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Shyness in the context of reduced fear of negative evaluation and self-focus: A mixed methods case study

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Shyness in the Context of Reduced Fear of Negative Evaluation and Self-Focus: A Mixed Methods Case Study

by

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DEDICATION

This dissertation is dedicated to my beloved Heavenly Father and my beloved daughter, who taught me how to love and how to be loved.

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It would be impossible to mention and adequately thank everyone who helped along this long path of higher education. All I can say is I sincerely appreciate the dedication, inspiration, and assistance of all my professors and the love and support of family and friends. You have each played a very special part, without which the journey would have been impossible.

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SHYNESS IN THE CONTEXT OF REDUCED FEAR OF NEGATIVE EVALUATION AND SELF-FOCUS: A MIXED METHODS CASE STUDY

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ABSTRACT

This mixed methods case study examined the effect of reduced fear of negative evaluation and self focus on behaviors related to shyness in a church environment. A sample of 239 members, regular attenders, and visitors completed a survey, consisting of the Brief Fear of Negative Evaluation-Straightforward (BFNE-S) Scale; two checklists measuring perceived acceptance and levels of comfort in situations known to be difficult for shy people; and extended response questions regarding thoughts, feelings, and behaviors in six church situations.

Confirmatory factor analysis revealed the BFNE-S (General and Context-specific) had acceptable fit compared with previous studies, and descriptive statistics were similar to those of previous studies. Lower self-reported levels of fear of negative evaluation and higher levels of perceived comfort, but not acceptance, in the church setting were found to be statistically significant, although the effect size was negligible. A repeated measures ANOVA revealed no statistically significant difference for gender or race for individuals in the church setting compared to the non church setting. A multiple regression failed

to reveal a statistically significant relationship between depth and breadth of involvement in church activities and reduced fear of negative evaluation.

The Clark-Wells (1995) model of social phobia explained 62% of self-reported behaviors, thoughts, and feelings of individuals with high levels of shyness when in social situations in the church setting. A statistically significant difference was found between focus of attention and quality of thought scores for individuals with minimal to low levels of shyness and high levels of shyness.

To explore further the validity of scores obtained with the BFNE-S, it would be useful to conduct a study in different environments and seek to understand individuals in those environments with high and low fear of negative evaluation. Future research regarding the church setting should utilize a sample with fewer long-term members and regular attenders. Additionally, future studies could probe how religious beliefs help people cope with difficult situations, in particular shyness.

CHAPTER 1

INTRODUCTION

Statement of the Problem

A great deal is known about shyness, its consequences and correlates, and the effectiveness of various treatments (Crozier, 2001; Crozier & Alden, 2001a; Heimberg, Hope, Liebowits, & Schneier, 1995; Zimbardo, Pilkonis, & Norwood, 1974). Additionally, research on measures of shyness has been ongoing for decades and has resulted in a number of instruments, many with excellent psychometric properties and a long history of use in research (Heimberg et al., 1995; Orsillo, 2001). Most of the research, however, has been conducted with college and university students in laboratory or clinical settings. Scant research was found regarding how shyness manifests itself in other environments and with other populations. It appeared worth investigating how shyness affects individuals in an environment—that is, the church setting—where two of the most thoroughly researched correlates were presumed to occur to a lesser extent than the competitive climate of the university. The two correlates were fear of negative evaluation and attentional focus on the self. According to Weeks et al. (2005), fear of negative evaluation is the core feature of social anxiety disorder. Attentional focus is a key feature in research investigating shyness and social interactions (Spurr & Stopa, 2002).

Background

As Crozier and Alden (2001a., p. 4) observe, shyness is a problem for many people. It is generally believed to occur in between 40% and 50% of individuals at some point in the life span and to varying degrees (Carducci, 2000; Zimbardo et al., 1974). For some, the problems are severe enough that the individual thinks of his or her shyness as an illness because it interferes with one's ability to live a normal life.

As Henderson and Zimbardo (2001) indicate, shyness affects many areas of an individual's life. According to Henderson and Zimbardo, shyness erects barriers in meeting and communicating with people and in becoming better acquainted. Shyness also acts as an obstacle in functioning in small groups, in contacts with authority figures, and in asserting oneself. A long line of research findings (e.g., Crozier, 2001, Crozier & Alden, 2001a, 2001b; Weeks et al., 2005) consistently indicate that shy people typically behave in an inhibited or overly restrained fashion, their approach too much of life is passive, and they avoid situations that cause them discomfort or fear. Furthermore, some of their outward behaviors, such as a low speaking voice, either inhibited or excessive body movement and expression, and other nervous behaviors are often misinterpreted as intentional reserve or coolness (Henderson & Zimbardo, 2001).

Given that shyness can affect so many areas of an individual's life, it seems logical that the *descriptive* phase of research in shyness—that is, clinical observations of medical and psychology practitioners—began as early as 1896 (Jones, Cheek, & Briggs, 1986). Since that time, a sizeable body of research

has been constructed regarding shyness. Much of that early research was conducted with college students and in laboratory or clinical settings such as with clients who presented for mental health counseling at clinics (Collins, Westra, Dozois, & Stewart, 2005). In the late 1980s, a change in diagnostic criteria led to more research being conducted by mental health professionals (McDaniel, 2003). Additionally, more recent research has sometimes involved clinical rather than analogue designs ". . . in which high and low socially anxious non-patients are compared" (Clark, 2001, p. 411).

The foregoing notwithstanding, search of the literature revealed that research still seems to be limited regarding settings and participants. Investigating how shyness operates in previously unexplored settings and with participants atypical with respect to the individuals usually involved in analogue and clinical designs should add to our knowledge of shyness. It was believed that such research might help uncover ways to reduce the difficulties that shyness causes in everyday life and in the field of education as well.

In particular, and of special relevance for the current study, scant research could be found that investigated how well what seems to be one of the most thoroughly researched cognitive theories of shyness, the Clark and Wells (1995) cognitive model, performs across settings and individuals. Moreover, careful search revealed no study that has explored how well the Clark and Wells model explains the thoughts, feelings, and behaviors of shy individuals in settings with less potential for negative evaluation and the incentive to focus outward, rather than on the self, during social interactions.

Briefly, the Clark and Wells model concerns the mental processing in which persons with social phobia engage upon entering a “feared social situation” (Clark, 2001, pp. 405-406). The mental processing can include “excessively high standards for social performance . . . conditional beliefs concerning the consequences. . . [of certain actions] . . . and unconditional negative beliefs about the self” (Clark, 2001, pp. 405-406). The second part of the model addresses the effects of the anxiety that typically occur just prior to entering a social situation and the negative rumination that often occurs afterwards (Clark, 2001).

Another point that makes the current study worthwhile is that the majority of research with one of the most often-used measures of shyness—the Brief Fear of Negative Evaluation (BFNE) scale—has been in typical settings (e.g., undergraduate classes or at mental health clinics), with college-age participants or clinical populations and more recently with non-student, non-clinical populations (Duke, Krishnan, Faith, & Storch, 2006). The current research helped quantify the explanatory power of the Clark and Wells model in a previously unexplored environment, that is, the church setting. The study also evaluated the psychometric properties of the BFNE in a non-student, non-clinical sample of a previously unstudied population (i.e., church members, regular attenders, and church visitors). One weakness of the Duke et al. (2006) study was the use of a non-random convenience sample. Findings might help extend the generalizability of scores from the BFNE across settings.

The methods utilized for the current study were appropriate for the topic. To confirm, or disconfirm, that the church setting (the environment utilized in the study) holds less potential for negative evaluation, it was necessary to obtain comparison measures with the BFNE. Participants' levels of shyness also had to be determined. Quantitative methods are suited to this purpose.

To examine the extent to which the Clark and Wells model explains shy behavior in the setting used in this study, it was necessary to use qualitative methods, specifically open-ended questions. The rich description of thoughts, feelings, and behaviors obtained through open-ended questions was necessary to ascertain the extent to which those thoughts, feelings, and behaviors are explained by the theory. A similar situation holds with exploring the effects of attentional focus in the church setting. A mixed methods case study design was selected to fulfill both purposes. Johnson and Turner (2003, p. 299) state that "the fundamental principle of mixed methods research . . . [is that] . . . methods should be mixed in a way that has complementary strengths and non-overlapping weaknesses. The current study typified this principle.

Theoretical Framework

As mentioned earlier, there is a well-developed body of research on shyness. Relevant to the current study is the fact that existing research includes:

- various explanatory models (Heinrichs et al., 2006), in particular the Clark and Wells model (Clark & Wells, 1995);
- consensus on the situations most difficult for shy people (Crozier, 2001); and

- the finding in a review of measures of shyness and social anxiety that scores obtained with the BFNE have very good psychometric properties (Orsillo, 2001).

The Clark and Wells model was chosen for the current study because it focuses on how fear of negative evaluation and negative self-focused attention can maintain social phobia (Clark & Wells, 1995). The first part of the model focuses on mental processing, safety behaviors, somatic and cognitive symptoms, and processing of external social cues experienced by individuals with social phobia (or shy persons) upon entering a feared social situation. The second part of the model seeks to explain processing before and after social situations. According to Clark and Wells, extremely shy persons accumulate three categories of beliefs about themselves and social interaction. Table 1 (Clark, 2001) presents these three categories of beliefs and some typical examples.

Table 1

Beliefs about Self Typically Held by Shy Persons

Category	Typical Examples
Excessively high standards for social performance	"I must not show any signs of weakness"; "I must always sound intelligent and fluent"; "I should only speak when other people pause"; "I should always have something interesting to say."

Conditional beliefs concerning the consequences of performing in a certain way	“If I disagree with someone, they will think I am stupid/will reject me”; “If my hands shake/I blush/or show other signs of anxiety, people will think I am incompetent/odd/stupid”; “If I am quiet, people will think I am boring”; “If people get to know me, they won’t like me.”
Unconditional negative beliefs about the self	“I’m odd/different”; “I’m unlikable/unacceptable”; “I’m boring”; “I’m stupid”; and “I’m different”.

Another theoretical foundation of the current study was the research finding that certain situations are particularly difficult for shy persons. Table 2 presents the 10 situations that research has indicated are most problematic for shy individuals (Crozier, 2001). As explained below, these situations occur in many of the interactions in which one engages when participating in church-related activities, such as attending worship services and social functions.

Table 2

Ten Situations Most Difficult for Shy People **

Being the focus of attention
Large groups
Small groups
Authority figures
Social situations in general
New interpersonal situations in general
Strangers
Situations where assertiveness is required
Being evaluated or compared with others
An opposite sex group or a member of the opposite sex

Note: Adapted from Crozier (2001). *Understanding shyness*: *Psychological perspectives*. China: Palgrave.

Social interactions in the church setting were believed to hold reduced potential for fear of negative evaluation and self-focused attention. The reasons for this were the cultural rules for the church community, which are based on the teachings of the Bible. Biblical teachings include the command to love and accept one another (John 13:34-35, New York International Bible Society, 1978) and to put others first (Romans 12:10, New York International Bible Society, 1978).

Another fact making the church setting ideal for the current study was that persons attending church interact in six situations that are highly similar to the situations research has indicated are difficult for shy people. Those situations are worship services, small group activities, social events (e.g., weddings, baby showers), relationships with friends, interacting with authority, and when performing a volunteer job (e.g., taking the offering or teaching a class).

Besides being valuable as a means to explore how theory performs across settings, it was also believed that the church setting should be helpful to seek further evidence for the validity of scores from the BFNE. As stated earlier, most of the validation work for scores obtained with the BFNE has been conducted with college-age young adults and, in more recent years, with clinical populations (Duke et al., 2006).

Finally, the current study was also based upon the author's long-term experience in the church and in the hidden culture of shyness. Nineteen of the 26 years the author has been an active church member have included personal observations of and discussions with other shy church members. Many of those conversations specifically addressed the difficulties shy individuals have in establishing social connections in the church setting.

Rationale of Study

As stated earlier, shyness is a significant social problem, affecting between 40% and 50% of the population at some time in the life span (Carducci, 2000; Zimbardo et al., 1974). Shyness can negatively affect many areas of an individual's life, often to a severe degree (Henderson & Zimbardo, 2001).

Providing more evidence either confirming or suggesting alternative explanations for one of the most well-researched theories of shyness and further investigation of the psychometric properties of one of the most often-used measures of shyness could assist with on-going efforts to alleviate this problem.

Research indicates shyness can be affected by many environmental conditions (Henderson & Zimbardo, 2001). Two of the most critical environmental factors are fear of negative evaluation (Weeks et al., 2005) and self-focus (Spurr & Stopa, 2002). Shyness has been studied most often either in the highly competitive environment of college, where evaluation is central, or in clinical populations where self-focus is obviously paramount. In responding to the questions about an individual's thoughts, feelings, and behaviors and/or in the interviews, participants reported on their experiences of shyness in the church setting, which was presumed to have less potential for negative evaluation and less focus upon the self. Comparing results of the participant responses with existing theory, which is based upon data collected in traditional settings, helped measure the extent of convergence with theory. Those analyses helped extend the theory with respect to this previously unexplored setting. Regarding measures of shyness, the current body of literature on shyness has been constructed using measures developed primarily with college students and/or, in the case of clinical psychologists and psychiatrists, clinical populations (Duke et al., 2006). Existing theory has been heavily influenced by these measures. Further validation work on scores from a commonly used measure (i.e., the BFNE) was needed.

Purpose of Study

The current study addressed nine purposes:

1. To evaluate the psychometric properties of the BFNE-S in a non-student, non-clinical sample of a previously unstudied population.

2. To compare levels of perceived fear of negative evaluation inside and outside the church setting.

3. To compare the effect of gender on perceived fear of negative evaluation in the church setting compared to the non church setting.

4. To compare the effect of race on perceived fear of negative evaluation in the church setting compared to the non church setting.

5. To compare levels of perceived acceptance by people inside and outside the church setting.

6. To understand how shyness manifests itself in an environment believed to induce higher comfort levels.

7. To understand how context-specific issues (extent of involvement in church activities) are related to self-reported fear of negative evaluation in the church setting.

8. To seek confirmation of theory or alternative explanations for behaviors the theory addresses via examining the extent to which existing theory explains the thoughts, feelings, and behaviors of shy individuals in the church setting.

9. To seek confirmation of theory or alternative explanations for behaviors via examining the extent to which attentional focus is related to self-reported levels of fear of negative evaluation.

The first seven purposes were addressed using quantitative methods. The eighth and ninth purposes were addressed using mixed methods.

Research Questions

Quantitative Research Questions

The following seven research questions were addressed in the quantitative portion of this study:

1. What are the psychometric properties of the BFNE-S, General and Context-specific, in the church setting?
2. What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting?
3. What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for males and females?
4. What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for individuals of different races?
5. What is the difference in perceived acceptance between people inside and outside the church setting?
6. What is the difference in self-reported levels of comfort outside the church setting and inside the church setting?
7. To what extent do context-specific issues relate to self-reported levels of fear of negative evaluation?

Mixed Methods Research Questions

The qualitative portion of this study addressed the following research questions:

8. How do shy people typically think, feel, and behave in an environment hypothesized to have less fear of negative evaluation and self-focus?

9. To what extent is self-reported fear of negative evaluation associated with attentional focus upon self and negative quality of thought in the six church situations?

Research Hypotheses

The current study tested nine research hypotheses. These hypotheses are presented below.

Research Hypothesis 1. The BFNE-S, General and Context-specific, displays psychometric properties in the sample that are similar to those demonstrated for other populations taken from university or clinical settings.

Research Hypothesis 2. Perceived FNE is lower in the church setting compared to the non-church setting.

Research Hypothesis 3. The difference in FNE between the church and non-church setting is the same for males as for females.

Research Hypothesis 4. The difference in FNE between the church and non-church setting is the same for different races.

Research Hypothesis 5. Levels of perceived acceptance by people in the church setting are higher than are the levels of perceived acceptance by people outside the church setting.

Research Hypothesis 6. Levels of comfort perceived by people in the church setting are higher than are the levels of comfort outside the church setting.

.*Research Hypothesis 7.* Greater depth and breadth of involvement in church activities are associated with reduced self-reported fear of negative evaluation.

