune teller than from mental health professionals (Iwamasa, 1997; Kim, 1994; Neighbors, 1985, 1988). Weiss and Kupfer (1974) proposed that African Americans also rarely seek mental health services from universities and medical schools, both of which are settings where mental health research is most often conducted.

There may be several reasons for the underutilization of mental health services by members of the African and Asian American communities. One possible explanation may be related to ethnic minorities lack of trust in mental health institutions. Neal and Turner (1991) highlight the history of large-scale abuse associated with research projects conducted in African American communities, such as the Tuskegee Syphilis Study. The Tuskegee Syphilis Study was a 40-year government funded study conducted between 1932 and 1972 in which 399 African American men with syphilis from Alabama were studied without providing effective medical treatment that was available at the time in order to document the natural progression of the disease (Gamble, 1997). Some African Americans believe that this type of human disregard is typical for research studies today, especially when African American participants are recruited

(Freimuth et al., 2001). This mistrust may lead African Americans to be less likely to utilize mental health services, associated with both research and treatment.

The underutilization of mental health services may also be the result of a lack of culturally competent, bilingual therapists and researchers who can effectively communicate with and understand the cultural values and backgrounds of ethnic minorities like Asian Americans (Sue, 1991). The underutilization of mental health services may also be the result of the stereotype that Asian Americans are immune from behavioral or psychological distress (Kim & Yeh, 2002). This "model minority" stereotype was first used to attribute educational and economic success to all Asian Americans (Sue & Sue, 1972). Although Asian American students have been found to have better academic performance and fewer delinquent behaviors than their European American peers, they have also been found to report more depressive symptoms, withdrawn behavior, poor self-image, and social problems (Lorenzo et al., 2000). In order to uphold the expectations of the "model minority" stereotype, Asian Americans may choose not to seek mental health services even though they may be experiencing psychological distress (Lee, 1996).

Lastly, both of these ethnic minority groups may underutilize health services because current treatment methods may not incorporate or address issues specific to the experience of being an ethnic minority. Research on social phobia and its treatment has generally utilized a European American sample (e.g. Eng et al., 2005; Foa et al., 1996; Hofmann et al., 2004). The insights gained from such studies may lack generalizability to other populations. As such, current treatments found to be effective for a majority European American population may not be as effective for treating individuals from ethnic minority groups.

In summary, African Americans and Asian Americans have been shown to experience more social anxiety than European Americans and to underutilize mental health services. These findings are of concern because the higher prevalence rates of social anxiety among these ethnic minority groups may indicate that they are not receiving effective treatment for their anxiety. Such underutilization of mental health services may also limit researchers' and clinicians' exposure to ethnically diverse groups and lead to assumptions that African Americans and Asian Americans do not experience significant social anxiety, despite evidence to the contrary. As a result, these assumptions may inhibit the development of treatments that are sensitive to ethnic minorities experiences and may perpetuate high rates of social anxiety among African American and Asian American populations. Therefore, it is important to examine social anxiety in these ethnic minority groups in order to help develop treatments that are applicable to ethnic minorities and to help provide effective treatments that will reduce the number of African Americans and Asian Americans experiencing social anxiety. One way in which this can be accomplished is by examining and understanding how culturally relevant variables, like stereotypes, can impact social anxiety among ethnic minority groups.

Stereotypes: Impact on Performance and Anxiety

Stereotypes have been defined as overgeneralizations used to describe and evaluate people of various social groups (Macrae et al., 1996). The use of stereotypes typically leads to negative outcomes for those individuals to whom they are applied (Hughes & Baldwin, 2002). Even the mere threat of a stereotype may have a negative effect on an individual, more specifically on performance and anxiety (Steele, 1997). Steele defined "stereotype threat" as a situational threat that could affect an individual of any group out of one's fear of being negatively stereotyped, treated stereotypically, or fear of conforming to the stereotype.

Contrada and his colleagues (2001) described the fear of conforming to a stereotype as an enduring and recurring experience that is experienced with uncertainty and apprehension. They also found that African Americans and Asian Americans have more concerns about confirming stereotypes than European Americans. In addition, they found that concern about confirming stereotypes did not significantly differ between African Americans and Asian Americans.

Several studies have shown the negative effects that stereotypes have on performance for different social groups by directly or indirectly priming specific stereotypes (Steele & Aronson, 1995; Spencer et al., 1999). These studies have tested the negative impact of activating stereotypes on performance by randomly assigning participants to one of two experimental conditions, either a stereotype threat or no stereotype threat condition. In both conditions, participants are asked to complete a performance task (e.g., a standardized math or verbal test).

Studies have shown that participants' performance is negatively impacted by stereotypes, such that under conditions of stereotype threat, individuals are more likely to perform worse than those who are not under conditions of stereotype threat. For example, Spencer and his colleagues (1999) examined the effects of stereotype threat by directly manipulating the relevance of the stereotype that women perform worse on tests of mathematical ability compared to men. Fifty-four university students were asked to complete a difficult computerized math test with questions that were taken from the advanced mathematics Graduate Record Examination (GRE). The students were randomly assigned to one of two conditions where they were either told that the test had shown gender differences in the past or that the test had never shown gender differences in the past. When participants were explicitly told that the test had yielded gender differences in the past, women performed lower than their male counterparts. However, when the participants

were told the test had not previously yielded gender differences, there were no significant differences between the performance of the women and men.

Steele and Aronson (1995) also found decreased performance in African American undergraduate students attending Stanford University relative to their European peers on a standardized task of verbal ability when racial stereotypes were made relevant to their performance. More specifically, stereotype threat was manipulated by describing the task as either diagnostic of reasoning and verbal abilities (stereotype threat) or a general problem-solving task that was not diagnostic of ability (non-stereotype threat). When African American participants were told the task measured reasoning and verbal abilities (i.e., stereotype threat condition), they showed significantly lower performance on the task than their European American peers. However, when African American participants were not told the test measured intellectual ability (non-stereotype threat condition), their performance matched that of European Americans.

In a subsequent study, Steele and Aronson (1995) used a more subtle manipulation to examine the impact of stereotype threat on performance among African American (n=22) and European American (n=23) college students. Participants were required to list their race (stereotype threat condition) or not required to list their race (non-stereotype threat condition) before taking a test. African American participants in the stereotype threat condition performed worse then African American participants in the non-stereotype condition. In addition, in the stereotype threat condition, African Americans performed worse than European Americans. However, in the non-stereotype threat condition, the performance of African American participants equaled that of European Americans. This study suggests that even a very subtle

manipulation of stereotype threat, such as listing one's race or not, can negatively impact performance.

In both of these previous studies (Spencer et al., 1999; Stele and Aronson, 1995), task performance was negatively affected by the activation of group stereotypes (i.e. stereotypes about women and African Americans, respectively). However one might argue that there are factors internal to the individual, such as confidence in one's performance ability, which may influence the negative impact of stereotype activation on performance. In a study conducted by Stangor and his colleagues (1998), female college students were informed that they would be performing two tasks. After completing the first task involving verbal ability, participants received either positive or negative information regarding their alleged performance. Participants were then told that they would be performing a second task involving spatial abilities during which stereotypes were manipulated by telling the participants that women generally performed worse than men (stereotype threat condition) or equal to men (control condition) on such tasks. Rather than requiring the participants to actually perform the second task, the researchers asked the participants to estimate their likely performance on this second task.

This manipulation allowed Stangor and his colleagues to examine whether performance success on the first task would protect or buffer the participants against stereotype activation on a subsequent task. After receiving positive feedback on the first task, women in the no-threat condition were found to be more optimistic about their expected performance on the second task compared to women who received negative feedback. However, regardless of the individual feedback received on the first task, women in the stereotype threat condition demonstrated consistently low levels of performance expectancies for the second task. As such, the authors

concluded that individual differences involving performance expectancies do not act as buffer against the effects of stereotypes.

Numerous researchers have argued that being put in a situation where an individual is being treated stereotypically or is at risk of confirming a stereotype can lead to emotional distress (e.g., Cross, 1991; Howard & Hammond, 1985; Steele & Aronson, 1995; Steele, 1990). Steele (1997) suggested that stereotype threat is associated with anxiety by proposing that anxiety may mediate the relation between stereotype threat and performance. This hypothesis is based on research showing that high levels of anxiety or arousal can negatively impact task performance, especially if the task is complicated and/or not well learned (Geen, 1991; Hunt & Hillery, 1973; Wigfield & Eccles, 1989; Hill & Wigfield, 1984).

Several studies have provided some support for the anxiety mediation hypothesis of stereotype threat proposed by Steele (1997). In comparing the physiological responses of anxiety between African Americans and European Americans, Blascovich and his colleagues (2001) monitored changes in forty-one university students' blood pressure under conditions of stereotype threat that African Americans perform more poorly on standardized tests than their European American peers. Consistent with Steele's (1997) anxiety hypothesis, stereotype threat led to increased physiological levels of anxiety. More specifically, under conditions of stereotype threat, African American participants showed greater increases in blood pressure than European Americans. No differences were found between African Americans and European Americans under low stereotype conditions.