Research Hypothesis 8. At least 75% of individuals with high levels of FNE report thoughts, feelings, and behaviors related to six church situations that are consistent with the Clark and Wells model and that will be at least 10 % more than those with low levels of FNE. Note: After a review of the research, it was decided to select 75% as a best estimate because it seems likely that, for individuals with moderate to high levels of shyness, the habits of thought delineated in the Clark and Wells model will have become entrenched and that even while in an environment that is perceived as more accepting, the individual will respond with their characteristic behaviors, thoughts, and feelings. It is believed that the environment will have a slight moderating effect but only for perhaps one fourth of the situations being analyzed.

Research Hypothesis 9. Focus upon self and negative quality of thought related to the six church situations are associated with higher levels of self-reported fear of negative evaluation.

Educational Significance

The current study contributed to the field of measurement in that it provided additional evidence regarding the generalizability of scores yielded by the BFNE across settings. It was hoped that such information would help inform future research in this area. As stated earlier, most of the existing research was conducted with participants who were either college students or who had

presented for psychiatric or psychological counseling. Participants in the current study were non-students. Additionally, most of the previous research was conducted in traditional settings, such as a university or in a clinic. The current study utilized the church setting, and a thorough search revealed no study that had utilized such a setting. The current study has provided supplemental evidence regarding the utility of a commonly used measure of shyness. Additionally, education occurs in many different kinds of settings, and learning how shyness operates in a previously unexplored setting is helpful to the field of education.

Finally, the present investigation was unique in an important way. Specifically, it represents what is believed to be one of the first studies of shyness utilizing mixed methods research techniques. As noted by Onwuegbuzie and Leech (2004, 2005), combining quantitative and qualitative research enables researchers to be more flexible, comprehensive, holistic, and, above all, integrative in their investigative techniques, as they attempt to address a range of complex research questions that come to the fore. Further, by conducting mixed methods studies, researchers are in a better position to combine empirical precision with descriptive precision (Onwuegbuzie, 2003a). In addition, by utilizing a pragmatist lens (i.e., using both quantitative and qualitative techniques), rather than a single lens (i.e., conducting monomethod studies), researchers are in a better position to *zoom in* to microscopic detail or to *zoom out* to indefinite scope (Willems & Raush, 1969). This flexibility in perspective

leads to a broader understanding of the participants, which is an important goal of pragmatist research (Tashakkori & Teddlie, 2003).

Definition of Terms

Adult. For the purpose of this study, an adult is an individual more than 21 years of age.

Attentional focus. Attentional focus, for this study, is the object upon or toward which an individual is directing his/her attention.

Clark and Wells cognitive model of social phobia. The Clark and Wells (1995) cognitive model of social phobia emphasizes the role of the shift in attention that occurs when an individual perceives, whether accurately or inaccurately, that he or she is about to be evaluated negatively.

Continuum model. In this study, the continuum model refers to the assumption that shyness, social anxiety, and social phobia are more alike than different and that research findings relating to one construct can, with caution, be applied to the other constructs. This assumption is based on the findings of Rapee and Heimberg (1997, p. 742) that there is a "continuum from low to extreme degrees of concern over social evaluation and that shyness, social phobia, and avoidant personality disorder are on the low, middle, and upper ranges of that continuum, with a considerable degree of overlap."

Fear of negative evaluation. In this study, fear of negative evaluation is defined as ". . . apprehension about others' evaluations, distress over their

negative evaluations, avoidance of evaluative situations, and the expectation that others . . . [will] . . . evaluate oneself negatively" (Watson & Friend, 1969, p. 449).

Friend. A friend is "a person whom one knows, likes and trusts" (Berube, 1982, p. 534).

Interacting with authority. For the purposes of this research, interacting with authority is defined as occasions when church members, regular attenders, or visitors speak to the pastor or other officially designated leaders in the church, such as Sunday School teachers, ushers, or ministers of music.

Mixed methods study. A mixed methods study is ". . . a type of research design in which QUAL and QUAN approaches are used in type of questions, research methods, data collection, and analysis procedures, and/or inferences" (Tashakkorri & Teddlie, 2003, p. 711).

Self-focused attention. Self-focused attention is used to describe ". . . an awareness of self-referent information" (Spurr & Stopa, 2002, p. 947).

Shyness. Shyness is defined in this research the following way:

> discomfort and/or inhibition in interpersonal situations that interferes with pursuing one's interpersonal and professional goals. It is a form of excessive self-focus, a preoccupation with one's thoughts, feelings, and physical reactions. It may vary from mild social awkwardness to totally inhibiting social phobia. (Henderson & Zimbardo, 2001, p. 430)

To avoid confusion regarding terminology, the reader should recall the continuum assumption defined above and bear in mind that one of three terms (shyness,

social anxiety, or social phobia) is used throughout the study. When referencing research utilizing the term *social phobia*, for example, the term *social phobia* is utilized. Otherwise, the term shyness is utilized, consistent with the continuum assumption that shyness, social anxiety, and social phobia exist on a continuum (Rapee & Heimberg, 1997).

Shyness levels for this study. In this study, three levels of shyness (minimal to low, medium, and high) were designated, based upon local norms provided in the present study as well as the studies listed in Chapter 3 for Research Question 6. The three levels of shyness (minimal to low, medium, and high) designated for Research Questions 8 and 9 were based upon norms reported in previous research.

Small groups. The term *small groups*, relevant to this study, means gatherings of three or more people to conduct some activity related to the church, for example, to study the Bible together or encourage one another in spiritual growth. These gatherings could be in the church building, a public place such as a restaurant, or a private home.

Social anxiety. In this investigation, social anxiety is "another aspect of shyness, being the apprehension provoked before a social situation when you want to make a good impression on a real or imagined audience but doubt that you can" (Carducci & Clark, 1999, p. 6).

Social events. In this study, social events were defined as gatherings, varying in size from small to large, in which church members and attenders interact with one another to observe or commemorate special occasions and/or

to become better acquainted. Examples include weddings, bridal and baby showers, banquets, parties, and special meals. These events could be held at the church building, in other public places, or in private homes. For the purposes of this investigation, social events were distinguished from social situations in everyday life and in the church, as defined below.

Social phobia. For the purposes of this research, social phobia is "a marked and persistent fear of one or more social or performance situations in which the person is exposed to unfamiliar people or to possible scrutiny by others" (American Psychiatric Association, 1994, pp. 416-417). The individual with social phobia is afraid he or she will be embarrassed or humiliated by how he or she acts or that other people will perceive that he or she is anxious (American Psychiatric Association, 1994).

Social situations in everyday life. Social events in everyday life are situations in which an individual is expected to speak with or, in other ways (e.g., smiling, nodding the head), interact with other individuals. Examples include purchasing an item in a store, talking to friends and colleagues at work, or sharing an elevator. These are informal, unstructured situations and are distinguished from social events, which are more formal and involve interacting within a large group setting.

Social situations in the church. Social situations in the church are similar to social situations in everyday life except that the situations occur in the church setting. Examples would be introducing oneself in a Sunday school class,

making small talk before the worship service begins, or speaking to an acquaintance in the parking lot.

Worship Services. Relevant to this study, worship services are occasions when the entire church congregation (members, regular attenders, and visitors) gathers together to show reverence for God, to sing songs, and to hear a sermon.

Limitations of the Study

Limitations of this study include threats to the internal validity and external validity of the findings stemming from the quantitative phase of the study and threats to legitimation of the results stemming from the qualitative phase of the inquiry. Perhaps the most obvious threat was that of researcher bias in interpreting findings from the qualitative component of the study. This applied most particularly to the qualitative components of the study as well as in the confirmatory factor analysis portion of the study, although to a lesser extent in the latter. As Onwuegbuzie (2003b) notes, a common form of researcher bias at both the data collection and the data analysis stages of a study is the halo effect. This effect occurs when the researcher has prior knowledge about the participants and allows that knowledge to influence the interpretation of findings (Onwuegbuzie, 2003b). During the data analysis stage, knowledge of the participant's shyness level as measured by the BFNE and other characteristics could cause the researcher to perceive most or all participant responses as consistent with the known information.

The researcher was conscientious in seeking to prevent personal bias unduly influencing the findings and interpretations. A colleague in the field of education who had worked as a coder on two previous occasions was selected to act as a disinterested peer. This “disinterested peer” had no stake in the findings and interpretations and acted as “devil’s advocate” in order to keep the data interpretations as “honest” as possible (Lincoln & Guba, 1985, p. 308). Informal discussions of key concepts, coding procedures and coding results were held during the training process and during the coding and analysis portions of the study.

Self-report measures are utilized under the assumption that participants can accurately reflect upon and report various aspects of their behaviors, characteristics, and so forth (Dobbs, Sloan, & Karpinski, 2007). Regrettably, observation to confirm or disconfirm the self-report data was not feasible in the current study. However, score reliability and confirmatory factor analysis were utilized to assess the psychometric properties of the instruments.

Another potential threat to the validity of the findings was that completing the BNFE scale might have sensitized participants’ answers to the open-ended questions. Completing the short-answer questions on the survey first might have represented a form of pretest sensitization (Ary, Razavieh, Sorensen, Jacobs, & Sorensen, 2005), wherein data extracted from the second portion of the data collection instrument (i.e., the extended response questions) were affected as a result of having completed the pretest or prescreening instrument (i.e., the BNFE scale). In particular, it was possible that some very shy individuals might have

become anxious about supplying information about what is typically viewed as an undesirable personal problem and might have declined participation. Alternatively, individuals who had low levels of shyness might have declined participation if they believed the topic of the study to be unimportant for everyone by virtue of it being personally irrelevant for them. Either of these reasons for non-participation could have led to sampling bias. To the greatest extent possible, the researcher attempted to minimize these threats during presentations to solicit participants. The researcher provided reassurances that all data would be treated confidentially. The need for non-shy as well as shy individuals to participate in the study also was explained.

Another way that sampling bias might have influenced this study stems from the fact that the church selected for the study was an already-formed group. As such, participants might have differed in important ways from participants from other churches or other settings in which perceived potential for negative evaluation might exist. This appeared to be unavoidable, due to study design. To the extent possible, this threat was handled by exercising an abundance of caution in drawing conclusions and in making generalizations.

Furthermore, there seemed to be a high potential for bias in that participants were self-selected (i.e., volunteered to participate in the study). This self-selection or “volunteer bias” (Bordens & Abbott, 2004, p. 122) was of particular relevance to the current study. In a comprehensive study of the characteristics of volunteer participants in research, Rosenthal and Rosnow (1975) reported that persons who volunteer for research often possess the

tendency to be more social than do nonvolunteers. It is presumed that the converse of that finding is true as well. If so, individuals who were less social, which would presumably include those with moderate to high levels of shyness, might have declined to participate. Accordingly, an attempt was made to remediate the potential effects of volunteerism. During presentations to solicit participation, the researcher stressed the critical need for participants with social anxiety. The researcher also stressed the confidentiality with which results would be handled, as discussed previously.

As stated earlier, research has indicated that social anxiety might affect many areas of interpersonal functioning (Henderson & Zimbardo, 2001). Of particular relevance for the current study is that socially anxious individuals might have difficulty in maintaining conversations, they might be inhibited, and they might have speech dysfluencies or other nervous behaviors (Zimbardo et al., 1974). Each of those characteristics would likely have occurred numerous times in the life of a socially anxious adult. Participants who have even a moderate degree of social anxiety might have that anxiety, as manifested in such characteristics, accentuated when participating in a study wherein the main topic is a psychological attribute about which they may feel embarrassed. As stated earlier, every effort was made to provide reassurances about confidentiality.

In this study, there also seemed to be a considerable potential for making misspecification errors—that is, omitting one or more important variables. Research has indicated shyness is a multi-faceted phenomenon (Crozier, 2001). Consequently, careful attention was paid to this threat to internal validity in that

the researcher conducted a thorough review of the literature and engaged in conversations with committee members and peers throughout the study.

Additionally, one church congregation was selected from which to draw a sample, which poses a threat to ecological validity. Accordingly, the findings of the current study might not be generalizable to churches of other denominations or to churches with widely varying characteristics such as size, location, educational level of church attenders, and so forth. The potential inability to generalize findings beyond the church setting to the everyday world was an even larger threat to ecological validity, but unavoidable due to study design.

As is the case with ecological validity, the study design created a threat to population validity in that a subgroup of the initial sample was selected. From all of the participants who completed the write-in questions, 15 participants whose responses were sufficiently detailed were selected. Onwuegbuzie (2003b) specifies that "…. any kind of sub-sampling from the data set likely decreases population validity" (p. 84). Again, this threat could not be overcome with the study as designed.

The final potential threat to validity was confirmation bias. Stated simply, confirmation bias is the tendency for a researcher to find what he or she wants to find and to ignore, or misinterpret, anything else (Nickerson, 1998). As Greenwald, Pratkanis, Leippe, and Baumgardner (1986) noted, this type of potential bias is most often present when the aim of a study is to test, rather than create, theory. Thus, careful attention, through utilization of the methods

delineated above in the discussion of researcher bias, was paid to minimizing this threat.

According to Patton (1990), triangulation is ". . . the combination of methodologies in the study of the same phenomena or programs" (p. 187). Employing more than one method of investigation allows the researcher to see different aspects of the same phenomenon (Denzin, 1978). The quantitative and qualitative components of the study constituted methodological triangulation. Data triangulation was utilized in that the BFNE provided quantitative data, and responses to the write-in questions provided qualitative data.

Peer debriefing was one of the most important methods employed in the current study to address threats to the legitimation of the findings. In peer debriefing, a peer questions the researcher for the purpose of ". . . probing biases and clarifying interpretations" (Lincoln & Guba, 1985, p. 308). Throughout the study, the researcher discussed plans, findings, and conclusions with the committee as well as with other colleagues.

Another key method employed to seek maximal legitimation was negative case analysis. As Patton (1990) explains, "Where patterns and trends have been identified, our understanding . . . is increased by considering the instances and cases that do not fit within the pattern" (p. 463). Particular attention was given to write-in responses that seemed to indicate shyness operates differently in the church setting than in the everyday world.

Throughout the study, the researcher kept a reflexive journal, as described by Lincoln and Guba (1985). The researcher utilized journal entries to record

relevant information about herself as well as about all methodological decisions made. Summaries of critical peer debriefings are included in the reflexive journal.

Delimitations of the Study

The primary delimitation of the current study concerns the age of participants. To control for developmental issues, only individuals equal to or older than 21 years of age were selected for participation.

Organization of Remaining Chapters

Chapter 2 is a review of research relevant to this study. Chapter 2 begins with an overview of the chapter and is followed by the background for the study, which is organized under the following sub headings: key issues, measurement of shyness, a naturally occurring experimental setting, and the social climate of the church. Chapter 2 concludes with the theoretical base and rationale of the study, as well as a brief summary. Chapter 3 presents the methods utilized for the study, beginning with participants and ethical considerations. Next, detail is provided regarding instruments and procedures that were utilized. Finally, analysis plans for qualitative and quantitative data are presented. Chapter 4 opens with a description of participants, which is followed by the results of the study, presented in order of the nine research questions. Chapter 5 contains a summary and discussion of the findings as well as implications for future research.

CHAPTER 2

REVIEW OF THE RELATED LITERATURE

Overview

Shyness affects between 40% and 50% of individuals, to varying degrees and in various situations, at some point in life (Carducci & Clark, 1999; Zimbardo et al., 1974). A substantial body of research on shyness has been constructed in the last several decades (Crozier & Alden, 2001a, 2001b; Weeks et al., 2005), and much research on the development of measures also has been conducted (Cheek & Briggs, 1990; Orsillo, 2001). Relevant for the current study is the fact that no studies could be found on the topic of how shy individuals, feel, think, and behave in environments with less perceived potential for negative evaluation and less attention to self. Fear of negative evaluation and attention to the self are two key elements in maintaining shy behavior (Clark, 2001).

This review of literature presents the themes that are most commonly addressed in shyness research as well as a discussion of two of the most dominant cognitive models of shyness. This chapter also describes typical behaviors of shy people and environmental issues that research has suggested contribute to maintenance of shy behaviors. Additionally, the significant role that fear of negative evaluation and self-attention play in maintaining shy behaviors is addressed, as is the social climate of the church—the setting for the current study. Chapter II closes with a summary of findings pointing to the potential utility of exploring shyness in the church setting.