In an effort to determine whether anxiety mediated the relation between race and achievement, Osborne (2001) examined data collected from high school seniors surveyed in a study initiated by the National Center for Education Statistics (1984). Osborne hypothesized that

African Americans would perform lower on achievement tests of vocabulary, reading, and mathematics than their European American peers, because as a disadvantaged ethnic minority group, African Americans would be more anxious when taking tests of intellectual ability due to the threat of confirming a negative group stereotype. African American high school seniors (n=1846) were indeed found to perform significantly lower than European Americans (n=1846). Anxiety was also found to partially mediate the relation between race and achievement scores, in that African Americans reported higher levels of anxiety after taking the tests than European Americans. However, no definitive conclusions can be drawn from this study, because anxiety was measured after the students had completed their achievement tests.

In addition to the stereotype threat literature, other theories from social psychology suggest that receiving stereotype confirming feedback may negatively impact anxiety and performance. Although individuals are generally receptive to positive feedback and tend to disregard negative feedback concerning their performance (Baron, 1988), this may not be the case with individuals with social anxiety. Socially anxious individuals tend to overly focus on both internal and external signs of anxiety and embarrassment during social interactions that reinforce their social inadequacy (Rapee & Heimberg, 1997).

According to self-enhancement theory, individuals are motivated to maintain consistent attitudes about themselves (Shrauger, 1975). As such, socially anxious individuals may focus more on feedback that confirms their negative self-image. Self-verification theory suggests the people with negative self-concepts tend to behave in ways that generate the very conditions that confirm these negative views (Swann, 1983; 1990). In other words, people with negative self-views tend to create rejecting social worlds and preserve their negative self-conceptions by soliciting self-verifying feedback. Self-fulfilling prophecy theory suggests that negative

expectancies held by an individual can influence their behaviors towards others in accordance with this expectancy. As a result of this interaction, other people may respond in a manner that confirms the initial expectancy and reinforces the individual's negative expectations (Darley & Fazio, 1980). There are no studies that examine the effects of stereotype confirming feedback on public speaking performance and anxiety from these theoretical frameworks.

However, in a study examining the impact of verbal feedback about blushing on subsequent blushing during public performance tasks (i.e., singing and reading) (Drummond et al., 2003), the researchers found that participants who reported a high propensity for blushing demonstrated an increase in blushing, as measured by facial blood flow, after receiving verbal feedback compared to those who reported a low propensity for blushing. The researchers suggested that these results demonstrated self-fulfilling prophecy effects (Darley & Fazio, 1980). In other words, for the participants with high expectancies for blushing, receiving verbal feedback confirming this expectancy resulted in an increase in subsequent blushing. One might generalize this finding to expectancies regarding stereotypes and its impact on public speaking performance and anxiety.

Examining stereotypes is relevant within the context of social anxiety for several reasons. First, despite the lack of research examining African Americans' and Asian Americans' experience of social anxiety, several studies have shown that African Americans and Asian Americans may experience more social anxiety than European Americans (Okazaki, 2002; Brown et al., 1990; Brown & Eaton, 1986) and report greater fear of confirming stereotypes (Contrada et al., 2001). Secondly, stereotype activation has been found to negatively impact performance on various tasks of cognitive ability (e.g., standardized tests of verbal and mathematical ability) (Steele & Aronson, 1995; Spencer et al., 1999). Based on these findings,

one may speculate that the negative impact of being fearful of confirming a stereotype may also generalize to other performance domains, including public speaking situations. Therefore, activating stereotypes associated with the communication styles of African Americans or Asian Americans in the form of a stereotype confirming feedback may negatively impact their performance in public speaking situations. Lastly, as stereotypes have been associated with higher levels of anxiety, racial stereotypes associated with communication styles may also impact anxiety for African Americans and Asian Americans in public speaking situations.

Cognitive-Behavioral Model of Anxiety in Social Phobia

Rapee and Heimberg's (1997) model of social phobia is based on a cognitive-behavioral framework explaining how socially anxious individuals process social information when confronted with a social situation that is perceived to be potentially threatening. This model is based on the assumption that socially anxious individuals perceive that they are negatively evaluated in social situations, which for some ethnic minorities may be influenced by their fear of confirming a racial stereotype. Therefore, Rapee and Heimberg's model of social phobia can be used to illustrate the way in which fear of confirming a stereotype may influence social anxiety for African Americans and Asian Americans.

According to Rapee and Heimberg (1997), there are several processes that produce and maintain social anxiety (refer to Figure 1). When an individual with social anxiety is faced with a social situation, actual or anticipated, they feel threatened by the perceived audience, because there exists the potential to be negatively evaluated. This perceived threat is followed by the construction of a mental image of how they perceive themselves to be seen by their audience. This mental representation may be influenced by internal cues (e.g., physical symptoms), external cues (e.g., feedback from others), and information stored in long-term memory (e.g.,

past experiences). For individuals who are socially anxious, the negative aspects of the internal cues, external cues, and past memories are the primary focus, and individuals tend to preferentially allocate their attentional resources to monitor any evidence of impending negative evaluation from others and their own internal and external flaws that have the potential to be noticed by their audience.

While focusing on their perception of how they are being viewed by their audience, individuals with social phobia are also trying to determine the audience's expectations of how well they should be performing. Assessing the audience's expectations is based upon both audience characteristics (e.g., status, level of attractiveness) and the demands of the situation (e.g., whether the situation is formal or informal) with the assumption that these expectations are high (Rapee & Heimberg, 1997; Turk et al., 2001).

Given their negative mental self-representation, individuals with social phobia are most likely to conclude that they do not meet the high expectations of their audience and believe there is a high probability of being negatively evaluated and to experience negative consequences (Turk et al., 2001). As a result, the individual may experience various symptoms of anxiety ranging from behavioral (e.g., avoidance of social/evaluative situations), cognitive (e.g., negative thoughts), and physical symptoms (e.g., physiological arousal) all of which eventually serve as feedback to the internal and external cues that are used to form the negatively biased mental representation (Rapee & Heimberg, 1997; Turk et al., 2001).

Cognitive-Behavioral Model of Social Phobia and Stereotypes

Ethnic minorities may experience racial stereotypes on a consistent basis and when entering a social situation, these experiences of having been racially stereotyped may influence their perception of how they are being viewed by others. Racially oriented stereotypes associated

with the communication styles of ethnic minorities may be particularly relevant in impacting public speaking fears for ethnic minorities; there are various levels in Rapee and Heimberg's (1997) model in which fears of confirming these racial stereotypes in public speaking situations may be considered.

Several studies exploring communication stereotypes have found that European Americans perceive African Americans' communication styles as being argumentative, aggressive, critical, hostile, straightforward, less intelligent and grammatical correct (Leonard & Lock, 1993; Ogawa, 1971; Popp et al., 2003). Ogawa (1971) also found that European Americans viewed Asian Americans as being intelligent, courteous, industrious, quiet, reserved, and soft-spoken.

In public speaking situations, stereotypes related to the communication styles of African Americans and Asian Americans may act as what Rapee and Heimberg (1997) referred to as external indicators of negative evaluation that influence how they believe their audience perceives them. For example, for African Americans and Asian Americans, stereotypes that members of these ethnic minority groups exhibit overly aggressive or passive communication styles, respectively, may fuel the perception that their audience is viewing them according to these stereotypes. Therefore, regardless of whether they are actually presenting aggressively or passively, African Americans and Asian Americans may believe they are being viewed in this manner.

According to Rapee and Heimberg (1997), while being occupied with how they are being viewed by their audience, individuals also are trying to determine the expectations of how well they should be performing. Typically, this model posits that people with social anxiety believe that others have high expectations for performance that is beyond their capabilities. African

Americans and Asian Americans may also have the added pressure that not only will they fail to meet high performance standards in public speaking situations, but also that they will confirm the prevailing stereotype about their group. For example, African Americans and Asian Americans may believe that their audience expects that they will confirm the stereotype of communicating aggressively or passively in public speaking situations. As a result, they may fear there is a high probability that they will confirm these stereotypes, which will, in turn, lead to serious consequences (e.g., performance deficits and increased anxiety).

A published clinical case study highlighted the way in which race may have affected a client's experience of and treatment for social phobia (Fink et al., 1996). It also provides an example of how stereotypes may be considered within Rapee & Heimberg's (1997) model of social phobia. In this case study, a 39-year-old African American female medical student was treated for social anxiety. During treatment, she frequently described being the only African American student in her medical classes and believed she was excluded by her European American peers from many activities. She also reported that she believed her colleagues and faculty viewed her as not intelligent enough to be a physician because she was African American. As a result, she experienced extreme difficulty attending rounds as a medical student and giving oral presentations to other medical professionals in the hospital setting.

Consistent with Rapee and Heimberg's (1997) conceptualization of social phobia, this client may have felt that she was being negatively evaluated by other colleagues or medical professionals which, in turn, started a chain of cognitive, behavioral, and emotional events. More specifically, when interacting with other medical professionals in the hospital, she believed they perceived her as incompetent and not sufficiently intelligent enough to be a good physician. According to Rapee and Heimberg, this negative mental self-representation of how others are

viewing her may be influenced by past experiences of having been negatively evaluated, in addition to internal and external cues. As an ethnic minority, the past experiences of being negatively evaluated may have involved racial stereotypes about African Americans' intellectual ability, which may explain why she believed that her colleagues perceived her as being an incompetent physician.

In situations where she had to interact with other medical professionals, she may also have believed that her colleagues expected her to meet extremely high and unattainable performance standards. As an African American, she also may have felt additional pressure to meet high performance standards in order to not confirm racial stereotypes. Her negative mental self-representation, believing that she will not be able to meet the high performance expectations of her colleagues and fear of confirming racial stereotypes, may have contributed to her social anxiety. She described how she would find herself stuttering, experiencing nausea and headaches when interacting with other medical professionals, and she ultimately left the hospital environment to work in a public health clinic.

In summary, although Rapee and Heimberg's model of social anxiety does not specifically incorporate culturally relevant variables into its conceptualization, it is possible to hypothesize the way in which stereotypes can further elaborate this model.

By including this culturally relevant variable into Rapee and Heimberg's (1997) conceptualization of social phobia, it may further elucidate the experience of social anxiety for members of ethnic minority groups like African Americans and Asian Americans and may be a starting point for elaborating extant models of social anxiety with culturally relevant variables.

Rationale and Study Design

In summary, public speaking anxiety is a common experience for individuals with social anxiety in both community and clinical populations and has a negative impact on quality of life. Although effective treatments have been developed, many individuals do not actively seek them and still others do not fully benefit from them. In addition, much of what we know about social anxiety is about the experiences of European Americans, despite African Americans and Asian Americans having been found to exhibit higher prevalence rates of social anxiety.

Furthermore, although there is evidence suggesting that stereotypes can negatively impact performance on achievement tests, these findings have not been demonstrated using public speaking as a performance domain. Therefore, the purpose of this study is to examine the impact of stereotypes, a culturally relevant variable, on public speaking performance and anxiety for African Americans and Asian Americans. Specifically, this study examined whether receiving stereotype confirming feedback after giving one speech decreased performance and increased anxiety on a second speech.

In brief, participants were asked to present two speeches. After the first speech, participants were provided with either stereotype or non-stereotype confirming feedback according to random assignment. Participants rated their own level of performance and anxiety for each speech. Following the speech task, participants completed self-report questionnaires of public speaking anxiety. In addition to providing self-report data, observers were also asked to rate the participants' performance and level of anxiety for both speeches.

Pilot Study

In order to develop the specific stereotype confirming feedback for African Americans and Asian Americans that was used in this study, an informal pilot study was conducted. More

specifically, previous research studies (Leonard & Lock, 1993; Ogawa, 1971; Popp et al., 2003) and the pilot study assisted in determining equally negative descriptions of communication styles that were stereotype confirming for African Americans (but not for Asian Americans) and Asian Americans (but not for African Americans).

Fourteen undergraduate students attending Georgia State were asked to complete two surveys (refer to Appendix A). Both surveys consisted of an identical list of words describing various communication styles that have been used in previous studies examining communication stereotypes (Leonard & Lock, 1993; Ogawa, 1971, Popp et al., 2003). Based on the descriptive list, participants were asked to rate how negative it would be to receive feedback that is descriptive of one's own communication style on a scale of 1 (not negative) to 5 (highly negative) for each word. Based on the same descriptions, they were also asked to rate how stereotypically descriptive each word is for both African Americans and Asian Americans on a scale of 1(not descriptive) to 5 (highly descriptive). Participants were given 1 hour of research credit for completing the surveys.

Consistent with prior research, "improper grammar use" was found to be stereotypically descriptive and negative for African American's communication style (but not for Asian Americans) and "soft (difficult) to hear" was found to be stereotypically descriptive and negative for Asian Americans (but not for African Americans) (Ogawa, 1971; Poppet al., 2003). Thus for the current study, "improper grammar use" was used as stereotype confirming feedback for African Americans and "soft (difficult) to hear" for Asian Americans.

Hypotheses

It is expected that participants who are given stereotype confirming feedback will report higher levels of anxiety compared to those who receive non-stereotype confirming feedback

(Hypothesis 1). An interaction between feedback type and ethnicity on self-reported anxiety also will be examined, although there is not expected to be a significant interaction. It also is anticipated that participants who receive stereotype confirming feedback after giving an initial speech will demonstrate and report poorer performance and greater anxiety on a subsequent speech compared to those who receive non-stereotype confirming feedback (Hypothesis 2).

Methods

Participants

The participants were 97 undergraduate college students attending Georgia State University. There were 80 women (83%) and 16 men (17%). Ninety-nine percent of the participants identified as heterosexual and 1% identified as bisexual. The average age of the participants was 21.5 years (*SD* = 6.5). Forty-six percent of the participants identified as college freshmen, 28% as sophomores, 19% as juniors, and 7% as seniors. Sixty-one students (63%) self-identified as African American or Black and thirty-five self-identified as Asian American or Asian (36%). One student self-identified as Latino or Hispanic (1%). For the purpose of this study, this participant was excluded from subsequent analyses. Demographic characteristics compared by ethnicity are shown in Table 1.

Table 1.

Demographic and descriptive characteristics compared by race

	African American / Black (*n*=61)	Asian American / Asian (*n*=35)
Sex		
Male	9 (15%)	7 (20%)
Female	52 (85%)	28 (80%)
Sexual Orientation		
Heterosexual	60 (99%)	34 (100%)
Bisexual	1 (1%)	-
Years of age (*SD*)	22.5 (7.9)	19.8 (2.7)
College Status		
Freshman	23 (38%)	21 (60%)
Sophomore	20 (32%)	7 (20%)
Junior	12 (20%)	6 (17%)
Senior	6 (10%)	1 (3%)
Relationship Status		
Single	54 (89%)	34 (97%)
Married	2 (3%)	-
Divorced	2 (3%)	-
Living with significant other	2 (3%)	1 (3%)
Widowed	1 (2%)	-
Annual household income		
Below $10,000	4 (7%)	1 (3%)
$10,000 - $30,000	12 (20%)	6 (17%)
$30,000 - $50,000	11 (19%)	9 (26%)
$50,000 - $75,000	15 (25%)	11 (31%)
$75,000 - $100,000	10 (17%)	7 (20%)
$100,000 - $150,000	4 (7%)	-
Over $200,000	3 (5%)	1 (3%)
*Concerns for confirming stereotypes	*M* = 2.99, *SD* = 1.48	*M* = 3.10, *SD* = 1.26

**Measured by the Stereotype Confirmation Concern Scale, which is on a 7-point Likert scale*

Measures

Descriptive measures

Demographics Questionnaire consists of questions about the participants' gender, age, college status (i.e., freshman, sophomore, junior, senior), ethnicity relationship status, and household income (refer to Appendix B).

Stereotype Confirmation Concern Scale (SCCS) (Contrada et al., 2001) is an 11-item measure developed to assess how often over the past three months the respondent has felt enduring or chronic concern over confirming a negative stereotype about his or her ethnic group (refer to Appendix C). Responses are based on a seven-point Likert scale between one (not at all) and seven (very often). Examples of concern include, "owning certain things", "dressing a certain way", and "talking a certain way." The authors report that the reliability of the measure was determined using a diverse sample of 361 first-year undergraduate students enrolled in Introductory Psychology classes from Rutgers University, including both African Americans and Asian Americans (Cronbach's alpha = .91). In the current study the Cronbach alpha coefficient was .90.

Self-report measures of anxiety

Personal Report of Communication Apprehension (PRCA-short form) (McCroskey, 1978) is a ten-item measure designed to measure an individual's real or anticipated fear or anxiety associated with a public speaking situation (refer to Appendix D). Responses are based on a five-point Likert scale between one (strongly agree) and five (strongly disagree) with possible scores ranging from 10 to 50. Respondents are asked to rate how strongly they agree or disagree with statements such as, "I look forward to an opportunity to speak in public", "I'm afraid to speak up in conversations", and "I always avoid speaking in public if possible."