Background

Prevalence of Shyness

In the landmark 1979 study cited most often in discussing the prevalence of shyness, Zimbardo and colleagues at Stanford University (e.g., Pilkonis & Zimbardo, 1979) found that more than 40% of a sample of 470 high school and college students considered themselves shy and that 63% regarded shyness as a problem. A study by Carducci and Zimbardo (1997) indicates the prevalence rate for North American adults has increased over the years to greater than 50%. One finding in the Stanford survey that is particularly interesting is that a high percentage (73%) of respondents reported they were either shy now or had been at some time in the past. Crozier (2001), in reviewing research using Zimbardo et al.'s (1974) survey, reported a median value of 84% for being currently shy or shy in the past, with little cross-cultural variation. Although Crozier's (2001b) caveat that the increasing public awareness might be affecting response rates merits serious consideration, so does his conclusion that "a substantial number of people report that they are shy [or have been] and that their shyness is undesirable and causes a problem for them" (p. 3).

Recurrent Themes in the Literature

Beginning in 1986, several volumes, such as *Understanding shyness: Psychological Perspectives (Crozier, 2001), Shyness: Perspectives on research and treatment, (Jones, et al. 1986), and Social phobia: Clinical and research perspectives (Stein, 1995)* have reported on research trends. Other volumes

include those by Crozier and Alden, 2001; Heimberg et al., 1995; and Leary and Kowalski, 1995. Most of those volumes include discussions of shyness as a personality trait versus a temperament, as well as discussions on genetic, environmental, and developmental issues, and gender differences. Research on this topic is presented in the following sections.

Traits and temperaments. Some of the most influential efforts to identify fundamental personality traits have involved factor analysis, with three of these approaches finding "at least two fundamental higher order dimensions: extraversion and introversion and neuroticism (or anxiety)" (Crozier, 2001, p. 24). Introverts generally prefer and tend to be alone, act shy, and tend to withdraw during times of stress; extraverts are the opposite (Carver & Scheir, 1996). Neuroticism (also called emotionality) refers to the tendency to become upset and/or distressed relatively easily and often and the tendency to be moody, anxious, and depressed (Carver & Scheir, 1996).

Evidence as to whether social anxiety is similar to introversion is inconclusive. For example, Eysenck (1956), Crozier (1979), and Cheek and Buss (1981) concluded that the two constructs are different. In contrast, Bruch (1989) found a negative correlation of -.56 between shyness and introversion compared to a -.28 correlation reported by Cheek and Buss (1981).

Factor analytic studies have found evidence of a shyness factor (Crozier, 2001) but research in this area is hindered because shyness is a term taken from everyday language and there is no broadly accepted definition of shyness

(Crozier, 2001). Another factor making communication of findings among researchers difficult is that the shy population is extremely heterogeneous.

Temperament is a term used by psychologists to explore the effects of inheritance on personality. These effects are observable in infants and very young children. According to Buss and Plomin (1984), temperament differs from other personality traits in that temperament has a basis in biology, has a deeper and broader influence than do other traits, and is stable over time, though it is subject to modification by experience. Buss and Plomin also view temperament as lying on a continuum. Kagan and Reznick (1986), however, conceptualize temperament as being categorical in nature. These authors found evidence that ". . . perhaps 15% of the normal population are born with either a very high or a very low threshold for physiological arousal and an accompanying state of uncertainty following an encounter with the unfamiliar" (p. 88). Behavioral inhibition, however, is only one of many vulnerabilities that lead to childhood and adult shyness.

State-Trait anxiety. It is customary to distinguish between state and trait anxiety, and Spielberger's work on trait anxiety is accepted as the standard (Reiss, 1997). The instrument used most often to measure anxiety is the State-Trait anxiety Inventory (Spielberger, C.D., Gorsuch, R.I., & Lushene, R.E., 1970). According to Spielberger et al. (1970), state anxiety is a temporary emotional state where an individual experiences tension and fear along with increased activity in the autonomonic nervous system (such as increased heart rate or sweating). Trait anxiety, however, is more permanent in nature in that it is a

relatively stable tendency to feel anxious in situations where the individual feels threatened. It would be expected that individuals with a high level of trait anxiety would tend to be anxious in many, or most situations, whereas individuals with minimal to low levels of trait anxiety might be anxious mainly in situations where most people were anxious, such as giving a speech or being interviewed for a job.

Environmental, developmental, and genetic influences. Table 3 depicts the conditions, or vulnerabilities, that Bruch and Cheek (1995) believe can eventually result in shyness or social phobia. This conceptualization clarifies the interactive role of genetics, environment, and development, a finding nearly always emphasized in volumes (Crozier, 1990, 2000a, 2000b, 2001; Crozier & Alden, 2001; Heimberg et al., 1995; Jones et al., 1986; Leary & Kowalski, 1995) and articles (Keller, Wood, McLeod, Sigman, Wei-Chin, & Chu, 2003; Ollendick & Hirshfeld-Becker, 2002) addressing developmental issues. Specifically, consensus is that the cause of shyness and social phobia is part nature and part nurture. As Bruch and Cheek (1995) state, an individual is born with characteristics, like behavioral inhibition, that interact with the environment. In infancy and early childhood, the child is influenced most by the family, which may or may not exacerbate certain tendencies. By middle or late childhood, relationships with parents, peers, and the self add to the sources of possible vulnerabilities. Finally, the passage through adolescence seems to create or intensify preoccupation with the possibility of negative evaluation, and the individual enters young adulthood shy or socially phobic. Studies involving twins

have led some researchers (e.g., Boomsa & Plomin, 1986) to conclude that shyness has a larger component of heritability than does any other personality trait. After summarizing six studies that compared scores for monozygotic and dizygotic twins on measures of inhibition and shyness, Crozier (2001, p. 112) supports that finding by concluding that “measures of shyness show a substantial genetic component.”

Table 3

Common Vulnerabilities Underlying Shyness and Social Phobia *

Birth	Early Childhood	Middle and late childhood	Immediate results	Possible long-term consequence
Inherited temperament: >Wariness >Emotionality >Behavioral inhibition	Family Context: >Overcompensation via ineffective parenting (overprotection, withholding affection) >Family members not allowed to express emotion	(1) Inappropriate parental child rearing attitudes (Parent & societal emphasis on traditional sex roles	Conflict for shy child →	Maladaptive coping styles (e.g., avoid self-disclosure)
		(2) Negative peer relations (rejection and victimization, especially if have a high need for affiliation) →	Preoccupation with possibility of negative evaluation	
		(3) Life experiences that disturb social facets of self-esteem (e.g., peer rejection)	Misinterpretation of one's physical and social acceptability →	Prone to develop shyness and social phobia symptoms

* Note: Adapted from Bruch, M. A, & Cheek, J. M. (1995). Developmental factors in childhood and adolescent shyness. In R. G. Heimberg, M. R. Liebowits, D. A. Hope, & F. R. Schneier (1995) *Social phobia: Diagnosis, assessment, and treatment.* New York, London: The Guilford Press.

Gender differences. Research interest regarding gender differences in shyness seems to have developed somewhat later than did research interest regarding shyness in general. In 1974, Zimbardo et al. found no gender differences in the prevalence of shyness. That finding perhaps tended to suppress investigations concerning gender differences initially. Nonetheless, gender differences have been the focus in more relatively recent research regarding shyness (Bruch, Gorsky, Collins, & Berger, 1989; Crozier, 1990, 2001; Crozier & Alden, 2001b; Deardorff, Hayward, Wilson, Bryson, Hamme, & Agras, 2007; Pilkonis, 1977; Pollard, & Henderson, 1988; Rapee, 1995). The findings are often confounded with other variables, as described below.

In general, gender differences in shyness reported in the literature seem to coincide with what one would expect, given a basic understanding of the variables being considered and of how shyness manifests itself. Deardorff et al. (2007) found no gender differences among prepubertal youth, but pubertal girls reported more symptoms of social anxiety than did pubertal boys. This corresponds to common knowledge that adolescent girls, even more so than adolescent boys, are intensely concerned about appearances and popularity.

Gender differences in shyness also seem to be situation-specific so far as some behaviors are concerned. For example, Pilkonis (1977) found more differences between shy and nonshy men than between shy and nonshy women regarding speech and eye contact. Shy men were more hesitant to speak, and they spoke less. Shy men also engaged in less, and briefer, eye contact.

However, Bruch et al. (1989) found no gender differences in the amount of talk in which shy men and women engaged.

Another way in which gender differences in shyness have been investigated perhaps points to a fundamental difference that has confounded results in many studies. It also might explain why results have so often been mixed or apparently contradictory. In one study (Rapee, 1995), it was found that individuals with social phobia presented to clinics in an approximately equal distribution regarding gender, with slightly more males than females. Rapee (1995, p. 55) believed that the finding might reflect "presentation differences rather than actual diagnostic differences in that females report more anxiety disorders, including social anxiety, but males are more likely to seek treatment." One plausible explanation for that finding seems to be, as Rapee (1995) observes, the influence of society—Western society in particular. In Western society, men are generally expected to initiate romantic encounters, to be more successful in their careers, and in general to be more assertive than are women. This would logically suggest that social difficulties would cause greater problems for men than for women. Rapee based that argument, in part, on the findings by Pollard and Henderson (1988) indicating that twice as many females as males met criteria for social phobia as specified in the DSM-III. In the Pollard and Henderson study, when the criterion of 'significant distress' was included, gender proportions became more similar. These findings possibly suggest that women tend to report more symptoms of severe shyness than do men but that severe shyness is as troubling for men although they tend to under-report it. This

possibility was considered during the participant selection and analysis phases of the current study. Although the above argument was made in 1995, the social norms Rapee referenced are presumed to continue exerting a powerful influence on contemporary behavior.

Cultural differences. The previously mentioned finding of a 40% prevalence rate has been replicated in numerous countries, with the prevalence rate ranging between 24% for a sample of Jewish Americans to 60% for respondents in Hawaii and Japan (Pines & Zimbardo, 1978). Contemporary research has focused in particular on cultural differences in shyness for Asian populations. Possible reasons for this are set forth by Hsu and Alden (2007): (a) the increase in Asian immigration to North America; (b) the research finding that Chinese societies do not look on social anxiety as negatively as do other societies; and (c) the presumption that shy behaviors are less likely to disrupt social harmony, which is more valued in Asian than in Western cultures. Furthermore, shy behaviors might actually be considered desirable in Asian societies (Hsu & Alden, 2007).

Based on the foregoing, it seems logical that cultural differences in Asian populations would be an area of contemporary research interest. A search of recent research literature did, in fact, reveal a substantial number of citations, as listed above.

Trends in Research Concerning Shyness

Briggs, Cheek, and Jones (1986) describe shyness research as comprising three phases, the first of which is a descriptive phase based on

clinical observations from medical and psychological practitioners, beginning as early as 1896. They believe that as our world became increasing mobile, people were required to develop new friendships and to make new social connections beyond family and friends. In the second phase, the mid and late 1970s, which Briggs et al. (1986) term the popularization of shyness, several books about shyness and how to overcome it were written for the general public. *Shyness: What it is, what to do about it (*Zimbardo*,* 1977) was the most widely read of these books. In addition to case histories and interviews, social psychologist Zimbardo used data to add emphasis to his findings that shyness is a serious personal problem, that it has reached epidemic proportions, that it is caused by living in a competitive society, and that it can be alleviated. Zimbardo found that 42% of U.S. college students rated themselves as shy and that figure rose to 73% when students were asked about past as well as current shyness.

The third phase of research, according to Briggs et al. (1986), began in the early 1980s, with more traditional empirical investigations, which have resulted in a clearer conceptualization of shyness and its relationship to other theories and models. In this phase of exploring correlates and consequences of shyness, many new scales were developed. Also, during the third phase, besides research focusing on shyness, related work on introversion, assertiveness, shame, and embarrassment has increased our understanding of how shyness affects the lives of individuals. For example, Crozier viewed empirical research on shyness and embarrassment up to 1990 as fitting a

framework of either social anxiety or “the underlying emotion of shame” (Crozier, 1990, p. 53).

Regarding research from the mid 1980s onwards, the focus of research interest in shyness apparently experienced an interdisciplinary migration from one of the two broad categories of researchers investigating shyness (i.e., social scientists) to the other (i.e., mental health professionals). McDaniel (2003) attributes this upsurge of research interest to two causes: the “medicalization” of shyness, which began in 1980 when the DSM-III included “social phobia” in its diagnostic categories, and the use of drug therapies in treating shyness, beginning in the 1990s with Prozac and with Paxil.

Regarding social phobia per se, social phobia had been described as early as 1970, but it was not added to the DSM until 1980. Even so, the 1980 definition was limited and remained so, with only 2% to 3% of the population identified as having the disorder. By the early 1990s, however, the percentage was in the double digits. Most believed this shift was due to a 1985 article by psychiatrist Michael Liebowitz entitled “Social Phobia: The Neglected Anxiety Disorder.” That article stirred interest in the medical and research community alike. By 1987, the DMS III-Revised included a general subtype of social phobia, which many researchers see as extremely close to shyness. More importantly, the DMS III-R definition excluded the criterion “compelling desire to avoid.” Before that point, even if an individual had marked distress, he or she would not be classified as social phobic, so long as he was able to endure social situations. To obtain reimbursement for treatment from insurance companies, an individual

has to meet the definitional criteria for social phobia. With these two shifts in diagnostic criteria, in 1994 the Archives of General Psychiatry estimated a lifetime prevalence rate of social phobia in the U.S. as 13% (Cottle, 1999).

Measurement of Shyness

The measurement of shyness is another area in which the effect of discipline-specific definitions, and even more so, discipline-specific methodologies, is readily apparent. Most of the earliest questionnaires and scales, beginning with the often-cited Stanford Shyness Survey (Zimbardo, 1977), were developed and used by psychologists and social psychologists. It is interesting to note that the Stanford Shyness Survey, although it has so influenced research, is not actually a scale and has not been used as such. Rather, it consists of 44 questions regarding various aspects of shyness, and the responses are not intended to be summed to derive a score (Briggs & Smith, 1986).

Five of the most commonly used measures of shyness were reported by Briggs and Smith (1986) and were included in a review by Crozier (2001). Four of these scales are displayed in Table 4; the fifth scale used in the study was the Morris Shyness Scale (Morris, 1982). Briggs and Smith (1986) administered the five shyness scales to a sample of 1,213 college students from five institutions and obtained score alpha coefficients ranging from .82 to .92 and inter-item correlation means between .25 and .36. Besides the exceptional internal consistency, they also found that the scales seemed to measure the same construct, even though each differed in conceptual focus. Convergent validity

was evidenced in that pair wise correlations of the five scales with each other ranged from .70 to .86. Construct-related validity of these and other scales has been assessed in several studies (Cheek & Briggs, 1990).

Table 4

Hits for Shyness/Social Phobia Measures as Recorded in PsychINFO

Name of Scale	Date Written	Number of Items in PsychINFO
*SADS (Social Avoidance and Distress)	1969	146
FNE (Fear of Negative Evaluation)	1969	83
*Social Reticence Scale	1984	13
*Shyness Scale (Cheek-Buss)	1981	57
*Interaction Anxiety	1983	27
Social Phobia and Anxiety Inventory	1989	95
Social Phobia Inventory	2000	43

* Utilized by Briggs and Smith (1986).

Use of these scales for shyness and social anxiety, as well as three of the most popular measures for social phobia, has been extensive, as measured by the number of researchers using them in studies (see Table 4), as reported in the PsychInfo database. If one compares the age of these scales to the number of studies using them, it is easy to conjecture that scales developed specifically for measuring social phobia, though relatively new, are being used at a faster rate. This parallels, of course, the increasing interest devoted to social phobia by psychiatry subsequent to its reclassification in the DSM.

Theoretical Framework

Cognitive models. The literature contains a number of models for shyness, social anxiety, and social phobia, and volumes addressing shyness typically contain at least one, usually more, chapters devoted to theoretical foundations and/or specific models (Crozier, 1990, 2000a, 2000b, 2001; Crozier & Alden, 2001b; Jones et al., 1986; Leary & Kowalski, 1995; Stein, 1995). The two models to be utilized in the current study are described below.