According to McCroskey (1978), means from non-clinical samples studied have ranged between 27 and 28 with a standard deviation of 7. He proposed that cumulative scores greater than 34 indicate high levels of public speaking fears, while scores less than 21 indicate lower levels. The measure has been shown to demonstrate high internal consistency (Cronbach's alpha = .90) and test-retest reliability at .74 (McCroskey, 1978). In the current study the Cronbach alpha coefficient was .87.

Speech Anxiety Thoughts Inventory (SATI) (Cho, Smits, & Telch, 2004) is a 23-item measure, originally developed in Korea, designed to assess maladaptive cognitions associated with speaking anxiety (refer to Appendix E). Responses are based on a five-point strength of belief rating (Clark, 1988) scale between 1 ("I do not believe the statement at all) and five ("I completely believe the statement") with possible scores ranging from 23 to 115. Respondents are asked to rate the degree to which they believe each statement when they are in a public speaking situation, such as "I'll get tongued-tied", "If I perform poorly, then the audience will remember me negatively", "What I say will sound stupid", "My mind will go blank", and "If I make a mistake, the audience will think I'm stupid." This measure consists of two subscales: *prediction of poor performance* (subscale 1) and *fear of negative evaluation* (subscale 2). According to Cho et al. (2004) the total scale has good internal consistency, with a Cronbach alpha coefficient reported of .95. Both subscales also have been shown to demonstrate high internal consistency with reliability estimates of .94 and .91, respectively (Cho et al., 2004). Test-retest reliability estimates for both subscales were .73 and .64, respectively. Psychometric properties were assessed using a diverse sample of undergraduate students, including both African Americans and Asian Americans (Cho et al., 2004). In the current study, the Cronbach alpha coefficient for the total scale was .93. The current study also demonstrated good internal

consistency for both subscales with Cronbach alpha estimates of .92 (subscale 1) and .88 (subscale 2). For the purposes of this study, only the SATI subscales were utilized.

Self-Statements During Public Speaking (SSPS) (Hofmann & DiBartolo, 2000) is a 10-item measure designed to assess fearful thoughts during public speaking (refer to Appendix F). This measure consists of two five-item subscales; *positive and negative self-statements* (SSPS-P, SSPS-N). Respondents are asked to rate the degree to which he or she agrees with each item on a six-point Likert scale ranging from zero (if you do not agree at all) to five (if you agree extremely with the statement). Both subscales have been shown to demonstrate adequate internal consistency with reliability estimates being .84 and .83, for positive and negative subscales, respectively. The authors tested the psychometric properties of this measure using a diverse sample of undergraduate studies, including both African Americans and Asian Americans (Hofmann & DiBartolo, 2000). Test-retest estimates for both subscales were .78 and .80, respectively (Hofmann & DiBartolo, 2000). In the current study the Cronbach alpha coefficient for the total scale was .83. The reliability estimates for the SSPS-P and SSPS-N were .78 and .82, respectively. For the purposes of this study, only the SSPS-N was utilized.

Performance ratings were gathered during the experiment after each speech. Participants were asked to rate their performance on a scale ranging from zero (not good at all) to ten (very good) to determine how well they thought they had performed.

Subjective Units of Distress or Discomfort (SUDS) were gathered during the experiment after each speech. Participants were asked to rate their level of anxiety on a scale of zero (no anxiety) to ten (panic level of anxiety) to determine their level of anxiety while they were giving the speech.

Observer ratings of performance and anxiety

Observer ratings of the participants' performance were gathered. Two clinical psychology graduate students, blind to which experimental condition the participants were assigned to, were asked to rate the participants' performance on a scale ranging from zero (not good at all) to ten (very good) for both speeches.

Observer ratings of the participants' anxiety were gathered. Two clinical psychology graduate students, blind to which experimental condition the participants were assigned to, were asked to rate the participants' level of anxiety on a scale of zero (no anxiety) to ten (panic level of anxiety) after each speech during the experiment.

Procedures

Participants were recruited via Sona-Systems (http://gsu.sona-systems.com) from the undergraduate research pool at Georgia State University. Students were able to view a brief description of the study on SONA and to sign up for available appointment times, which were provided during the spring semester of 2006. Students were given 1 hour of research credit for their participation.

Participants interested in a study examining public speaking anxiety were asked to meet with the project investigator at their scheduled appointment times. Prior to the experiment, participants were randomly assigned to one of two experimental conditions based on the findings from Study 1. In condition 1, participants received feedback that was stereotype confirming for African Americans, but not for Asian Americans (IMPROPER GRAMMAR USE). In condition 2, participants received feedback that was stereotype confirming for Asian Americans, but not for African Americans (SOFT, DIFFICULT TO HEAR).

During the informed consent process, participants were informed that they were being asked to volunteer for a study examining public speaking anxiety in which they would be giving two speeches that were digitally recorded via computer web-camera. Participants were asked to present their speeches to a flat-panel computer screen that displayed a visual image of a small room with five professionals of different ethnicities sitting around a conference table. The visual image is generated from real video footage.

The speech task was based on a standardized speech assessment protocol (Beidel, Turner, & Jacob, 1989). At the start of the task, participants were given an index card with three topics and instructed to choose one of the three topics. The topics included sex education in schools, violence on TV, and space exploration. Participants were instructed to choose one of the three topics and given three minutes to prepare and organize a speech. After the preparation time, they were encouraged to speak on that topic for as long as they could for up to five minutes; however, they could stop at any time.

After the three minutes of preparation time participants were asked to present their speech. A SUDS rating was collected after the participants completed their speech to indicate the highest level of anxiety experienced while making the speech. After completing the speech, they were also asked to rate their performance on the speech. Anxiety was rated on a scale of zero (no anxiety) to ten (panic level of anxiety) and performance was rated on a scale ranging from zero (not good at all) to ten (very good).

At the end of the first speech, participants were provided feedback prior to being asked to present a second speech. Based on their randomly assigned condition, participants were either provided a feedback that was stereotype confirming for African Americans (but not for Asian Americans) or stereotype confirming for Asian Americans (but not for African Americans).

More specifically, participants received one of two types of feedback: 1) "Thank you for presenting your first speech. Now I'd like you to present a second speech, but this time be sure you are not using IMPROPER GRAMMAR." or 2) "Thank you for presenting your first speech. Now I'd like you to present a second speech, but this time be sure you are not speaking too "SOFT, IT IS DIFFICULT TO HEAR YOU."

After receiving this feedback, participants were given another set of three topics (euthanasia/assisted suicide, abortion, and technology & society) and asked to select one topic. Again, participants were given three minutes to prepare a speech on the topic they selected. They were reminded that after the preparation time, they should speak on that topic for as long as they can for up to five minutes; however, they could stop at any time. At the end of the speech, participants were asked to rate their highest level of anxiety (SUDS) giving the speech and their performance.

Participants were then asked to complete the questionnaire packet. After completing the questionnaires, all participants were debriefed with regards to the purpose of this study; that is to examine the impact of stereotype confirming feedback on public speaking performance and anxiety. During the debriefing, participants' memory for type of feedback they received after presenting their first speech was also assessed by asking participants to recall whether they received feedback and to specify the type of feedback they received from condition one or condition two.

Observer ratings of performance and anxiety: Training for reliability

Two clinical psychology graduate students (one African-American female and one Asian American male), blind to which experimental condition the participants had been assigned, were asked to rate the participants' level of performance and anxiety for both speeches utilizing the

same rating scales as used by the participants. In order to maximize inter-rater consistency, descriptors utilized from previous research studies (Norton & Hope, 2001; Fydrich et al, 1998) were provided to the graduate students to use in rating the participants' anxiety and performance on the speech task. When observing the participants, the raters were informed to pay attention to voice quality (e.g. tonal quality, pitch, clarity, volume), length of speech, eye contact, and discomfort (e.g. trembling, fidgeting, rigidity). In addition, the raters watched video recordings of several individuals performing a similar speech task that was collected in a previous research study on public speaking anxiety. In accordance with the recommendations of Norton and Hope (2001), the raters watched four tapes demonstrating high levels of anxiety, low levels of anxiety, high performance and low performance.

After the training session, the project investigator met with the observers four additional times to review discrepancies in ratings on a selection of 20 participants (approximately 20% of the total sample). The investigator and research assistants discussed any discrepancies between raters larger than 3 points. After the initial training session, there were no discrepancies larger than 2 points on ratings of both participants' performance and anxiety.

Data Analysis Plan

Prior to conducting analyses, the data was examined for possible missing data, outliers and skewness in order to ensure that the variables were normally distributed. More specifically, to determine the normality of the distributions, the skewness statistic (skewness/standard error) and tests of normality (i.e. Shapiro-Wilk) were calculated. If the distributions were not normally distributed, the data was transformed using Tabachnick & Fidell's (1996) recommendations. In addition, in efforts to not exclude cases, missing values or outliers were substituted with mean estimates.

Chi-square analyses and independent samples t-test were utilized to examine whether there were significant differences between feedback groups (i.e., stereotype confirming and non-stereotype confirming) among the demographic variables (i.e., age, gender, sexual orientation, ethnicity, college status, relationship status, and yearly household income).

A 2 X 2 analysis of variance was conducted to examine the impact of feedback (stereotype confirming and non-stereotype confirming) and ethnicity (African American and Asian American) on self-reported levels of anxiety as measured by the PRCA, SATI, and SSPS-N, in addition to examining a potential interaction between feedback and ethnicity. To determine whether participants' ratings of performance and anxiety before and after receiving feedback differed depending on which type of feedback was given, a mixed factor analysis of variance was conducted. More specifically, this analysis was conducted to explore the interaction between the type of feedback received (stereotype confirming vs. non-stereotype confirming) and time (based on ratings of performance and anxiety before and after receiving feedback). Observer ratings of the participants' performance and anxiety were also examined using a mixed factor analysis of variance.

Results

Overall there was very little missing data. There were two missing items for the SSCS, three missing items for the PRCA, fourteen missing items for the SATI, and one missing item for the SSPS. Missing data in the SCCS, PRCA, SATI and SSPS were substituted with mean item estimates. In addition, two participants did not complete the SSPS measure.

All dependent variables, except for the SSPS-N, were normally distributed. Based on Tabachnick and Fidell's (1996) recommendations, square root and logarithmic transformations were performed on the SSPS-N to increase normality. Although tests of normality for both

square root and logarithmic transformations on the SSPS-N remained significant, the square root transformation for SSPS-N was selected for subsequent analyses because it reduced the skewness of the distribution.

Preliminary Analyses

Through the process of random assignment, 46 participants (48%) received stereotype confirming feedback and 50 participants (52%) received non-stereotype confirming feedback. No significant differences in demographic characteristics between the feedback groups were found. More specifically the percentage of participants in the feedback groups did not differ by sex (c^2 (1, N = 96) = 1.01, p = .32), college status (c^2 (1, N = 96) = 2.14, p = .54), race (c^2 (1, N = 96) = .01, p = .91), relationship status (c^2 (1, N = 96) = 3.22, p = .52), and income (c^2 (1, N = 94) = 3.96, p = .68). In addition, there was no significant difference in age for stereotype confirming (M = 20.49, SD = 3.64) and non-stereotype confirming groups (M = 22.29, SD = 8.2; t (90) = -1.33, p = .19). Thus, it appears that randomization was effective for equalizing the groups according to demographic information.

The relation between the participants' concerns over confirming negative stereotypes (as measured by the SCCS) and the outcome variables (as measured by the PRCA, SATI, and the SSPS-N) was examined using Pearson product-moment correlation coefficients (refer to Table 2 for means and standard deviations). As shown in Table 3, the SCCS was significantly correlated with all outcome variables.

Table 2.

Means and standard deviations for the stereotype confirmation concern scale and self-report measures of public speaking anxiety

Measures	*M*	*SD*
SCCS	3.03	1.40
PRCA	33.35	8.29
SATI- Subscale 1	37.76	12.26
SATI- Subscale 2	30.79	8.68
SSPS-N	2.58	1.00

Note. The mean for the SCCS is based on the mean item score and the means for the PRCA, SATI subscales, and SSPS-N are based on the summary score. Scores on the SCCS can range from (1–7), (10-50) on the PRCA, (13-65) on the SATI-Subscale 1, (10-50) on the SATI-Subscale 2, and (0-25) on the SSPS-N.

Table 3.

Correlations between SCCS and self-report measures of public speaking anxiety

Subscale	1	2	4	5	6
1. SCCS	1	.27**	.47**	.53**	.44**
2. PRCA	-	1	.63**	.30**	.49**
4. SATI-Subscale 1	-	-	1	.65**	.71**
5. SATI-Subscale 2	-	-	-	1	.55**
6. SSPS-N	-	-	-	-	1

**$p < .01$
SCCS = Stereotype Confirmation Concern Scale
PRCA = Personal Report of Communication Apprehension
SATI-Subscale 1 = Speech Anxiety Thoughts Inventory - Prediction of Poor Performance
SATI-Subscale 2 = Speech Anxiety Thoughts Inventory - Fear of Negative Evaluation
SSPS-N = Self-Statements During Public Speaking (Negative self-statements)

<u>Hypothesis 1: Does stereotype confirming feedback impact self-report levels of anxiety?</u>

As shown in Table 4, there was an effect of feedback type on SATI-Subscale 1 (prediction of poor performance) (F (1, 92) = 4.31, p = .04; η_p^2 = .05), such that the mean score

for participants who received stereotype confirming feedback was significantly lower than participants who received non-stereotype confirming feedback. There was no effect of feedback type on PRCA (F (1, 92) = .71, p = .40), SATI-Subscale 2 (fear of negative evaluation) (F (1, 92) = 3.72, p = .06), and the SSPS-N (negative self-statements) (F (1, 90) = 3.43, p = .07).

Table 4.

Means and standard deviations for self-reported anxiety compared by feedback received

	Stereotype Confirming (n=46)		Non-stereotype Confirming (n=50)	
Measures	*M*	*SD*	*M*	*SD*
PRCA	32.63_a	7.81	34.02_a	8.73
SATI-Subscale 1	35.48_a	9.93	39.86_b	13.84
SATI-Subscale 2	29.46_a	8.41	32.02_a	8.81
SSPS-N	2.41_a	.94	2.73_a	1.02

Note. Means in the same row that do not share subscripts differ at $p < .05$.
PRCA = Personal Report of Communication Apprehension
SATI-Subscale 1 = Speech Anxiety Thoughts Inventory - Prediction of Poor Performance
SATI-Subscale 2 = Speech Anxiety Thoughts Inventory - Fear of Negative Evaluation
SSPS-N = Self-Statements During Public Speaking (Negative self-statements)

As shown in Table 5, there was an effect for ethnicity on SSPS-N (negative self-statements) (F (1,90) = 9.01, p = .003, η_p^2 = .09), such that the mean score for African American participants was significantly lower than Asian American participants. There was no effect of ethnicity on PRCA (F (1,92) = .97, p = .33), SATI-Subscale 1 (prediction of poor performance) (F (1,92) = 2.67, p = .11), and the SATI-Subscale 2 (fear of negative evaluation) (F (1,92) = .18, p = .67).

Table 5.

Means and standard deviations for self-reported anxiety measures compared by ethnicity

	African American (*n*=61)		Asian American (*n*=35)	
Measures	*M*	*SD*	*M*	*SD*
PRCA	32.69_a	8.62	34.51_a	7.64
SATI-Subscale 1	36.11_a	12.72	40.63_a	11.01
SATI-Subscale 2	30.97_a	8.99	30.49_a	8.21
SSPS-N	2.35_a	.98	2.97_b	.89

Note. Means in the same row that do not share subscripts differ at $p < .05$.
PRCA = Personal Report of Communication Apprehension
SATI-Subscale 1 = Speech Anxiety Thoughts Inventory - Prediction of Poor Performance
SATI-Subscale 2 = Speech Anxiety Thoughts Inventory - Fear of Negative Evaluation
SSPS-N = Self-Statements During Public Speaking (Negative self-statements)

In addition, no significant interaction effects were found between feedback type and e ethnicity on all self-report measures of anxiety (PRCA (F (1,92) = .12, p = .74); SATI-Subscale 1 (F (1,92) = 2.16, p = .15); SATI-Subscale 2 (F (1,92) = 3.44, p = .07); SSPS-N (F (1,90) = 1.11, p = .29)).

<u>Hypothesis 2: Does receiving stereotype confirming feedback after giving a speech impact performance and anxiety on a subsequent speech?</u>

Self-ratings of Performance and Anxiety

As shown in Table 6, there was an effect of time on self-ratings of performance (F (1,94) = 4.39, p = .04, η_p^2 = .05), such that the mean score for self ratings of performance before receiving feedback was significantly lower than ratings of performance after receiving feedback. There also was an effect of time on self-ratings of anxiety (F (1,94) = 10.13, p = .002, η_p^2 = .10), such that the mean score for self-report of anxiety before receiving feedback was significantly higher than self-report of anxiety after receiving feedback.

Table 6.

Means and standard deviations for self-ratings of performance and anxiety at Time 1 and Time 2

	Time 1 (N = 96)		Time 2 (N=96)	
Measures	*M*	*SD*	*M*	*SD*
Performance	3.75_a	2.29	4.21_b	2.11
Anxiety	6.38_a	2.25	5.68_b	2.39

Note. Means in the same row that do not share subscripts differ at $p < .05$.

There was no effect of feedback on self-ratings of performance (F (1,94) = 2.90, p = .09) or self-ratings of anxiety (F (1,94) = .58, p = .45) as shown in Table 7. In addition, there was no interaction between feedback and time for self-ratings of performance (F (1,94) = 1.17, p = .28) or self ratings of anxiety (F (1,94) = .09, p = .77).