Rapee and Heimberg Model

Rapee and Heimberg (1997) acknowledge that their model, which is particularly helpful in conceptualizing the mental processes of the socially anxious or phobic person, builds on earlier versions. The assumptions of the model were addressed in Chapter I. According to Rapee and Heimberg, social situations activate a series of processes that create and maintain social anxiety. When a social phobic or socially anxious person enters a social situation or merely thinks about it, the individual forms a mental representation of how he or she thinks others perceive him or her and that mental representation then becomes the focus of attention. The mental representation is created from various sources of information, including long-term memory (recalling one's perceived poor social performance in a similar situation), proprioceptive information (e.g., perceived heart rate increase, flushing, or blushing), and external cues (e.g., facial expressions of others). The individual's attention is then focused on what is perceived as the most relevant aspects of the situation, and those are generally the most negative because the individual's fear of

negative evaluation leads him or her to focus on the worst that can happen—for example, that he/she might be unable to say anything at all or that others might observe that his/her hands are shaking. Possible signs of negative evaluation by others, such as a lack of interest, are also an object of attention as the individual monitors all potential threats. Subsequently, a comparison is made between the mental representation of the self as seen by others, and, most typically, unrealistic standards of performance. The discrepancy between the actual self and the self one believes one should be creates a perception of negative evaluation, which causes anxiety and all its physical, mental, and behavioral manifestations. That anxiety leads the individual to perceive that others evaluate him or her negatively and the cycle renews itself (Rapee & Heimberg, 1997).

Clark and Wells Cognitive Model

The Clark and Wells (1995) cognitive model of social phobia emphasizes the role of the shift in attention that occurs when a social phobic client perceives, whether accurately or inaccurately, that he/she is about to be evaluated negatively. Attention is focused away from the environment to an inward self monitoring. That self-focus causes a heightened awareness of the anxiety responses the individual fears (such as blushing or stammering). It also interferes with processing information about the situation, including the behavior of other people. The individual might not hear a question or might not see a smile aimed in his or her direction due to paying attention to his or her own physical and mental reactions. Besides that, social phobic clients tend to use this interoceptive information to form a negative impression of themselves, as

seen by others. To avoid these painful consequences of social interactions, individuals with social phobia tend to use a variety of safety behaviors, like avoiding social situations and if that is not possible, avoiding eye contact and prolonged conversational interchanges and spending a great deal of effort rehearsing what to say rather than paying attention to and responding appropriately to what is being said. Of course, such safety behaviors make it impossible for the socially phobic individual to obtain evidence that disconfirms dysfunctional beliefs about the self. Further, these behaviors make it likely that some of their fears about their social performances, such as stuttering, blushing, or being unable to speak, will occur. A person who seldom smiles, who does not appear to be listening, and who seldom joins in conversations is likely to be perceived as somewhat unfriendly and will eventually be approached by others less often (Clark & Wells, 1995).

Similarities and differences between the models. Table 5, which integrates diagrams of the Clark and Wells and the Rapee and Heimberg models, reveals their similarities, and confirms the view set forth by Musa and Lépine (2000) that the Clark and Wells model stresses "self focus and safety behaviors," whereas the Rapee and Heimberg model stresses the "discrepancy between mental representation of self and others' expected standards" (Rapee & Heimberg, 1997, p. 62). This is logical if one recalls that the Clark and Wells model was developed as a model for treatment and to explain how social phobia is maintained, whereas the Rapee and Heimberg model was developed for heuristic purposes.

Table 5

Comparison of Clark and Wells and Rapee and Heimberg Models *

Clark and Wells Model	Relationship Between Models	Rapee and Heimberg Model
Social situation	Which involves the	Perceived audience
Activates assumptions	Which causes →	Preferential allocation of attentional resources
	One of which is →	Mental representation of self as seen by audience
Perceived social danger	The intensity of which is judged by: →	External indicators of negative evaluation
	→	Perceived internal cues
Processing of self as a social object	Which involves →	Comparison of mental representation of self as seen by audience with appraisal of audience's expected standard
	→	Judgment of probability and consequence of negative evaluation from audience
Safety Behaviors		Behavioral symptoms of anxiety
Somatic and cognitive symptoms of anxiety		Cognitive and physical symptoms of anxiety

Note: Adapted from Clark, D. M. (2001) A cognitive perspective on social phobia. In W. R. Crozier & L. E. Alden (Eds.) *International handbook of social anxiety: Concepts, research, and interventions relating to the self and shyness* (pp. 404-430). New York: Wiley; and Rapee, R.M., & Heimberg, R.G. (1997). A cognitive behavioral model of anxiety in social phobia. *Behavior Research Therapy*, *35*, 741-756.

The current study employed the Clark and Wells (1995) model as part of the data gathering and analytic framework because of its focus on the thoughts, feelings, behavior, and attentional focus in social situations (Clark, 2001). Specifically developed for the treatment of social phobia, the Clark and Wells model focuses on thoughts, feelings, behavior, and attentional focus prior to, during, and after involvement in a social situation (Clark, 2001). The Rapee model was used primarily to provide explanatory insights. A detailed presentation of the Clark and Wells (1995) model follows.

Clark and Wells Cognitive Treatment Model in Depth

The aim of the treatment program developed by Clark, Wells, and colleagues is to reverse the processes that maintain social phobia, as specified in the model (Clark, 2001). The program seeks to modify self-focused attention, negative self-processing, and safety behaviors. Doing so gives individuals with social phobia the opportunity to disconfirm their negative beliefs. The steps in the treatment program are summarized below.

Deriving an idiosyncratic version of the model. Therapy begins by reviewing a typical incident of social anxiety and fitting the particular details of the individual's experience into a personalized diagram of the model. Figure 1 presents the simplified template of the model that is used and a hypothetical example of anxiety that a socially phobic church attender or member might experience while waiting for a worship service to start.

Manipulation of self-focused attention and safety behaviors. After agreement is reached on the personalized model, the therapist engages the

client in role-playing by changing, for example, the client's focus of attention or dropping some of the client's safety behaviors. Self-ratings after each role-play typically demonstrate to clients that self-focus and safety behaviors tend to make them feel more anxious and that how they think they looked and performed is related to how they felt, which enables them to see they are using their feelings to interpret how others perceive them, rather than reality.

Video and audio feedback. The purpose of this step is to help the client obtain realistic information about how they appear to others during social encounters. By viewing a video of themselves interacting with others, clients can see, for example, that their hands did not shake visibly. This helps the client begin to alter previous beliefs.

Shift of attention and interrogation of the social environment. Next, clients are encouraged to shift their attention externally and eliminate safety behaviors during therapy session and in homework assignments. Clients are helped to engage the social events they have feared and avoided previously; however, the goal is not just simply to have the client undergo repeated exposures to feared situations. Rather, the client is encouraged to predict likely outcomes and then evaluate whether those outcomes actually occurred. For example, an individual who fears engaging store clerks in conversation might predict that the clerk would frown and make a comment such as, "What a stupid thing to say!" When the client evaluates the actual situation, he or she can see that the feared event did not occur. Often, quite the opposite happens. For example, the store clerk might smile warmly and initiate a pleasant conversation.

Dealing with anticipatory and post-event processing. As described earlier, one of the prime characteristics of social phobic behavior is the negative mental processing before and after social events. Clients are encouraged to become aware of their habitual ways of thinking and to modify them—for example, not rehearsing a "script" before each casual encounter and afterwards focusing deliberately on what went right, rather than on what was perceived as having gone wrong.

Dealing with assumptions. According to Clark (2001), three types of assumptions affect how individuals with social phobia mentally process information about social encounters: "excessively high standards for social performance. . . conditional beliefs concerning . . . consequences . . . ('if I am quiet, people will think I am boring'). . . and unconditional negative beliefs about the self, e.g., 'I'm odd/different' " (p. 407). These are handled by "bandwidth" exercises.

“Widening the bandwidth” is a term used by Clark and Wells (1995). To deal with the unrealistically high standards for social behavior that many individuals with social phobia have, the client needs to broaden his or her usual range of behaviors and needs to act in ways that violate self-imposed rules. For example, instead of trying to think through several comments before speaking, the client is encouraged to say the first thing that pops into his or her mind. Seeing that this does not cause a social calamity helps the client gain confidence to experiment and try other behaviors, that is, to “widen the bandwidth” (Clark & Wells, 1995, p. 424). These exercises often help clients change some of their

self-defeating and unquestioned assumptions, too, such as “No one likes me” or “I can never say anything to a stranger.”

However, Wells (2000) states that negative beliefs about oneself are often persistent because they are vague and poorly defined. The treatment program addresses this by having the client operationalize negative self beliefs. Clients would list all the observable characteristics that would support that belief and then rate themselves and others on the listed characteristics. For example, if a client believed “I am socially inept because I never talk to strangers,” the client might count how often he/she talks to strangers in elevators, stores, and parking lots. That procedure often helps clients see that they do not possess all the characteristics they think they do and that they are generally about the same as many people.

The Clark and Wells (1995) model was utilized to analyze thoughts, feelings, and behaviors in the study setting. Regardless of the type of setting, however, shy individuals in general tend to exhibit certain characteristics. These characteristics are described below.

Typical Behaviors of Shy People

Table 6 reveals some of the typical thoughts, feelings, and behaviors that shy individuals experience (Henderson & Zimbardo, 2001). These thoughts, feelings, and behaviors, or symptoms, frequently appear as variables in research, as the titles of the following measures demonstrate: the Social Avoidance and Distress Scale (Watson & Friend, 1969); the Fear of Negative Evaluation Scale (Watson & Friend, 1969); and the Interaction Anxiousness

Table 6

Symptoms of shyness (Henderson & Zimbardo, 2001)

Behavior	Physiological
• Inhibition and passivity • Gaze aversion • Avoidance of feared situations • Low speaking voice • Little body movement or expression or excessive nodding or smiling • Speech dysfluencies • Nervous behaviors, such as touching one's hair or face	• Accelerated heart rate • Dry mouth • Trembling or shaking • Sweating • Feeling faint or dizzy, butterflies in the stomach or nausea • Experiencing the situation or oneself as unreal or removed • Fear of losing control, going crazy, or having a heart attack
Cognitive	**Affective**
• Negative thoughts about the self, the situation, and others • Fear of negative evaluation and looking foolish to others • Worry and rumination, perfectionism • Self-blaming attributions, particularly after social interactions • Negative beliefs about the self (weak) and others (powerful), often out of awareness • Negative biases in the self-concept e.g., "I am socially inadequate, unlovable,	• Embarrassment and painful self-consciousness • Shame • Low self-esteem • Dejection and sadness • Loneliness • Depression • Anxiety

unattractive” • A belief that there is a “correct” protocol that the shy person must guess, rather than mutual definitions of social situations	

Scale (Leary, 1983). These symptoms also appear in self-diagnostic check-lists in the self-help literature, for example, in *Shyness: What it is, what to do about it* (Zimbardo, 1977). These characteristics of shy individuals are experienced more often in particular kinds of settings, as described below.

Key Environmental Influences

As stated earlier, one purpose of this study was to understand the effect of different environments on the manifestations of shyness. The environmental influences on shyness that were relevant for this study are described below.

Nine situations most difficult for shy people. How shyness is manifested, in typical as well as atypical environments, is a recurrent theme in shyness research (Crozier, 1990, 2000a, 2000b, 2001; Crozier & Alden, 2001b; Jones et al., 1986; Leary & Kowalski, 1995; Weeks et al., 2005). In their exploratory work on shyness, Zimbardo et al. (1974) used the Stanford Shyness Survey to investigate the effects of different situations on shy behaviors. One section of the survey asked respondents to indicate the situations that most often elicited shyness. A replication and extension of that study conducted 20 years later (Carducci & Clark, 1999) produced similar results. For the current study, similar categories in both studies were combined into one list, as presented in Table 7.

Table 7

*Ten Most Difficult Situations for Shy People**

1. Being the focus of attention
2. Large groups
3. Small groups
4. Authority figures by virtue of knowledge (intellectual superiors, experts) or by virtue of role (police, teachers, superiors at work)
5. Social situations in general
6. New interpersonal situations in general
7. Strangers
8. Situations where assertiveness is required (e.g., when complaining about faulty service in a restaurant)
9. Being evaluated or compared with others (e.g., when being interviewed, when being criticized)
10. An opposite sex group or a member of the opposite sex

Note: Adapted from Crozier, W. R. (2001). *Understanding shyness*: *P*sychological perspectives. China: Palgrave.

Similarity to six activities of church social life. These 10 situations are highly similar to the 6 social situations in church life chosen for the current study:

- worship services
- small group gatherings (e.g., Sunday School and Bible study classes)
- social events such as weddings, baby showers, and holiday celebrations
- contacts with friends and acquaintances,
- interaction with authority figures (e.g., pastor, staff, group leaders) and
- jobs (e.g., Sunday School teacher, greeter).

These 6 activities in which church members and regular attenders routinely engage include aspects that closely parallel the 10 situations. The cells marked with an asterisk (*) in Table 8 indicate aspects of the six church life activities to which it seems research findings could be cautiously extrapolated.

Table 8

Areas of Commonality Between the Nine Situations and Five Church Life Activities

	Six church life activities					
Ten situations	Worship Services	Small groups	Social events	Friends, etc.	Interactions with Authority	Places of Service
Being the focus of attention		*	*	*	*	
Large and small groups	*	*	*			
Authority figures					*	
Social situations in general	*	*	*	*	*	*
New interpersonal situations in general	*	*	*	*	*	*
Strangers	*		*			*
Situations where assertiveness is required			*	*	*	*

Being evaluated or compared with others	*	*	*	*	*	
An opposite sex group or a member of the opposite sex	*	*	*	*	*	*

Two key environmental influences that maintain shyness. Two key environmental influences relevant for the current study are fear of negative evaluation and self focus. Shy individuals report feeling shy when they fear being negatively evaluated by others and when they are the focus of attention. Both fear of negative evaluation as well as self-focus were central in the work of several theorists researching shyness and social phobia (Beck, Emery, & Greenberg, 1985, 1996; Hartman, 1983; Heimberg & Barlow, 1988; Leary, 1983; Trower & Gilbert, 1989). In the Clark and Wells (1995) model, two key components that maintain social phobia are focusing of attention upon self and negative thoughts about the self. These two components of the model are addressed in detail below.

Fear of negative evaluation. The effect of feared criticism has long been prominent in shyness research, as evidenced by the early and extensive use of the Fear of Negative Evaluation scale (Watson & Friend, 1969) and its subsequent revisions (Collins et al., 2005). As mentioned earlier, the FNE and BFNE are included in reviews of measures of shyness and social phobia (Antony, Orsillo, & Roemer, 2001; Orsillo, 2001). Both scales assess differences

in “broad social-evaluative anxiety, such as public speaking and going on a date” (Collins et al., 2005, p. 347).

The fear of being evaluated unfavorably is one of the main features that can maintain social phobia for decades (Clark & Wells, 1995). According to the continuum assumptions described previously, that fear also can maintain moderate to extreme shyness for prolonged periods of time. Because of previous social difficulties, individuals with social phobia tend to believe habitually that when they enter certain social situations, they will behave in an unacceptable manner (e.g., blush or stutter). Individuals with social phobia also tend to believe that such behaviors will have terrible consequences, such as rejection by others and embarrassment (Clark & Wells, 1995). Several vicious cycles are thus set in motion because the symptoms of this fear maintain and even increase the anxiety. For example, stuttering can make an individual believe he or she looks foolish. Then, the individual with social phobia or the shy individual tends to become even more acutely aware of physical sensations as well as the negative thoughts and self-talk that accompany awareness of, for example, sweating or trembling. Next, as this excessive focus on the self continues, behavior is affected and the individual can appear less friendly, which, in turn, partially confirms the shy individual’s fears. Finally, the behavioral symptoms can produce more symptoms. For instance, talking quickly can lead to hyperventilation (Clark & Wells, 1995).

Self-focused attention. Ingram (1990, p. 156) defines self-focused attention as “an awareness of self-referent, internally generated information.”

Given the foregoing findings regarding fear of negative evaluation, it is not surprising that individuals with social phobia and shy individuals have a "narrowed attention to different elements of the social situation" (Kimble & Zehr, 1982, p. 39). Shy individuals thus rarely obtain positive feedback about their social competence and, additionally, often interpret neutral social cues as evidence of negative evaluation by others (Clark, 2001). That awareness can include information about somatic conditions or thoughts and feelings, including memories.