Table 7.

Means and standard deviations for self ratings of performance and anxiety compared by feedback type at Time 2

		Stereotype Confirming (n = 46)		Non-stereotype Confirming (n = 50)	
	Measures	*M*	*SD*	*M*	*SD*
Time 2	Performance	4.43_a	1.95	4.00_a	2.24
	Anxiety	5.54_a	2.47	5.80_a	2.33

Note. Means in the same row that do not share subscripts differ at $p < .05$.

Observer-ratings of Performance and Anxiety

The inter-rater agreement between the two observers and project investigator was estimated using intraclass correlations (ICC). More specifically, the ICC (3,1) version (two-way mixed model) defined by Shrout and Fleiss (1979) was utilized. Twenty percent of the total sample (i.e., 20 participants) was used to measure inter-rater agreement on observer ratings of participants' performance and anxiety before and after receiving feedback. The ICC (3,1) for

observer ratings of participants' performance before receiving feedback was .93. The ICC (3,1) for observer ratings of participants' anxiety before receiving feedback was .94. The ICC (3,1) for observer ratings of participants' performance and anxiety after receiving feedback was .91 and .90, respectively. According to Fleiss (1981), ICC greater than .74 is considered acceptable.

There were no effects for time on observer-ratings of performance (F (1,94) = .16, p = .69) or observer-ratings of anxiety (F (1,94) = .62, p = .43) as shown in Table 8. There also were no effects for feedback on observer-ratings of performance (F (1,94) = .66, p = .42) or observer-ratings of anxiety (F (1,94) = .46, p = .50) (refer to Table 9). In addition, there was no interaction between feedback and time for observer-ratings of performance (F (1,94) = 2.08, p = .15) or observer-ratings of anxiety (F(1,94) = 2.84, p = .10).

Table 8.

Means and standard deviations for observer-ratings of performance and anxiety at Time 1 and Time 2

	Time 1 (N = 96)		Time 2 (N=96)	
Measures	*M*	*SD*	*M*	*SD*
Performance ratings	4.38_a	2.19	4.32_a	1.83
Anxiety Ratings	3.86_a	2.38	3.74_a	2.14

Note. Means in the same row that do not share subscripts differ at $p < .05$.

Table 9.

Means and standard deviations for observer-ratings of performance and anxiety compared by feedback type at Time 2

		Stereotype Confirming (n = 46)		Non-stereotype Confirming (n = 50)	
	Measures	*M*	*SD*	*M*	*SD*
Time 2	Performance	4.37_{a}	1.89	4.28_{a}	1.78
	Anxiety	4.02_{a}	2.24	3.48_{a}	2.03

Note. Means in the same row that do not share subscripts differ at $p < .05$.

Discussion

Overall, the results of this study did not support the hypotheses being examined. In contrast to what was expected, participants who received stereotype confirming feedback did not report higher levels of anxiety compared to those who received non-stereotype confirming feedback. In addition, stereotype confirming feedback did not negatively impact the participants' performance or anxiety on a speech task. More specifically, self and observer ratings of participants' speeches did not indicate differences in performance or anxiety from Time 1 to Time 2 based on the feedback received.

There are several factors to consider in putting these null results into context. First of all, participants in this study generally exhibited low levels of public speaking anxiety based on the outcome measures used in this study. Compared to the studies that developed and validated the Speech Anxiety thoughts Inventory (Cho et al., 2003) and Self-Statements During Public Speaking Scale (Hofmann & DiBartolo, 2000) with a group of college students who met diagnostic criteria for social phobia, participants in this study reported fewer maladaptive thoughts and negative self-statements associated with speaking anxiety. Therefore, for the current study, receiving stereotype confirming feedback may not have had a negative impact on

the participants' performance or anxiety given they did not report high levels of public speaking anxiety.

Although the questionnaires used in this study have shown to be both reliable and valid self-report measures of public speaking anxiety, they examined trait as opposed to state levels of anxiety. Using trait measures of anxiety may not have been sensitive as outcome measures, because they may not reflect transient fluctuations of anxiety as a result of receiving stereotype confirming feedback. State measures of anxiety may have provided a more accurate assessment of changes in anxiety based on the feedback they received. However, given that trait anxiety is generally associated with an individual's level of state anxiety in psychologically threatening situations (Behnke & Beatty, 1981; Mladenka et al., 1998; Reiss, 1997), similar results may have been observed using outcome measures examining state levels of public speaking anxiety. Additionally, participants were asked to provide SUDS and performance ratings after both speeches, which may be conceptualized as measures of state anxiety.

Although the participants in this study, on average, reported higher scores on the Stereotype Confirmation Concerns Scale compared to participants previous research (Contrada et al., 2001), most of the participants in the study reported few concerns for confirming stereotypes about their ethnic group as measured by the Stereotype Confirmation Concern Scale. According to Contrada and his colleagues (2001), the stereotype confirmation concern can be defined by two extremes: individuals who experience chronic apprehension about confirming stereotypes about a group to which they belong and individuals who are free from such concerns. As such, if the participants in this study were not overly concerned with confirming ethnically relevant stereotypes, receiving stereotype type confirming feedback would less likely trigger a negative response (i.e. increased anxiety).

Understanding the null results may also be considered by comparing the current study to studies examining stereotype threat effects on performance. The effect of stereotype threat on intellectual performance has been well replicated and shown to be activated with direct (e.g. informing participants that a test had shown gender differences in the past) and subtle manipulations (e.g. asking participants to indicate their race) (Steele & Aronson, 1995; Spencer et al., 1999). In the studies that have manipulated stereotype threat, stereotypes were activated prior to the performance task and focused on stereotypes regarding one's group (e.g. women perform poorer at math compared to men). By priming and activating a stereotype regarding one's group membership, there may be more pressure and anxiety associated with one's performance due to the potential to confirm this stereotype. For the current study, stereotypes were manipulated only after the participant had completed their first speech. Therefore the participants in this study may have interpreted the feedback as information about their individual performance rather than priming a stereotype about one's group membership.

Given that the feedback provided to the participants in this study was in response to their individual performance, it may have been easier to distance from and disregard this individually focused feedback as opposed to a manipulation that primed group membership and stereotypes about that group. As a result, the stereotype confirming feedback may not have had an effect on their public speaking performance and anxiety. A future study could manipulate group stereotypes by requiring the participants to give only one speech and providing the stereotype confirming feedback before asking the participants to perform this speech. The stereotype confirming feedback could range from the participants being told that other African American participants had trouble using improper grammar during their speech or that other Asian

American participants spoke too softly and it was difficult to hear them when they gave their speech.

Lastly, stereotype confirming feedback may not have had an effect on the participants' public speaking performance and anxiety because the domain in which the stereotype was implicated (i.e. public speaking) may not have been relevant. Steele (1997) suggested that in order to demonstrate the effect of stereotype threat, the individual must have some degree of self-identification with performance in that specific domain. Those who are not highly identified with the performance domain would be less likely to show stereotype threat effects because the possibility of performing poorly is not a threat to the self. Participants in this study may not have self-identified with public speaking performance, and as a result, not been influenced by receiving stereotype confirming feedback when presenting their speech. However, one might argue that the public speaking may be viewed as an indicator of verbal abilities and/or intelligence and participants in this study presumably did have some degree of self-identification with public speaking performance given the fact that they are in college.

Several modifications to the study design and procedure could be considered and utilized in subsequent studies. First, although public speaking anxiety has been found to be prevalent in both community and clinical samples (Stein et al., 1994; Furmark et al., 2000), future studies should specifically focus on participants who exhibit significant public speaking anxiety. Second, it may be more applicable to utilize actual audiences as opposed to the visual image of an audience displayed on a computer screen. Although developed from actual video footage, presenting a speech to a visual image on a computer screen may not have been as relevant to the participant. If participants are asked to present their speech to a real audience, this experience may evoke more typical and salient symptoms of anxiety.

Although both self and observer ratings of public speaking performance and anxiety were utilized in this study, these measures may still not have been sensitive enough to pick up potentially subtle changes in behavioral and emotional responses caused by stereotype confirming feedback. Other measures of anxiety should be considered, particularly markers of physiological arousal that may provide more thorough insight into an individual's emotional states. For example, Blascovich and his colleagues (2001) were able to demonstrate the effects of stereotype threat on physiological levels of anxiety by measuring participants' blood pressure.

Despite the limitations and caveats noted above, the current study had several strengths. This study utilized a randomized experimental design that included a standardized speech task (Beidel, Turner, & Jacob, 1989) and measures of speaking anxiety with good psychometric properties, which has been validated with both African American and Asian American college students. The study also included observational ratings of performance and anxiety from two well-trained and reliable observers, as well as participants' own self-reported measures.

Although the results did not support the primary hypotheses, some noteworthy findings emerged. First, contrary to what was expected, participants who received stereotype confirming feedback reported less prediction of poor performance in public speaking situations compared to participants who received non-stereotype confirming feedback. It is unclear why participants who received stereotype confirming feedback did not report more prediction of poor performance in public speaking situations. However given the finding was not consistent across the other measures of public speaking anxiety (e.g. PRCA, SATI-Subscale 2, and SSPS-N) and feedback accounted for only 5% of the variance in the SATI-Subscale 1, it is possible that these results are a reflection of chance variance. Second, Asian American participants reported more negative statements associated with public speaking compared to African American participants.

However they did not differ on other measures of public speaking anxiety (e.g. PRCA and SATI) and ethnicity accounted for only 10% of the variance in the SSPS-N.

The results also showed that participants who reported having relatively more concerns for confirming negative stereotypes also reported having relatively more public speaking fears. Overall, participants who were more concerned with confirming stereotypes, as measured by the Stereotype Confirmation Concern Scale (Contrada et al., 2001), also reported more apprehension, maladaptive thoughts, and negative self-statements associated with public speaking, as measured by the Personal Report of Communication Apprehension (McCroskey, 1978), Speech Anxiety Thoughts Inventory (Cho et al., 2004), and Self-Statements During Public Speaking (Hofmann & DiBartolo, 2000), respectively. These results suggest that there is indeed a relation between concern for confirming stereotypes and public speaking performance and anxiety. As such, although the main hypotheses yielded null results, it does not necessarily indicate that there is no effect of culturally relevant variables in general or stereotypes in particular on public speaking performance and anxiety.

As previously mentioned, for ethnic minorities, experiences of being racially stereotyped may influence their perception of how they are being viewed by others in social situations, such as public speaking. According to Rapee and Heimberg's (1997) model, individuals with social phobia presume their audience has high expectations for their performance, which they are unable to meet based on their already negative self-representation. This perception ultimately results in various symptoms of anxiety. Elaborating Rapee and Heimberg's (1997) model to specify culturally relevant factors would suggest that, for ethnic minorities, fears for confirming racial stereotypes may also influence perceptions of their audiences' expectations. More specifically, ethnic minorities may feel like they are unable to meet the audiences' high

expectations as a result of their fears for confirming the prevailing stereotypes about their group. It also is possible instead of presuming their audience will have high expectations for their performance, ethnic minorities may believe their audience may have low expectations for their performance based on existing stereotypes and they have to contend with the fear that they will confirm this negative stereotype.

Other culturally relevant constructs may be helpful in understanding the impact of stereotypes on public speaking performance and anxiety and should be examined. Two such constructs are stigma consciousness and self-construal. According to Pinel (1999; 2004), not all individuals experience their stereotyped status similarly. How they experience and behave in stereotype-relevant situations may be influenced by stigma consciousness, defined as the extent to which they expect to be stereotyped or discriminated against.

In a study linking stigma consciousness with stereotype threat, Brown and Pinel (2003) showed, under stereotyped threat conditions, women who were high in stigma consciousness performed worse on a math test than women who were low in stigma consciousness. Similarly, it is possible that the relation between stereotype confirming feedback and public speaking performance and anxiety may be influenced by the degree to which the participants in this study were self-conscious and expected to be discriminated against based on those stereotypes. Therefore one might expect that participants with high stigma consciousness would be more sensitive to receiving stereotype confirming feedback and as a result the feedback would negatively impact public speaking performance and anxiety.

An individual's sense of self also may influence their perception of how they are being viewed by their audience in social situations. According to Markus and Kitayama (1991), an individual's sense of self may be differentiated by the degree to which they see themselves as

separate from others (independent self-construal) or as connected with others (interdependent self-construal). An independent self-construal is separate from social context and primarily organized by referring to one's own attributes, abilities, and goals rather than by reference to the attributes, abilities, and goals of others. In contrast, the interdependent self-construal emphasizes familial and social group membership and primarily organized in reference to what the individuals perceives to be the attributes, abilities, and goals of others.

Several studies have found significant relations between self-construal and measures of emotional distress. Norasakkunkit & Kalick (2002) found individuals who endorsed an independent self-construal significantly reported less fears of being negatively evaluated, as measured by the Fear of Negative Evaluation (Leary, 1983). In a study conducted by Kleinknecht and his colleagues (1997), a more independent self-construal was also associated with less report of social anxiety, as measured by the Social Phobia Scale and Social Interaction Anxiety Scale (Mattick & Clarke, 1989). Singelis and Sharkey (1995) found stronger interdependent self-construal was correlated with increased susceptibility to embarrassment, as measured by the Embarrassability Scale (Modigliani, 1991).

Therefore, it is possible that self-construal also may influence the degree to which an individual experiences stereotypes and public speaking anxiety. Presumably, individuals who embody a more interdependent self-construal may be more susceptible to being influenced by stereotype confirming feedback. In these cases, the feedback about their performance would not only be a reflection of their abilities, but the abilities of his or her larger group as well.

According to Rapee and Heimberg (1997), individuals with social phobia evaluate the likelihood that they will be negatively evaluated and the consequences of this evaluation. For individuals with an interdependent self-construal, the consequences of being negatively

evaluated may be weighed heavily because their actions or behaviors are not only a reflection of themselves, but also reflect upon their group. Individuals with a more independent self-construal may be able to minimize the impact of a stereotype confirming feedback, because the pressures of misrepresenting one's group is not relevant to their sense of self.

Conclusion

This current study is one of the first to examine the impact of a culturally relevant variable, stereotypes, on public speaking performance and anxiety, and one of the few that specifically focuses on the experiences of ethnic minorities. The results did not show that stereotype confirming feedback negatively impacted the participants' public speaking performance and anxiety. Yet, a significant correlation between the participants' fears of confirming stereotypes and self-report measures of public speaking anxiety were found. Future research should replicate this finding and build upon this line of research to identify and understand the processes that explain the relation between stereotypes and public speaking performance and anxiety.

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Appendix A

Understanding Communication Styles

For the list of descriptions below, please rate how negative, on a scale of 1 (not negative) to 5 (highly negative), it would be to receive this feedback about your own communication style.

1. Too radical
2. Unprofessional
3. Speaking too quickly
4. Improper grammar use
5. Overly friendly
6. Argumentative
7. Ostentatious (showy)
8. Overly critical
9. Blushing
10. Emotional
11. Unexpressive/Flat
12. Poor eye contact
13. Arrogant
14. Using slang words/phrases
15. Wordy
16. Loud
17. Informal
18. Soft (difficult to hear)
19. Straightforward (too direct)
20. Aggressive
21. Difficult to understand
22. Rigid
23. Overly obliging (kind)
24. Too reserved
25. Patronizing

Understanding Communication Styles

For the list of descriptions below, please rate how stereotypically descriptive, on a scale of 1 (not descriptive) to 5 (highly descriptive), each is to the communicational style of these to racial groups: African American and Asian American.

1. Too radical
2. Unprofessional
3. Speaking too quickly
4. Improper grammar use
5. Overly friendly
6. Argumentative
7. Ostentatious (showy)
8. Overly critical
9. Blushing
10. Emotional
11. Unexpressive/Flat
12. Poor eye contact
13. Arrogant
14. Using slang words/phrases
15. Wordy
16. Loud
17. Informal
18. Soft (difficult to hear)
19. Straightforward (too direct)
20. Aggressive
21. Difficult to understand
22. Rigid
23. Overly obliging (kind)
24. Too reserved
25. Patronizing

Appendix B

Demographics

1. What is your sex?
   a. Male
   b. Female

2. What is your sexual orientation?
   a. Heterosexual
   b. Homosexual
   c. Bisexual

3. How old are you?

4. What is you college status?
   a. Freshman
   b. Sophomore
   c. Junior
   d. Senior

5. What is your ethnicity/race?
   a. African-American or Black
   b. Asian-American or Asian
   c. European American or White
   d. Latino or Hispanic
   e. Native American
   f. Other (please specify _____)

6. What is your relationship status?
   a. Single
   b. Married
   c. Separated
   d. Divorced
   e. Living with significant other
   f. Widowed

7. What is your annual household income (including your parents)?
   a. below $10,000
   b. $10,000 - $30,000
   c. $30,000 - $50,000
   d. $50,000 - $75,000
   e. $75,000 - $100,000
   f. $100,000 - $150,000
   g. $150,000 - $200,000
   h. over $200,000

Appendix C

Stereotype Confirmation Concern Scale

Please indicate how often over the past three months you have been concerned that by doing the following (listed below) you might appear to be confirming a stereotype about African-Americans.