Although the wording may differ, self-help books on shyness direct the reader to learn to think of others, rather than the self, during social interactions. For example, in *Shyness, A Bold New Approach* (Carducci, 1999), Carducci talks about expanding one's comfort zone and learning to deal with one's tendency to be slow to warm up to new situations and new people (Carducci, 1999). One study on self-focused attention suggests that a person's ". . . representation of the self is [changed after effective treatment]. . . in a more positive direction, primarily by decreasing the frequency of negative self-focused thoughts" (Hofmann, 2000, p. 722).

The centrality of self-focused attention in research on shyness and social phobia is evident also in that a review has been written on the subject (Spurr & Stopa, 2002). Additionally, inspection of the items in measures for shyness and social phobia reveals that many of the items address the locus of attention. For example, in the Social Thoughts and Beliefs Scale (STABS), one item is "When

other people laugh it feels as if they're laughing at me" and another is "If there is a pause during a conversation, I feel as if I have done something wrong."

As mentioned earlier, fear of negative evaluation is held to be a central feature in shyness (Rapee, 1995) and reduction in fear of negative evaluation has been shown to be a good indicator of effectiveness of treatment for social phobia (Cox, Walker, Enns, & Karpinski, 2002; Heimberg et al., 1995). Based on the previous review of literature, it seemed likely that an environment wherein fear of negative evaluation and self-focused attention are diminished would be an ideal setting in which to explore further how these two correlates affect an individual's behavior, thoughts, and feelings.

It was believed that shy individuals would exhibit these characteristics to a lesser extent in the church setting. The following section sets forth reasons why the social climate of the church was presumed to be more accepting.

The Social Climate of the Church

For evangelical churches, the Holy Bible is the absolute rule of conduct. Evangelicals believe the Bible is divinely inspired (II Timothy 3:16, NIV) and that its commands and teachings explain how God wants people to live here on earth. These directives from God on how to live one's life as a believer are presented in the Biblical text in a system of commands, principles, and specific applications of those commands and principles. The most fundamental level of Biblical law is the Ten Commandments (Exodus 20:1-17, NIV). For people living before the time of Jesus, additional rules were provided to explain how to apply these 10

general laws to particular instances. For example, God's holy people were told ". . . do not go about spreading slander among your people" (Leviticus 19:16, NIV).

For believers living after the time of Jesus, the New Testament writings explain even more fully the intent of the 10 Commandments and the underlying principles by which believers are to live. Jesus summarized all of God's laws when He said: "The whole law is summed up in this one command: "Love the Lord thy God with all your heart, with all your soul, and with all your might and your neighbor as yourself" (Deuteronomy 6:5, NIV).

For another example of how the teachings of Jesus illustrate the 10 commandments, one can consider Exodus 20:17: "Do not covet your neighbor's house. You shall not covet your neighbor's wife, or his manservant or maidservant, or his ox or donkey, or anything that belongs to your neighbor." Jesus explained the underlying principle of this commandment in His words recorded in the gospel of Matthew. Jesus reminded His listeners that the Old Testament included the command, "Do not commit adultery." But I [Jesus] tell you that anyone who looks at a woman lustfully has already committed adultery with her in his heart." Jesus explained that He came ". . . not to abolish the Law or the Prophets [the Old Testament] but to fulfill them" (Matthew 5:17, NIV).

Besides the teachings of Jesus as recorded in the Gospels, the other New Testament writings also give specific, clear instructions for daily living that are consistent with God's will, as revealed in the 10 Commandments. For example, believers are admonished to "love one another" (I John 3:11, NIV) and to "look after orphans and widows in their distress" (James 1:27, NIV).

Two aspects of God's commands for present-day believers were of central importance in the current study:

- believers are to be accepting, compassionate, and kind to each other,
- believers are to be focused on helping others.

Colossians 3:12 (NIV) says, ". . . clothe yourselves with compassion, kindness, humility, gentleness, and patience. Bear with each other and forgive whatever grievances you may have against one another." The believer in Jesus is to be focused on others. One of the clearest explications of the concern believers are to have for each other is found in the 12th chapter of First Corinthians. All believers as a whole are compared to one body, called the "body of Christ" (First Corinthians 12:27, NIV). In the First Corinthians passage, the apostle Paul explains that believers are to be as concerned for each other as if one believer were an eye and another believer were a foot, both parts of the same body. As Paul explains, each part of the body is to be concerned for every other part and if one part hurts, whether the whole body hurts or feels good, the whole body feels the same way the part of the body does (First Corinthians 12:26, NIV).

As described above, environmental characteristics play an important role in how individuals manifest shyness. Three aspects of the church environment were particularly relevant for the current study:

- the type of situations in which church members are often involved;
- the likelihood that the social world of the church is perceived by church members and attenders as holding less potential for negative evaluation; and

- a focus upon others, rather than self, a key aim of ideal social interactions within the church setting.

Rationale

Shyness is a significant social problem that can negatively affect many areas of an individual's life (Henderson & Zimbardo, 2001). It seemed logical that contributing to existing theory of and measures for shyness also could contribute to alleviation of this problem.

Two environmental factors that affect shyness are fear of negative evaluation (Weeks et al., 2005) and self focus (Spurr & Stopa, 2002). Shyness has been studied most often in environments where these conditions are prominent. It was believed that if findings of the current study suggested that the Clark and Wells (1995) model explains how shyness operates in a more accepting environment, research could continue with greater confidence in the Clark and Wells model. That is, the Clark and Wells model would have more generalizability. Additionally, existing measures of shyness have been constructed primarily utilizing college students and/or, in the case of clinical psychologists and psychiatrists, clinical populations (Duke et al., 2006). Existing theory has been heavily influenced by these measures. It was believed that further validation work on scores from a commonly used measure (the BFNE) would be useful. Finally, it was believed that this study could identify new empirical indicators for future use in theory and in measures.

Summary

A review of the literature revealed that shyness is a common problem that affects more than 50% of the population, to varying degrees (Carducci & Zimbardo, 1997). Several themes were found to recur in the substantial body of research on shyness. Recurrent themes included whether shyness is a trait or inborn temperament, environmental, developmental and genetic influences, and gender and cultural differences (Crozier, 2001; Crozier & Alden, 2001b; Heimberg et al., 1995; Jones et al., 1986; Leary & Kowalski, 1995; Stein, 1995).

Current consensus is that behavioral inhibition is one of many vulnerabilities that can lead to childhood and adult shyness but that genetics, the environment, and developmental issues all play an interactive role (Bruch & Cheek, 1995). Gender and culture have also been found to affect whether shyness develops in an individual. Evidence thus far regarding gender differences is inconclusive (Bruch et al., 1989; Crozier, 1990, 2001; Crozier & Alden, 2001b; Deardorff et al., 2007; Pilkonis, 1977; Pollard & Henderson, 1988; Rapee, 1995). Recent studies concerning cultural differences in shyness, however, have consistently found that individuals from Asian cultures report higher levels of shyness than do North Americans (Chen, 2000; Hsu & Alden, 2007; Pines & Zimbardo, 1978).

Regarding the measurement of shyness, most of the earliest questionnaires and scales were developed by psychologists and social psychologists. Following a change in diagnostic criteria that resulted in a broader definition of social phobia, psychiatrists became more involved in research as

well as in measurement. The most commonly utilized measures of shyness, social anxiety, and social phobia have been employed extensively in research, as indicated earlier in Table 4.

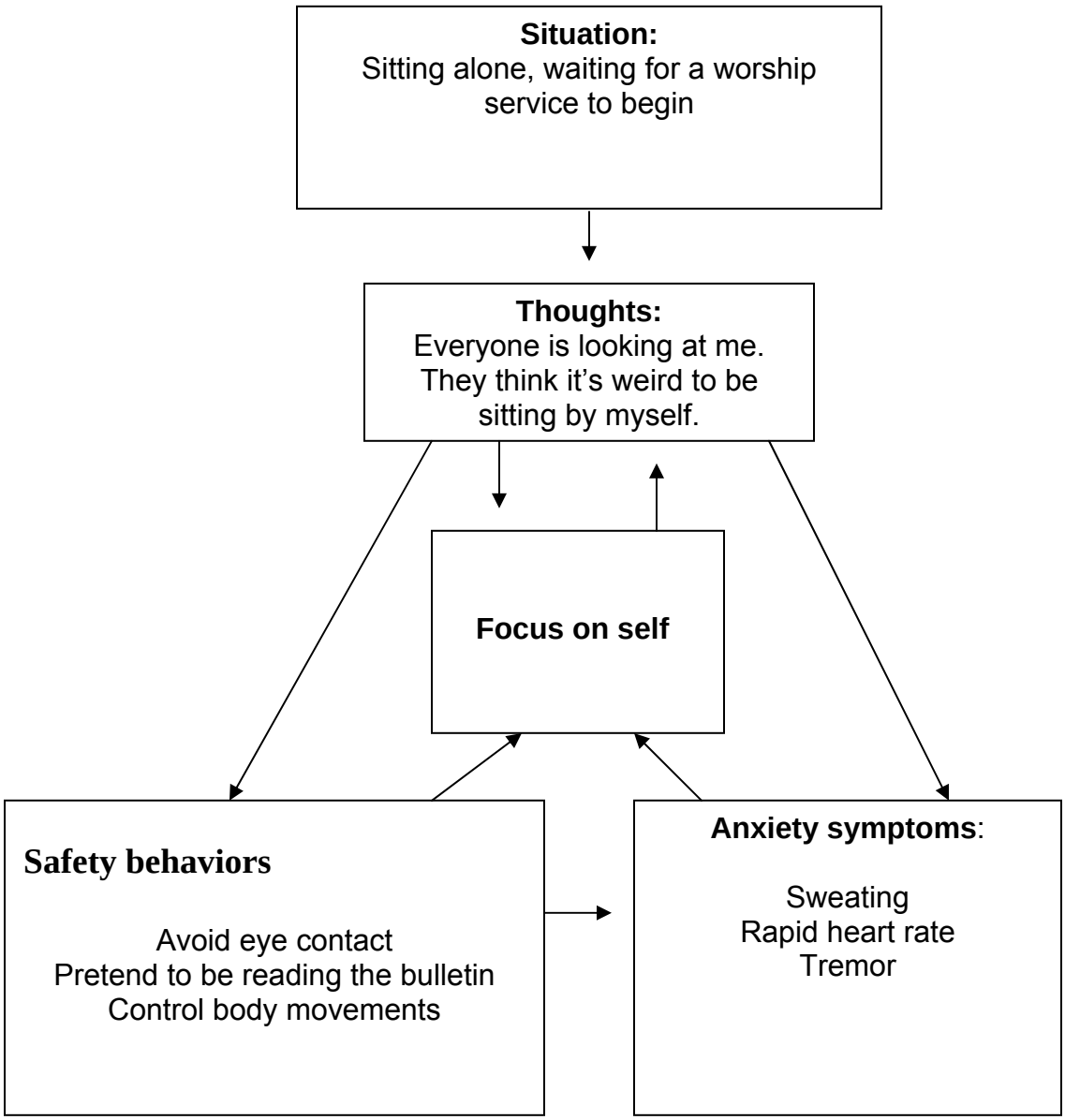
According to Briggs et al. (1986), shyness research can be described as occurring in three phases: (a) descriptive studies beginning in 1986; (b) the popularization of shyness occurring in the mid to late 1970s with the publication of several books about shyness; and (c) traditional empirical investigations that began in the early 1980s. Research from the mid 1980s onwards has been affected by the increased interest in social phobia and the use of drug therapies in treating shyness (McDaniel, 2003).

Two cognitive models of shyness were of particular interest for the current study. The Rapee and Heimberg (1997) model focuses on how social situations activate a series of processes for a shy individual and how those processes create and maintain social anxiety. The Clark and Wells (1995) cognitive model emphasizes the role of the shift in attention that occurs when a social phobic perceives he/she is about to be evaluated negatively. The Clark and Wells model was foundational to the data gathering and analytic framework of the current study because of its focus on the thoughts, feelings, behavior, and attentional focus in social situations (Clark, 2001). The Rapee and Heimberg model was utilized to provide additional explanatory insights.

The literature review also revealed that the 10 environmental situations most difficult for shy individuals (Crozier, 2001) are similar to six basic activities of the social life of church members, as conceptualized by the author.

Additionally, it was presumed that fear of negative evaluation and self-focused attention would be of less intensity in the church setting. According to Biblical teachings, church members are to love (First John 3:11, NIV) and accept one another (Colossians 3:12, NIV). Based upon the previously stated findings and assumptions, the social climate of the church was believed to be an ideal setting in which to investigate the effect of reduced fear of negative evaluation on shyness.

Because shyness is a significant social problem, it seemed logical that studies contributing to existing knowledge would be worthwhile. It was believed that the current study could help confirm or disconfirm the Clark and Wells (1995) model of social phobia and the theory on which it is based. If shyness manifests itself in the experimental setting in the same way, it was believed that we could continue to employ the Clark and Wells model, as well as theory, with greater confidence.



Adapted from: Clark, D. M. (2001). A cognitive perspective on social phobia. In *International handbook of social anxiety: Concepts, research, and interventions relating to the self and shyness* (pp. 404-430). New York: Wiley.

Figure 1 *Developing an Idiosyncratic Version of the Clark-Wells Treatment Model*

CHAPTER 3

METHODS

Chapter 3 begins with a description of the participants in the study and an explanation of how they were selected for participation. The background of the quantitative instrument to be employed is presented next, followed by a description of the qualitative instrument. The procedures section of Chapter 3 opens with an explanation of why the pragmatic approach was selected. Next, details about how the quantitative data were gathered are provided, and threats to external validity are presented, followed by an explanation of how the qualitative data were gathered and a discussion regarding potential threats to legitimation of the qualitative phase. The analysis section, which concludes the chapter, provides specifics about the quantitative, qualitative, and mixed analyses conducted in this study as well as threats to legitimation of the mixed methods design.

Selection Eligibility Criteria

The population for the quantitative study consisted of three subgroups of individuals attending an evangelical church in the Tampa Bay, Florida area: members, regular attenders, and visitors. The church was established at its current suburban location in 1997, having relocated from three other locations since its original founding in the 1950s. The church had a membership of approximately 1,000, and no demographic information was available regarding its members. In this study, church members were those individuals who have

formally requested to join the church and to be included on the church membership list. Based on conversations the author has had with various church members over a period of 27 years, individuals generally attend a church for a number of weeks, often much longer, before joining. Other individuals, called in this study regular attenders, might be present in any given worship service and might be on church mailing lists (but not the membership list) by virtue of regular attendance at worship services and other church-sponsored gatherings. Other individuals present in any given worship service include first-time visitors and individuals who have attended at least once before but do not attend services on a regular basis. Sample A (the quantitative sample) was limited to one church (called Church 1 in this study) because of heterogeneity in beliefs and practices among churches. Any individual over age 21 who was present in the service or who heard about the study was eligible to participate. To control for developmental issues, only adults were selected.

Participants

Quantitative Phase

Participation was solicited, as described in the Quantitative Procedure section of this chapter. The plan for Sample A (i.e., Phase I; Quantitative Phase) was to solicit and obtain participation from a minimum of 250 individuals, from Church 1. Sample A (see Figure 2) consisted of individuals completing the BFNE-S. Data collection was halted when 239 responses had been obtained, so the sample utilized in the current study consisted of 239 participants. One

hundred and forty-two completed the BFNE-S electronically, and 97 utilized the paper-and-pencil format.