1	2	3	4	5	6	7
Not at all						Very Often

	1	2	3	4	5	6	7
1. Owning certain things	O	O	O	O	O	O	O
2. Attending or participating in certain social activities	O	O	O	O	O	O	O
3. The way you look (your physical appearance)	O	O	O	O	O	O	O
4. Shopping in certain stores or eating in at certain restaurants	O	O	O	O	O	O	O
5. Eating certain foods	O	O	O	O	O	O	O
6. Doing certain household tasks	O	O	O	O	O	O	O
7. Dressing a certain way	O	O	O	O	O	O	O
8. Playing certain sports	O	O	O	O	O	O	O
9. Taking your studies too seriously	O	O	O	O	O	O	O
10. Talking a certain way	O	O	O	O	O	O	O
11. Revealing your socioeconomic status	O	O	O	O	O	O	O

Appendix D

Personal Report of Communication Apprehension-Short Form

This instrument is composed of statements concerning your communication with other people. Please indicate the degree to which each statement applies to you by using the following scale. There is no right or wrong answer. Work quickly; just record your first impression.

1	2	3	4	5
Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree

	1	2	3	4	5
1. I look forward to expressing my opinions at meetings.	O	O	O	O	O
2. I am afraid to express myself in a group.	O	O	O	O	O
3. I look forward to an opportunity to speak in public.	O	O	O	O	O
4. Although I talk fluently with friends, I am at a loss for words on the platform.	O	O	O	O	O
5. I always avoid speaking in public if possible.	O	O	O	O	O
6. I feel that I am more fluent when talking to people than most other people are.	O	O	O	O	O
7. I like to get involved in group discussions.	O	O	O	O	O
8. I dislike to use my voice and body expressively.	O	O	O	O	O
9. I'm afraid to speak up in conversations.	O	O	O	O	O
10. I would enjoy presenting a speech on a local television show.	O	O	O	O	O

Appendix E

Speech Anxiety Thoughts Inventory

This questionnaire is concerned with thoughts associated with public speaking. Please read each statement carefully and rate the degree to which you believe each statement on a scale from 1 ("I do not believe the statement") to 5 ("I completely believe the statement"). Base your ratings on what you typically think when you are in a public speaking situation

1	2	3	4	5
I do not believe the statement				I completely believe the statement

	1	2	3	4	5
1. I'll get tongue-tied.	O	O	O	O	O
2. My speech won't impress the audience.	O	O	O	O	O
3. My speech will be incoherent.	O	O	O	O	O
4. I won't be able to speak as well as others.	O	O	O	O	O
5. When others are not paying attention to my speech, I worry that the audience is thinking poorly of me.	O	O	O	O	O
6. If I perform poorly, then the audience will remember me negatively.	O	O	O	O	O
7. It would be terrible if my voice will tremble.	O	O	O	O	O
8. If I make a mistake, the audience will think I'm stupid.	O	O	O	O	O
9. If I am anxious in this situation, the audience will not like me.	O	O	O	O	O
10. I won't know what to say when I'm called on to make a speech.	O	O	O	O	O
11. If I don't speak well, the audience will reject me.	O	O	O	O	O
12. What I say will sound stupid.	O	O	O	O	O
13. It would be terrible if others think I'm not intelligent.	O	O	O	O	O
14. It would be terrible if I make a mistake during my speech.	O	O	O	O	O
15. I will not be able to control my anxiety.	O	O	O	O	O
16. It would be terrible if people notice that I'm anxious.	O	O	O	O	O
17. My behavior will appear awkward to the audience.	O	O	O	O	O
18. I will be unable to give a good speech.	O	O	O	O	O
19. I won't be able to complete my speech.	O	O	O	O	O
20. My mind will go blank.	O	O	O	O	O
21. I must deliver a good speech in order to gain approval from the audience.	O	O	O	O	O
22. I worry that I will be asked to give a speech.	O	O	O	O	O
23. I won't be able to answer questions from the audience.	O	O	O	O	O

Appendix F

Self-Statements During Public Speaking

Please imagine what you have typically felt and thought to yourself during any kind of public speaking situations. Imagining these situations, how much do you agree with the statements given below. Please rate the degree of your agreement on a scale between 0 (if you do not agree at all) to 5 (if you agree extremely with the statement).

	0	1	2	3	4	5
1. What do I have to lose it's worth a try	O	O	O	O	O	O
2. I'm a loser	O	O	O	O	O	O
3. This is an awkward situation but I can handle it	O	O	O	O	O	O
4. A failure in this situation would be more proof of my incapacity	O	O	O	O	O	O
5. Even if things don't go well, it's no catastrophe	O	O	O	O	O	O
6. I can handle everything	O	O	O	O	O	O
7. What I say will probably sound stupid	O	O	O	O	O	O
8. I'll probably "bomb out" anyway	O	O	O	O	O	O
9. Instead of worrying I could concentrate on what I want to say	O	O	O	O	O	O
10. I feel awkward and dumb; they're bound to notice	O	O	O	O	O	O

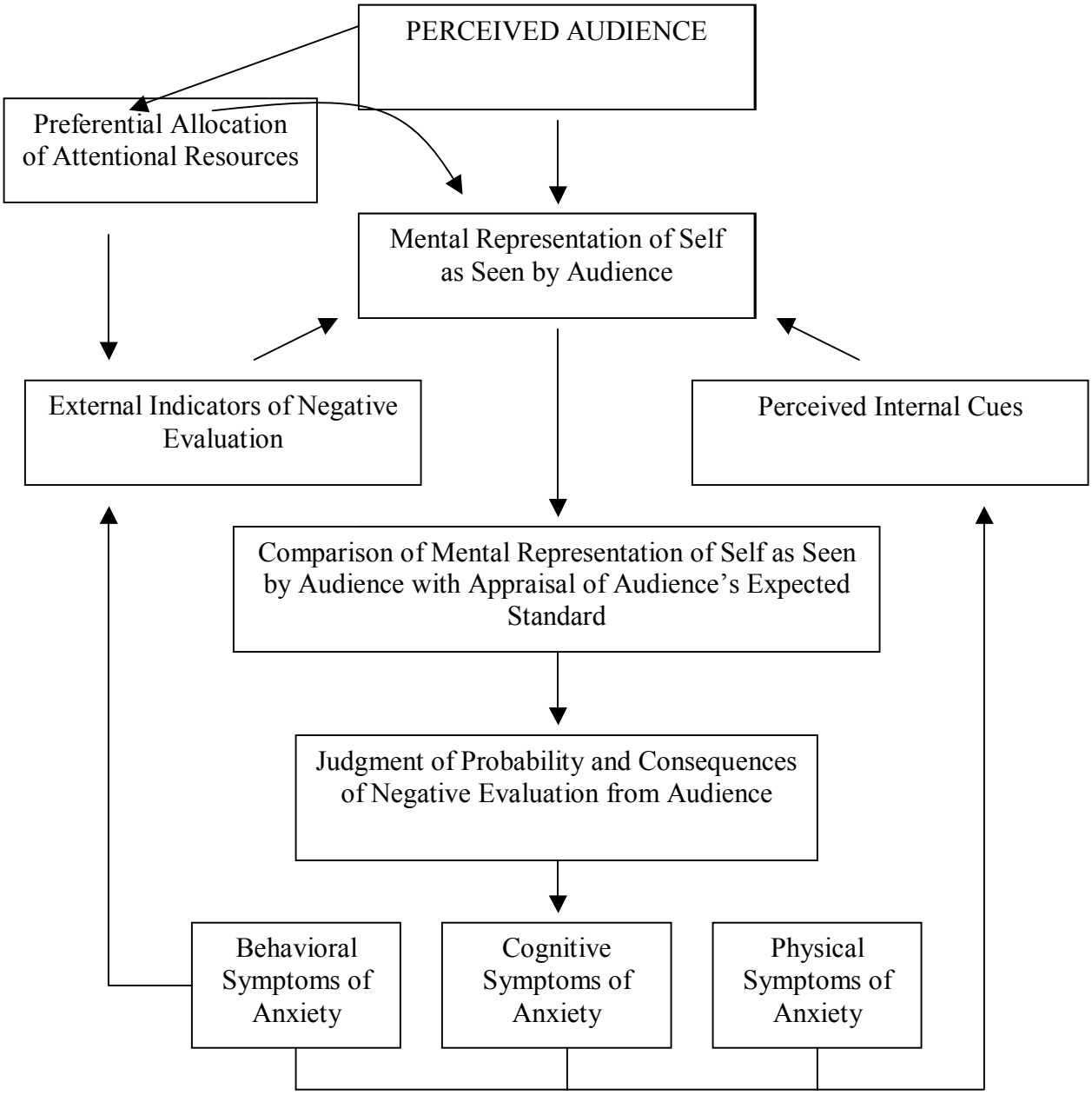

Figure 1. A cognitive-behavioral formulation of social phobia.