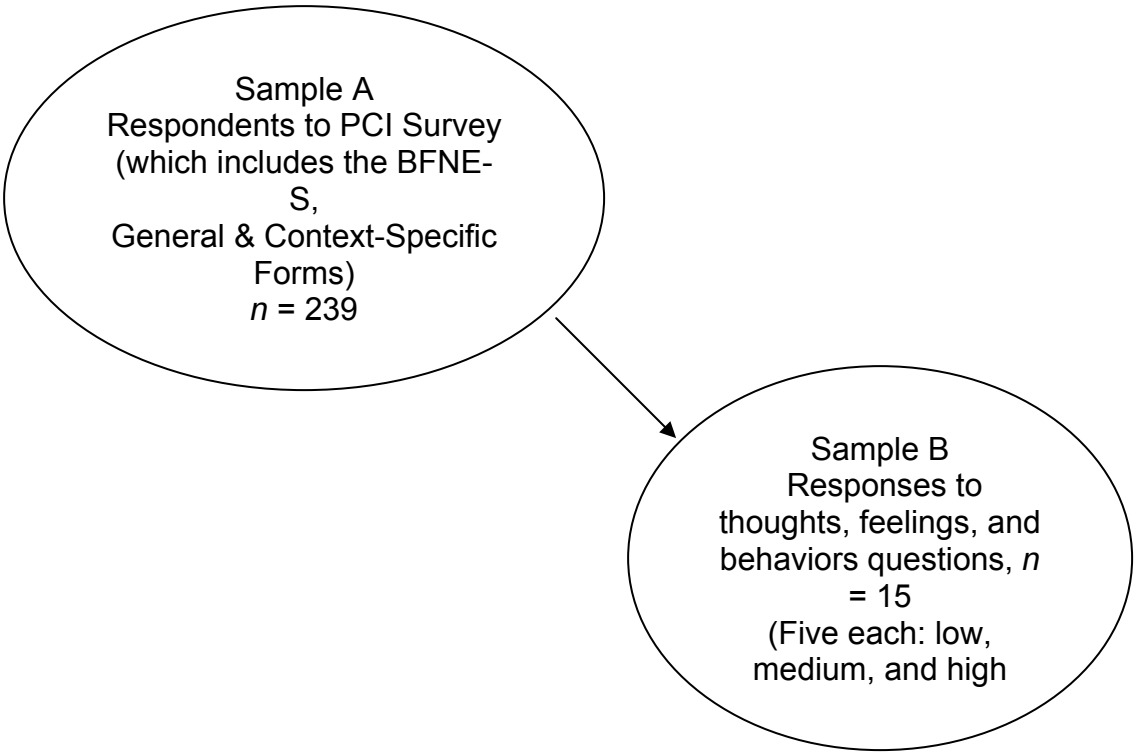


Figure 2 *Sampling Plan*

The sample size was selected because it represents an adequate number of participants to conduct all analyses. Specifically, a sample size of 239 was adequate to conduct the two sets of confirmatory analyses of the 12-item BFNE-S scale (i.e., Research Question 1). According to Hatcher (1994):

> For the [confirmatory factor] analyses discussed here, a minimally acceptable number of observations would be the larger of 150 observations or 5 observations per parameter to be estimated. Larger samples are always preferable, and if many model modifications are to be

made, substantially larger samples are required to arrive at a model that will successfully generalize to other samples. (p. 260)

With 12 items, the sample size of 239 exceeded both criteria (i.e., 150 observations or 5 observations per parameter to be estimated).

For the dependent samples *t*-tests (i.e., Research Questions 2 and 3), a sample size of 27 was needed to detect a statistically significant one-tailed difference with a moderate effect size (i.e., $d = 0.5$) with power = .80 and alpha = .05 (Erdfelder, Faul, & Buchner, 1996). Finally, for the analysis of variance (ANOVA), a sample size of 85 was needed to detect a statistically significant difference with a moderate effect size (i.e., $f^2 = 0.15$) with power = .80 and alpha = .05 (Erdfelder, et al., 1996). Thus, the sample size of 239 was more than adequate for both the dependent samples *t*-test and the ANOVA.

Qualitative Phase

Appended to the BFNE-S was a statement requesting that participants who wished to answer more detailed questions about thoughts, feelings, and behaviors in the church setting to continue with the write-in response questions. From those who provided responses to the thoughts, feelings, and behaviors questions, 15 respondents' comments were analyzed, as detailed in the Quantitative Procedure and Qualitative Procedure sections of this document.

The decision to analyze responses to open-ended questions from 15 participants was made by the researcher and the panel of experts. The panel of experts (i.e., committee members), who have many years of research experience, determined through discussions with the researcher that the sample

space should be adequate. Fear of negative evaluation is a critical component of shyness and it was believed it would be present to some degree in most of the respondents identified as shy.

Five of the 15 participants whose responses were selected for analysis had BFNE-S, Context-specific scores indicating a high level of shyness, five had a medium level of shyness, and five had little or no shyness, as measured by responses to the BFNE-S, Context-specific, that were collected during Phase I. Standardized, rather than local norms were utilized for this part of the analysis to allow findings from the study to be extrapolated, although with caution, to the general population. Norms based upon the general population were the appropriate measure in this instance. The study revealed that shyness levels reported by church members, regular attenders, and visitors of Church 1 for situations outside as well as inside the church setting were similar but not identical to the general population. Table 9 contains the norms for the BFNE scale that have been reported in previous studies. The norms based upon the general population are the appropriate measure in this instance, as described above.

Table 9

Norms Reported for BFNE Scale

Study Author(s)	*N*	Sample Description	*M*	*SD*
Collins et al., 2005	82	Individuals with social phobia	51.50	*7.30*
	99	Panic disorder	39.80	*12.50*

	30	Community sample (non-anxious)	29.20	*8.20*
Weeks et al., 2005	138-165 (missing data varied)	Socially anxious	46.91	*9.27*
	138-165	Non socially anxious	26.81	*4.78*
Duke et al., 2006	355	Shopping mall	32.30	*7.34*
Rodebaugh, Woods, Thissen, Heimberg, Chambless, and Rapee, 2004	*1,049*	*Archival data (anxious and nonanxious)*	*29.41*	*7.72*

Ethical Considerations

During the informed consent process, the purpose of the research, as well as costs and benefits to participants, was explained, and participants were advised that information they provided would be treated confidentially. It was emphasized that withdrawal from the research was possible at any time, and contact information for psychological counseling would be provided to all participants as part of the informed consent process, although it was considered unlikely that participation in this study would cause psychological distress.

The researcher described the study and solicited participation during a Sunday morning worship in June and again in July. The role of the researcher regarding participants was that of a non-participant data gatherer and analyst.

Instruments

Brief Fear of Negative Evaluation-Straightforward (BFNE-S). Two facts made the BFNE-S a good instrument for this study. First, a brief scale was needed, and second, fear of negative evaluation is the core feature of social anxiety disorder (Weeks et al., 2005). The purpose of the current study is to understand how shyness is manifested in a setting believed to have less potential for negative evaluation and less self-focus, two critical issues in shyness. It was, therefore, essential and appropriate to have a measure of fear of negative evaluation. McNeil, Ries, and Turk (1995) described the Social Avoidance and Distress (SAD) scale and the FNE scale as some of the most often-used measures of social anxiety. Cox et al. (2002) and Heimberg et al. (1995) found the FNE scale to be one of the most sensitive outcome measures for social phobia treatment.

Developed in 1969, concurrently with the SAD (Watson & Friend, 1969), the FNE measures apprehension, avoidance, and expectation of being negatively evaluated. The original FNE, consisting of 30 true/false items, had very good psychometric properties as reported in a review by Orsillo (2001). Leary (1983) developed a shortened version, the Brief Fear of Negative Evaluation (BFNE) scale, which consisted of 12 of the original items (those with Pearson correlation coefficients greater than 0.50) in a 5-point Likert-type response format. Results indicated that the BFNE was sensitive to changes in social anxiety and panic disorder. Additionally, the 12-item BFNE correlated

significantly with various measures of treatment responsiveness, such as somatic arousal and depression.

The four items that were reverse-worded in the BFNE were straightforwardly worded in the current study. That decision is in accordance with the recommendation of Rodebaugh et al. (2004) that the BFNE-S (BFNE-Straightforward) be used to assess fear of negative evaluation. Rodebaugh et al. found that straightforwardly worded items ". . . had significantly stronger relationships with theoretically related measures . . . than did the reverse-worded items" (p. 169). Three subsequent studies (Carleton, Collimore, & Asmundson, 2007; Duke et al., 2006; Weeks et al., 2005) supported the recommendation of Rodebaugh et al. to use the BFNE-S, with all items worded straightforwardly for assessing fear of negative evaluation. Furthermore, as Weeks et al. (2005) note, ". . . a sizeable body of literature demonstrates that when scales include a combination of straightforward and reverse-scored items, factor analyses frequently produce distinct factors based on this difference in item construction" (p. 188).

Recent studies have supported the score reliability as well as content-, construct-, and criterion-related validity of the BFNE-S, as detailed in Table 10. Note that the studies included in Table 10 also include the BFNE, with the original reverse-worded items. The current study used the BFNE-S and it seemed reasonable to assume that research findings from the BFNE apply to the BFNE-S as well. Each of the studies reported in Table 10, except for Collins et al. (2005) and Duke et al. (2006), employed both the BFNE and the BFNE-S.

Table 10

Research Regarding Validity and Reliability of Scores Obtained from the BFNE-S

Validity and Reliability	Study Author(s) and Findings Regarding Validity and Reliability
	Collins et al. (2005)
	n = 181 (82 social phobia, 99 panic disorder) and 30 nonanxious controls)
Construct-related validity	Principal components analysis (*n* = 107). One factor accounted for 74% of variance, and pattern/structure coefficients ranged from .76 to .90.
Concurrent validity	Statistically significant correlations with Social Avoidance subscale of the Fear Questionnaire-Social Phobia subscale and Beck Depression Inventory-II.
Concurrent and discriminant validity	BFNE correlated statistically significantly with social avoidance but not with agoraphobic avoidance or measures of panic or theoretically unrelated variables of education and age.
Discriminant validity	Discriminant function analysis (DFA) revealed the BFNE differentiated significantly among groups of individuals with social phobia, panic disorder, and no psychiatric difficulties. Another DFA discriminated significantly between individuals with social phobia and panic disorder.
Inter-item reliability	No systematic differences on symptom or sociodemographic variables (*n* = 107).
Internal consistency	Cronbach's alpha =.97.
Test-retest	Two week test-retest correlation was .94, $p < .001$, with treatment effect size of 0.63.
Criterion-related validity	BFNE change scores correlated statistically significantly and positively with changes on the Beck Anxiety Inventory, Anxiety Sensitivity Index, Beck Depression Inventory-II, and both the Social Avoidance and Agoraphobic Avoidance subscales of the Fear Questionnaire.
	Carleton et al. (2007)
Construct-related validity	Confirmed unitary factor structure of BFNE-S.
Convergent validity	Demonstrated convergent validity with measures related to social anxiety (Social subscale of the Anxiety Sensitivity Index) though not as strong as expected. That was believed to be due to sample characteristics (i.e., the sample consisted of undergraduate students with no diagnosed mental or emotional disorders)
Divergent validity	Found divergent correlations with measures of illness and

	injury.
	Weeks et al. (2005)
	n = 138-165 (missing data varied)
Construct-related validity	*n* = 165 Confirmatory factor analysis (CFA) supported one factor (and confirmed reverse-worded items formed a second factor, affirming findings of Rodebaugh et al., 2004).
Convergent validity	BFNE-S statistically significantly correlated with all measures of social anxiety (Liebowitz Social Anxiety Scale .59, Social Interaction Anxiety Scale .46, Social Phobia Scale .40, and Fear Questionnaire-Social Phobia Subscale .40.)
Discriminant validity	Lower correlations were found with Anxiety Sensitivity Scale, Penn State Worry questionnaire, and Beck Depression Inventory.
Internal consistency	Excellent in patient, control, and overall sample (Cronbach's alpha =.92, 90, and .96 respectively).
	Rodebaugh et al. (2004)
Construct-related validity	Suggested a two-factor model but the most parsimonious explanation was method variance of reverse-worded items.
Item Response Theory Analysis	Both FNE and BFNE had good discrimination but BFNE discriminated across a wider range of the underlying construct
Convergent validity	Straightforwardly worded items had significantly stronger relationships with theoretically-based measures than did the reverse-worded items.
	Duke et al. (2006)
	n = 355, shopping mall, nonclinical, nonstudent sample
Construct-related validity (CFA)	Supported two-factor solution corresponding to straightforwardly and reverse-worded items
Internal consistency	Cronbach's alpha = .94
Convergent validity	Correlated significantly in expected directions with Beck Depression Inventory and UCLA Loneliness Scale.

The BFNE-S is an appropriate instrument for the current study, as evidenced by the research reporting its use in large samples (Collins et al., 2005; Duke et al., 2006; Rodebaugh et al., 2004; Weeks et al., 2005). The author, who

has experience administering surveys and who is a member of Church 1, administered the survey. The author announced the survey, explained the purpose and advised how individuals wishing to do so could participate. Electronic participation was possible by using the Internet link that was printed in a flyer distributed with the weekly bulletin. Paper and pencil copies could be picked up and returned to the Media Center in the lobby area. To avoid reactivity, the survey was entitled "Personal Concerns and Issues" (PCI) rather than The Brief Fear of Negative Evaluation Scale. Care was taken, however, to use the name of the BFNE-S scale in all other documentation involved in the research. The PCI survey consisted of the components listed in Table 11.

Table 11

Components of the Personal Concerns and Issues Scale

Component	Total No. of Items	Format and Description
BFNE-S, context-specific and general	24	12 Likert-format context-specific items and 12 Likert-format general items
Perceived acceptance	13	Rating of perceived acceptance by various people and in various situations
Comfort in nine situations, context-specific and general	18	Ten ratings (answered twice; once for context-specific and once for general situation) of comfort level in the ten situations known to be difficult for shy people
Involvement in and connections with church members	8	Rating of depth of involvement in church-related activities and connections with church attenders
Other items	8	Age, gender, race/ethnicity, and 5 rating-scale items from Zimbardo survey (Zimbardo, 1974)
	Total = 71	

Note: 1-2 open-ended questions, specific to the local church and not included in the dissertation analysis, were included after the Zimbardo survey questions. See Questions to be Excluded from Analysis section below.

The BFNE-S was used both as a general and as a context-specific measure as was the checklist for perceived comfort in the 10 situations. The instructions directed the participants to respond to the items a first time while thinking about how they felt during church-related activities and a second time when thinking about how they felt in social situations in general. Score reliability, as measured by Cronbach's alpha, was computed for the sample in the current study.

The second component was a list of five items assessing the level of perceived acceptance the respondent had for various individuals and in various situations inside and outside the church setting. The list of situations also included two additional situations (at place of work/business and with one's family at home) where only one answer was required, rather than one answer for inside the church and one answer for outside the church. The third component of the PCI Scale was a checklist for respondents to indicate their levels of comfort in the 10 situations, in general and in the context of the church. The fourth group of items concerned the level of involvement in the church and church activities. Cronbach's alpha was computed to ascertain the level of internal consistency for the second, third, and fourth components of the PCI Scale scores. The final component of the PCI Scale was three items eliciting participants' age, gender, and race/ethnicity and five items from Zimbardo's (1977) shyness survey. Table 12 presents items for the BFNE-S.

Table 12

BFNE-S Items

Instructions: Read each of the following statements carefully and indicate how characteristic it is of you according to the following scale.
1 = Not at all characteristic of me
2 = Slightly characteristic of me
3 = Moderately characteristic of me
4 = Very characteristic of me
5 = Extremely characteristic of me
1. I worry about what other people will think of me even when I know it does not make any difference.
2. I am concerned if I know people are forming an unfavorable impression of me.
3. I am frequently afraid of other people noticing my shortcomings.
4. I often worry about what kind of impression I am making on someone.
5. I am afraid others will not approve of me.
6. I am afraid that people will find fault with me.
7. Other people's opinions of me bother me.
8. When I am talking to someone, I worry about what they may be thinking about me.
9. I am usually worried about what kind of impression I make.
10. If I know someone is judging me, it has a big effect on me.
11. Sometimes I think I am too concerned with what other people think of me.
12. I often worry that I will say or do the wrong things.

Table 13 presents the remaining components of the PCI Scale. For items in the Ten Situations, respondents were asked to specify their levels of comfort using a 5-point Likert-format scale. A 5-point Likert-format scale also was utilized for rating perceived acceptance. The items concerning extent of involvement in

the church, age, sex, race/ethnicity had fixed-response options. Four of the five items from Zimbardo's (1977) shyness survey had fixed-response options, with the last item being open-ended in format.

Table 13

Other Components of the PCI Scale

Perceived Acceptance (respondent to indicate how accepted he/she generally feels as an individual:

1. by the people in this church in general
2. by friends and acquaintances you have in this church
3. by the pastor and other leaders in this church
4. when you meet someone at church you do not know
5. by friends and acquaintances you have who do not attend this church
6. when you meet someone you do not know outside this church setting
7. by yourself while in this church
8. by God while in church
9. outside your home in general (in a store, at a theme park, etc.)
10. at your place of work/business (If you are not employed outside the home, please respond based on how you feel when you go into a relatively formal setting, like renewing your driver's license)
11. with your family at home
12. by yourself outside church
13. by God outside church

*Level of Comfort in the Ten Situations Known to be Difficult for Shy People**

1. Being the focus of attention
2. Large groups
3. Small groups
4. Authority figures by virtue of knowledge (intellectual superiors, experts) or

by virtue of role (police, teachers, superiors at work)

5. Social situations in general
6. New interpersonal situations in general
7. Strangers
8. Situations where assertiveness is required (e.g., when complaining about faulty service in a restaurant)
9. Being evaluated or compared with others (e.g., when being interviewed, when being criticized)
10. An opposite sex group or a member of the opposite sex

(* Adapted from Crozier, W. R. (2001). *Understanding shyness*: *P*sychological perspectives. China: Palgrave.)

Extent of Involvement in Church Activities

1. How long have you been a member of this church?
2. For how many years of your life have you been a member of any church?
3. Do you have a designated task or job in this church?
4. Approximately how many times a month do you participate in church activities outside worship services?
5. Approximately how many times a month do you attend worship services?
6. Approximately how many close friends do you have at this church?
7. Approximately how many acquaintances do you have at this church?

Demographic Variables

Age (1 item), gender (1 item), race and /ethnicity (1 item)

Self-rating of shyness

1. Do you consider yourself to be a shy person? (If no, skip to #4)
2. If yes, have you always been shy?
3. If you are currently shy, is that in most or only in some situations?
4. Was there ever a prior time in your life when you were shy?
5. How desirable is it for you to be shy?

Questions to be Excluded from Analysis

As a professional courtesy to Church 1, two open-ended questions specifically about the church were added after the PCI scale. The pastor selected the topic of the questions, and the researcher worked with the pastor to ensure the questions were appropriately worded. Responses were analyzed using inductive constant comparison analysis. Findings were presented to the pastor in a separate report but are not included in the current study. Additionally, a copy of the completed dissertation will be presented to the pastor. Extreme caution was exercised throughout the analysis to maintain confidentiality of all respondents and to ensure that no individual was identifiable in the report on the church-specific question(s) or in the completed dissertation.

Qualitative Questions

Written responses were obtained to the thoughts, feelings, and behaviors questions listed in Table 14 for each of the six church situations. The responses were obtained via write-in items on the electronic SurveyMonkey form (http://www.surveymonkey.com) or in paper/pencil format for those respondents who preferred that mode. One hundred and forty-two participants utilized the electronic format, and 97 chose the paper/pencil format.

Table 14

Thoughts, Feelings, and Behaviors Questions

Thoughts, Feelings, and Behaviors Questions
(Behavior) *"If I were with you in a typical church service, what would I probably see you do?"*

(Thoughts) *"What are some of the thoughts you might be having?"*
(Feelings) *"Please describe how you would be feeling."*

Procedures

Pragmatist procedure. Table 15 presents the distinguishing features of the research paradigm known as pragmatism. The pragmatic approach was considered appropriate for the research questions. The current study is a mixed methods study in that it combined qualitative and quantitative approaches in a single study and employed a sequential, equivalent status design, specifically QUAN/QUAL (Tashakkori & Teddlie, 1998). The instrument used for the regression analysis and selection of Sample B was quantitative in nature, whereas the thoughts, feelings, and behavior questions were qualitative in nature. The BFNE-S was used comparatively, being administered and analyzed as a general measure and as a context-specific measure, and compared to norms in existing literature. The questions about thoughts, feelings, and behaviors in the six church situations were exploratory and were analyzed thematically as well as quantitized and linked to existing theory and instrumentation.

A mixed methods design was appropriate because the research questions were both quantitative and qualitative (Yin, 2003). Additionally, from a measurement perspective, it was believed that mixed methods could reveal manifestations of shyness that would otherwise remain hidden. Also, use of multiple methods avoided a grave shortcoming inherent in monomethod studies

(Campbell & Fiske, 1959). "Triangulation of methods" was the initial impetus to greater utilization of mixed methods (Tashakkori & Teddlie, 1998, p. 41). Campbell and Fiske (1959) proposed using multiple measurement methods to help assure that results were attributable to the actual phenomenon being studied rather than the method being employed. The mix of quantitative and qualitative questions provided methodological triangulation (Tashakkori & Teddlie, 1998).

Table 15

Primary Distinguishing Characteristics of the Pragmatist Paradigm *

Paradigmatic Element	Pragmatist Distinctive
Methods	Quantitative and qualitative
Logic	Deductive and inductive
Epistemology	Both objective and subjective points of view
Axiology	Values play a large role in interpreting results.
Ontology	Accept external reality. Chose explanations that best produce desired outcomes.
Causal linkages	There may be causal relationships but we will never be able to pin them down.

* Tashakkori and Teddlie, 1998, p. 23.

Quantitative Procedure

The quantitative component utilized descriptive, correlational, and causal-comparative designs. For participants in Sample A, descriptive statistics were presented for scores from the BFNE-S, General and Context-specific, and for items on the checklist of perceived acceptance in situations inside and outside

the church setting. Also for participants in Sample A, a correlational design was utilized to examine the relationships among fear of negative evaluation and length of membership, regularity of attendance, and frequency of interpersonal contact (i.e., Research Question 7). For participants in Sample B, a correlational design was utilized to measure the extent to which self-reported shyness was associated with attentional focus upon self and negative quality of thought in the six church situations under investigation in the current study.

A causal-comparative design is one in which groups known to have differed in the past ". . . either in the dependent variable or the independent variable. . . " are compared retroactively in order to infer ". . . relationships (especially tentative causal ones" (Tashakkori & Teddlie, 2003, p. 704). The current study also employed a causal-comparative design in that it involved a comparison of (a) perceived fear of negative evaluation in the church setting and perceived fear of negative evaluation outside the church setting; (b) perceived levels of acceptance in the church setting and perceived levels of acceptance outside the church setting; and (c) perceived levels of comfort in the church setting and perceived levels of comfort outside the church setting.

Participation was solicited in the following manner in the church where the data were collected. On the Sunday that data were collected, a flyer was included in the bulletin that every individual received upon entering the worship service. The flyer gave a brief explanation of the purpose of the research and included a link to the website where the Personal Concerns and Issues Survey

could be accessed. It was emphasized to participants that the electronic survey software does not record the respondent's name or email address.

In addition to the potential participants being informed via the flyer that was distributed prior to the worship service, the author gave a brief presentation during the worship service. She announced that paper versions of the survey were available in the Media Center immediately after service for individuals who wished to pick up a paper/pencil version and that the completed surveys could be returned to the same place. Ninety-seven individuals chose the paper/pencil option.

The author of the current study was the data collector, who is experienced in administering surveys, and analyzing quantitative and qualitative data. Data collection procedures were systematic in that standard responses to potential questions participants might ask were prepared and utilized by the researcher. For example, the researcher was prepared to respond to the question, "Why are you doing this survey?" with the reply "For my dissertation and to help the church."

The author updated her training, as required by the University of South Florida Institutional Review Board, and obtained approval for the study before any data were collected. All data were handled confidentially, with participants so advised, and data were kept in a locked file cabinet in the author's home office. Electronic data files were kept on the home office computer. As mentioned before, a referral for psychological counseling was provided, although

it was believed unlikely that participating in the study would cause psychological distress.

No formal pilot study was conducted; however, friends, acquaintances, and colleagues of the author provided informal feedback on instruments and the process of using the SurveyMonkey software in the proposed manner. The purpose of the informal pilot work was to verify that the instruments would not require too much time, that the thoughts, feelings, and behavior questions would elicit in-depth responses, and that the author communicated clearly to participants.

Internal validity. According to Trochim (2006), internal validity is "the approximate truth about inferences regarding cause-effect or causal relationships" or as Babbie (2004, p. 230) explains, "the threat to internal validity is present whenever anything other than the experimental stimulus can affect the dependent variable." Regarding this study, internal validity would tend to be low because this is a non-experimental study; however, the instrument being utilized, the BFNE-S, is a psychometrically sound instrument. In the current study, the original version of the quantitative instrument to be utilized, the BFNE-S, has a long history of use in research, and various studies have explored psychometric properties of the instrument (Orsillo, 2001; Rodebaugh et al., 2004). Psychometric properties obtained with the instrument as a context-specific and as a general measure were compared to available norms, although it is known that most of the norms were obtained using college student samples and, more recently and on only a few occasions, with clinically anxious samples and, even

more recently, the general population. The author recognized that using norms thus obtained constitutes a threat to internal validity; however, the BFNE-S seems to be the instrument most suited for use in the current study. Particular attention was paid to psychometric properties of the BFNE-S, both as a general and as a context-specific measure.

External validity. Issues relating to external validity were carefully considered. Selection was a threat to external validity because individuals who elected to participate likely possessed attributes different from those declining involvement in the study (Tashakkori & Teddlie, 1998). The BFNE-S was used to explore whether the same symptoms that predict shyness in a general setting also predict shyness in the church setting. The BFNE-S also was used as a screening device to identify responses to the write-in questions from shy and non-shy individuals. It was recognized that the convenience sampling used for this study limits generalizability to other populations and constitutes a threat to population validity.

The quantitative and qualitative components of this study have equivalent status in this study in that ". . . both types of methods are given equal weight (Tashakkori & Teddlie, 2003, p. 285). As Tashakkori and Teddlie (2003) observe, this type of design is often employed in dissertation research in educational settings. The first sample consisted of responses from 239 individuals, and the second, purposive sample of 15 participants was selected from the first sample. The second sample of 15 participants was utilized to extend existing knowledge. There was no treatment group in the study. The

quantitative instrument was administered as a general and as a context specific measure.

Additionally, scores from the BFNE-S were used to identify participants having self-reported high, medium, and low to minimal levels of shyness. Responses from participants for the 15 sets of write-in comments that were qualitatively analyzed were selected based on scores from the BFNE-S, Context-specific.

The research paradigm, as stated earlier, was pragmatism. Pragmatism embraces aspects of both post-positivism and constructivism (Tashakkori & Teddlie, 1998). Thus, the research design was appropriate for the proposed study. As Tashakkori and Teddlie (2003) state,

> Pragmatism supports the use of both qualitative and quantitative research methods in the same study. . . [and] Pragmatist researchers consider the research question to be more important than either the method . . . or the paradigm that underlies the method. (p. 21)

Findings have been shared with members of the dissertation committee and with the leadership of Church 1 wherein the data were gathered.

Qualitative Procedure

The qualitative component utilized a multiple case study, embedded research design, with multiple units of analysis (Yin, 2003, p. 40). Table 16 presents Yin's classification scheme for the characteristics of research design.

Table 16

*Basic Types of Designs for Case Studies**

	Single-Case Designs	Multiple-Case Designs
Holistic (single unit of analysis)	Type I	Type 3
Embedded (multiple units of analysis)	Type 2	Type 4

* Yin (2003, p. 40).

It is helpful to bear in mind that case study research relies on "analytical generalization . . . [wherein] . . . the investigator is striving to generalize a particular set of results to some broader theory" (Yin, 1984, pp. 43-44). Replication, rather than sampling logic, is employed, in that the same results are predicted for the number of cases available within time and financial constraints (Yin, 2003). Each individual case is analogous to a single experiment and the analysis follows "cross-experimental rather than within-experimental design and logic" (Yin, 1984, p. 53).

The researcher was not the sole voice representing the participant. Results were discussed with committee members as well as other professional colleagues. The 16 detailed responses were assessed for interpretive validity. A disinterested peer, a colleague in the field of education who had worked as a coder on two previous occasions, worked as a second coder. The researcher specifically chose a second coder who had very minimal experience with attending a church. After training, the second coder reviewed a sample of coded

responses, explanatory discussion with the researcher ensued, and then the second coder reviewed each of the 16 sets of responses to the write-in questions, attaining a satisfactory rate of agreement (90%). The second coder thus affirmed that the interpretations of the author stemmed directly from the findings and thus exhibited interpretive consistency (Collins, Onwuegbuzie, & Jiao, 2007).

Rich data were collected because the thoughts, feelings, and behaviors questions contained ideas of different individuals about the issues under investigation. Although interviews were not utilized, the desired richness of response was achieved through the extended response questions (Rubin & Rubin, 2005).

Sets of comments from five individuals were selected in each category of minimal, low, medium, and high shyness, based on scores from the BFNE-S, Context-specific. To gain entry into the research context, the researcher secured permission from the local pastor. Church members and attenders were invited to participate either during a brief presentation at a worship service or via mail or internet, depending on what permission was given.

Verification included utilizing the extensive experience of the researcher. The researcher has had long-term experience with being shy and has conducted numerous personal conversations for more than a decade regarding shyness and specifically the effects of shyness in the church setting. The researcher also has been a church member for 26 years. Terminology and expressions utilized by the participants were thus easily understandable. Traditional member

checking (Lincoln & Guba, 1985) was not possible because interviews were not utilized.

Data triangulation was employed in that both quantitative and qualitative data were utilized. The aforementioned notwithstanding, it is recognized that the quantitative instrument and responses to the thoughts, feelings, and behaviors questions were both subject to self-report bias (Maxwell, 2005). Legitimation threats were addressed by searching for discrepant evidence and negative cases, those "instances and cases that do not fit within the pattern" (Patton, 1990, p. 463). In addition to testing for rival explanations, findings were discussed with committee members and colleagues. Researcher bias was controlled for to the extent possible by the author maintaining awareness that she is motivated to help shy individuals, which might have affected analysis of the data.

In all aspects of the study, the researcher endeavored to achieve inter-subjectivity, by deliberately shifting between objectivity and subjectivity (Morgan, 2007; Onwuegbuzie & Johnson, 2006). To minimize bias during data analysis, "analyst triangulation" (Patton, 1990, p. 464) was employed in that a second rater reviewed the codings of responses to the thoughts, feelings, and behaviors questions.

Mixed Methods Procedures

Threats to legitimation. Threats to legitimation of findings stemming from the qualitative and mixed methods procedures in the following discussion are reviewed within the framework of the "problem of legitimation" (Onwuegbuzie &

Johnson, 2006), which “refers to the difficulty in obtaining findings and/or making inferences that are credible, trustworthy, dependable, transferable, and/or confirmable” (p. 52). The first type of legitimation to be employed in the current study was sample integration legitimation. Care was taken when integrating inferences from the quantitative data collected from the larger sample (Sample A) and inferences from the smaller, qualitative sample (Sample B). It was recognized that making “meta-inferences” (Tashakkori & Teddlie, 2003, p. 686) by combining inferences from the quantitative and qualitative phases might not be justified.

According to Onwuegbuzie and Johnson (2006), “Inside-outside legitimation [concerns]…the extent to which the researcher accurately presents and appropriately utilizes the insider’s view and the observer’s views for purposes such as description and explanation” (p. 55). Peer review, through discussions with committee members, was utilized to obtain an outsider’s view that was as accurate as possible, and the extensive experience of the researcher with the church setting and with shyness were utilized to obtain an accurate insider’s view. As discussed earlier in the Qualitative Procedure section, peer review involved having a disinterested outsider work as a second coder.

Finally, attempts were made to enhance “weakness minimization” (Onwuegbuzie & Johnson, 2006). The richness of the qualitative data, most specifically the in-depth responses to the thoughts, feelings, and behaviors questions, helped compensate for the inability of the quantitative data to explain

why individuals did or did not report feeling shy in the environment under investigation.

As stated earlier, the current study was a mixed methods study that employed a sequential, equivalent status design, specifically QUAN/QUAL (Tashakkori & Teddlie, 1998). Deciding to utilize mixed methods was an iterative process as the researcher considered the purposes of the research and the specific questions to be addressed. Tashakkorri and Teddlie (2003) indicate that when the purpose of the research is to have a "social [or] institutional impact," mixed methods research is appropriate in that the "research can be used to test hypotheses related to values idiosyncratic to the context" (p. 186). Examination of Table 18 (Analysis Plan) reveals that the specific research questions were all focused upon increasing knowledge regarding how shyness operates in a setting—the church setting—where two of the most important environmental variables affecting shyness were presumed to be substantially different. The two central purposes of the current study were to confirm existing theory and provide alternative explanations of behaviors the theory addresses and to provide further validation work on a frequently used measure of shyness. Fulfilling those purposes may help advance the understanding and treatment of shyness in all settings and specifically in educational settings. A mixed method research design was therefore considered appropriate.

Early in the study, the researcher decided upon the dimensions of "paradigm emphasis (deciding whether to give the quantitative and qualitative components of a mixed study equal status or to give one paradigm the dominant

status). . . time ordering of qualitative and quantitative components" as well as the degree to which research methods would be mixed and in what temporal order (Onwuegbuzie & Johnson, 2004, p. 19).

As the design evolved through discussions with committee members, decisions were made regarding other dimensions of research design. Table 17 presents other dimensions of the final research design that was developed in concert with committee members. It is important to note that for purposes of visual presentation, some components of Table 17 are summarized. Table 18 (Analysis Plan) provides more detail regarding analyses that were conducted.

Analyses

Quantitative Analysis

A variety of quantitative analyses were undertaken to address the quantitative research questions, as depicted in Table 18. Statistical tests were conducted at the .05 level of statistical significance, using SPSS statistical software (SPSS Inc., 1998).

Table 17

Dimensions of Research Design *

Research Question	Instrument (Components of the PCIS)	Analysis	Nature of Analysis	Linkage to Theory	Phase of Study, Data Type and Source
1. What are the psychometric properties of the BFNE-S, general and context specific?	What are the psychometric properties of the BFNE-S, General and Context-specific, i.e., the church?	(A) Descriptive statistics and Cronbach alpha (B) Confirmatory factor analysis	Confirmatory and exploratory	Validation work on existing instrument	Phase I, Quantitative data, Sample A (*n* = 239)
2. What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting?	What is the difference in perceived fear of negative evaluation in the church setting compared to the non-church setting?	A dependent samples *t*-tests to examine differences in means	Confirmatory	Validation work on existing instrument	
3. What is the difference in perceived fear of negative evaluation between the genders in the church setting compared to the non church setting?	What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for males and females?	A repeated measures ANOVA.	Confirmatory and exploratory	Exploratory	
4. What is the difference in perceived fear of negative evaluation among the races in the church	What is the difference in perceived fear of negative evaluation in the church setting	A repeated measures ANOVA.	Confirmatory and exploratory	Exploratory	

setting compared to the non church setting?	compared to the non church setting for individuals of different races?				
5. What is the difference in perceived acceptance between people inside and outside the church setting?	What is the difference in perceived acceptance between people inside and outside the church setting?	(A) Descriptive statistics (B) dependent samples *t*-test	Exploratory and confirmatory	Exploratory and confirmatory	
6. What is the difference in self-reported levels of comfort outside the church setting and inside the church?	What is the difference in self-reported levels of comfort outside the church setting and inside the church setting?	A dependent samples *t*-test of the difference between mean levels of comfort in the general setting and in the Context-specific setting	Exploratory and confirmatory	Exploratory and confirmation of theory or alternative explanations of behavior theory addresses	
7. To what extent do context-specific issues relate to self-reported levels of fear of negative evaluation?	To what extent do Context-specific issues relate to self-reported levels of fear of negative evaluation?	An analysis of variance for effect on fear of negative on: length of membership, formal place of service, regularity of attendance, and frequency of interpersonal contact.	Exploratory	Exploratory	
8. How do shy people typically think, feel, and behave in an environment with less fear of negative	How do shy people typically think, feel, and behave in an environment hypothesized to	(A) Frequencies for thoughts, feelings, and behavior consistent with the model versus those that are	Content analysis (classical, manifest, latent and inductive constant comparison)	Confirmation of theory or alternative explanations of behavior theory addresses	Phase II, Qualitative data, Sample B (*n* = 15)

evaluation and self-focus?	have less fear of negative evaluation and self-focus?	inconsistent. (B) Thematic analysis of unaccounted-for comments			
9. To what extent is self-reported shyness associated with attentional focus upon self and negative quality of thought in the six church situations?	To what extent is self-reported fear of negative evaluation associated with attentional focus upon self and negative quality of thought in the six church situations?	(A) Pearson correlations between mean attentional focus score and scores from BFNE-S, context specific (B) Pearson correlations between thought quality scores and scores from BFNE-S, Context-specific.	Latent content analysis		

* For purposes of visual presentation, some components of Table 17 are summarized. Table 18 (Analysis Plan) provides more detail regarding analyses to be conducted.

Table 18

Analysis Plan

Purpose	Research Question	Research Hypothesis	Data Collection Instrument (Components of the PCIS)	Analysis
1. To evaluate the psychometric properties of the BFNE-S in a non-student, non-clinical randomly selected sample of a previously unstudied population.	What are the psychometric properties of the BFNE-S, General and Context-specific, i.e., the church?	The BFNE-S, General and Context-specific, displays psychometric properties in the sample that are similar to those demonstrated for other populations taken from university or clinical settings.	BFNE-S, general and context-specific versions, and demographic questions	(A) Descriptive statistics and Cronbach alpha for scores from the BFNE-S, General and Context-specific. (B) Confirmatory factor analysis for scores from the BFNE-S, General and Context-specific.
2. To compare levels of perceived fear of negative evaluation inside and outside the church setting.	What is the difference in perceived fear of negative evaluation in the church setting compared to the non-church setting?	Perceived FNE is lower in the church setting compared to the non-church setting.	BFNE-S, general and context-specific versions	A dependent samples *t*-test to examine differences in means
3. To compare levels of perceived fear of negative evaluation between the genders inside and outside the church setting	What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for males and females?	The difference in FNE between the church and non-church setting is the same for males as for females.	BFNE-S, general and context-specific versions	A repeated measures ANOVA to compare perceived FNE for males and females in the church setting compared to the non church setting.
4. To compare levels of perceived fear of negative	What is the difference in	The difference in FNE between the church and	BFNE-S, general and context-specific versions	A repeated measures ANOVA to compare perceived FNE for

evaluation among the races inside and outside the church setting	perceived fear of negative evaluation in the church setting compared to the non church setting for individuals of different races?	non-church setting is the same for different races.		Caucasians, African Americans, Hispanics, and persons of multiracial background in the church setting compared to the non church setting.
5. To compare the levels of perceived acceptance by people inside and outside the church setting.	What is the difference in perceived acceptance between people inside and outside the church setting?	Levels of perceived acceptance by people in the church setting are higher than the levels of perceived acceptance by people outside the church setting.	Checklist of perceived acceptance in situations inside and outside the church setting.	(A) Descriptive statistics for the items on the perceived acceptance checklist, outside and inside the church setting. (B) A dependent samples *t*-test for the difference in levels of perceived acceptance by people inside and outside the church setting.
6. To understand how shyness manifests itself in an environment believed to induce higher comfort levels.	What is the difference in self-reported levels of comfort outside the church setting and inside the church setting?	Levels of comfort perceived by people in the church setting are higher than the levels of comfort outside the church setting.	Checklist of 10 situations known to be difficult for shy persons, with respondents to indicate level of self-reported comfort in the 10 situations, inside and outside church setting.	A dependent samples *t*-test of the difference between mean levels of comfort in the general setting and in the Context-specific setting.
7. To understand how context-specific issues (extent of involvement in church activities) moderate self-reported fear of negative evaluation in the church setting	To what extent do Context-specific issues relate to self-reported levels of fear of negative evaluation?	Greater depth and breadth of involvement in church activities are associated with reduced self-reported fear of negative evaluation.	Eight questions regarding extent of involvement in church activities.	A multiple regression for fear of negative evaluation using length of membership, regularity of attendance, number of activities participated in per month, and number of close friends as predictor variables
8. To seek confirmation or disconfirmation of theory	How do shy people typically think, feel,	At least 75% percent of individuals with high	15 in-depth responses* to write-in questions, with the	Percentage of thoughts, feelings, and behaviors for

via examining the extent to which existing theory explains the thoughts, feelings, and behaviors of shy individuals in the church setting.	and behave in an environment hypothesized to have less fear of negative evaluation and self-focus?	levels of FNE will report thoughts, feelings, and behaviors related to six church situations that are consistent with the Clark and Wells model and that will be at least 10 & more than those with low levels of FNE.	15 individuals to have self-reported minimal-to-low, medium and high levels of shyness (five from each category) as measured by the BFNE-S.	individuals with high levels of shyness in the church setting that were consistent with the Clark and Wells (1995) model.
9. To seek confirmation or disconfirmation of theory via examining the extent to which attentional focus is related to self-reported levels of fear of negative evaluation.	To what extent is self-reported fear of negative evaluation associated with attentional focus upon self and negative quality of thought in the six church situations?	Focus upon self and negative quality of thought related to the six church situations are associated with higher levels of self-reported fear of negative evaluation.	15 in-depth responses described above.	(A) A Pearson correlation between mean attentional focus score and scores from BFNE-S, Context-specific (B) A Pearson correlation between thought quality scores and scores from BFNE-S, Context-specific

Qualitative Analysis

Any comments that do not fit the theory-derived categories were reviewed for emergent themes. A variable-oriented analysis was undertaken. Analyses were both exploratory and confirmatory. The analyses were exploratory in that the research was conducted to understand how well existing theory explains shyness in a previously unexplored setting and confirmatory in the sense that it was believed the theory would explain most of the behaviors of shy individuals who manifest symptoms of shyness in the church setting.

Three types of qualitative analyses were employed: manifest content analysis, manifest and latent content analysis, and inductive constant comparison, also called emergent themes analysis. Manifest content analysis, which Boyatzis (1998) defines as ". . . the analysis of the visible or apparent content of something" (p. 16) was used to categorize responses of individuals with high, medium, and low-to-minimal levels of shyness to the thoughts, feelings, and behaviors questions. The manifest content analysis also was classical in the sense that the researcher counts ". . . the number of times each code is utilized" (Leech & Onwuegbuzie, 2007, p. 569). Comments of individuals that could not be categorized into the components of the Clark and Wells model were analyzed using the inductive form of constant comparison in that codes were allowed to emerge from the data (Glaser & Strauss, 1967).

Boyatzis (1998, p.16) defines latent content analysis as ". . . looking at the underlying aspects of the phenomenon under investigation. It is more interpretive than manifest content analysis." Latent content analysis was utilized

for the 16 sets of responses selected for Phase II of the study. The researcher attempted to infer what seemed to be the point of attentional focus and the negative or positive quality of thought. Latent content analysis is appropriate because it often focuses upon ". . . important (although hidden) aspects of individual and social cognition underlying behaviors rather than assessing the behaviors that are easily observable (Leech & Onwuegbuzie, 2007, p. 12).

Table 19

Map for Content Analyses of Responses to Thoughts, Feelings, and Behaviors Questions/Interviews

Content to be Analyzed	Content Analysis Type
Responses for individuals with high, medium, and minimal-to-low levels of shyness	
▪ Features of Clark and Wells cognitive model (safety behaviors, high standards, and conditional beliefs)	Manifest content analysis
▪ Unaccounted for comments	Inductive constant comparison
For all respondents – attentional focus scoring sheet	Latent content analysis

No qualitative software was necessary because of the relatively small amount of data and the fact that most of the coding employed a priori categories. Responses to thoughts, feelings, and behaviors questions for participants with high and medium levels of shyness were mapped to the components of the Clark and Wells (1995) model of social phobia, as depicted in Table 20.

Responses were entered into an Excel spreadsheet and tallied. The unit of analysis for the qualitative data was each response to each question. In other words, for each participant, there were 18 units of analysis (i.e., responses to thoughts, feelings, and behaviors in each of the six church situations). Equal weight was given to the key issue—that is, the proportion of the comments in each situation that the Clark and Wells model explained or did not explain.

An example of a comment about a behavior that would fit the model under the label of safety behaviors would be if a participant mentioned arriving late, keeping one's eyes averted, or leaving the building as soon as the service is concluded. As another example, if a respondent stated "I felt bad at the wedding reception because when you meet a stranger, you should always smile and look poised and make a comment that is just right for that person and I just turned away," that comment would fit the model because it is an excessively high standard. Inductive constant comparison analysis was conducted of all comments that did not fit components of the model. Attentional focus scores were also tallied using an Excel spread sheet.

Combined Qualitative and Quantitative Data Analysis

A sequential analysis of both quantitative and qualitative data (i.e., mixed analysis) was undertaken, with qualitative data being quantitized. A sequential mixed analysis was used in that ". . . one set of data [the quantitative data, or surveys] was analyzed prior to analyzing the other dataset" (Onwuegbuzie, Slate, Leech, & Collins, 2007, p. 6) [the qualitative data, or open-ended responses to the thoughts, feelings, and behavior questions]. The mixed analysis gave

approximately equal weight to the quantitative and qualitative portions of the study and thus was an equivalent status design. Specifically, responses to survey questions will be utilized to address five of the nine research questions whereas checklist data and write-in responses to the thoughts, feelings, and behaviors questions were utilized for four research questions. Using the typology developed by Onwuegbuzie et al. (2007), the study was an equal-status sequential multitype mixed analysis.

The mixed analysis included the seven stages of mixed analysis explicated by Onwuegbuzie and Teddlie (2003): (a) data reduction, (b) data display, (c) data transformation, (d) data correlation, (e) data consolidation, (f) data comparison, and (g) data integration. Table 20 presents definitions of the seven stages of the mixed analysis process and indicates which stage was employed for each of the nine research questions in the current study.

Classical, manifest and latent content analyses, as well inductive constant comparison analyses were used for responses to the thoughts, feelings, and behaviors questions as described previously in the Qualitative Analysis Section. Descriptive statistics and graphical displays were used to present the results of both quantitative and qualitative analyses.

Table 20

Seven Stages of Mixed Analysis Process and Research Questions

Stage of Mixed Analysis	Definition*	Research Question(s)
Data reduction	Reducing dimensionality of quantitative data and qualitative data	1, 5, , 8, and 9
Data display	Describing visually the quantitative data	1-9
Data transformation	Data are quantitized and/or qualitized	8 and 9
Data correlation	Involves qualitative data being correlated with quantitized data or quantitative data being correlated with qualitized data.	9
Data consolidation	Both quantitative and qualitative data are combined to create new or consolidated codes, variables, or data sets.	8 and 9
Data comparison	Involves comparing the findings from the qualitative and quantitative data sources or analysis	8 and 9
Data integration	Both qualitative and quantitative findings are integrated into either a coherent whole or two separate sets (i.e., qualitative and quantitative) of coherent wholes	1-9

*Definitions quoted from Onwuegbuzie et al. (2007, pp. 15-16).

CHAPTER 4

RESULTS

Introduction

Chapter 4 presents the results from this study by research question. This chapter comprises nine sections, one for each research question. Results of the data analysis are presented in descriptive text, tables, and/or figures. This chapter concludes with a summary of findings.

Two forms of the 12-item BFNE-S were utilized, the BFNE-S, General and the BFNE-S, Context-specific. Respondents were first asked to complete the BFNE-S, General, when thinking about situations in general outside the church setting. Respondents were next asked to complete the BFNE-S, Context-specific, which consisted of the same 12 items, when thinking about situations inside the church. Comparisons are made between responses to the two different versions of the BFNE-S. The church setting was believed to hold less potential for fear of negative evaluation. For all analyses, missing data were minimal. Appendix E contains a table indicating the number of missing data for each analysis that was conducted.

Participants. Participants were 239 members, regular attenders, and visitors of Church A. As depicted in Table 21, a large percentage of survey respondents were older (51% were 50 or more years of age, with 77% being 40 years of age or more) and were long-time members of Church A (46% had been members for five or more years).

Table 21

Demographics of Respondents to Personal Concerns and Issues Survey

Gender	*Male*	*Female*					
	73 (32%)	*157 (68%)*					
Age	21-30	31-40	41-50	51-60	61-70	70 +	
	23 (10%)	*31 (13%)*	*60 (26%)*	*66 (28%)*	*37 (16%)*	*17(7%)*	
Race/ ethnicity	*Caucasian*	*African American*	*Hispanic*	*Multi-racial*			
	144 (64%)	*48 (21%)*	*26 (11%)*	*10 (4%)*			
Length of Membership at Church A	*Not a member*	*Less than 1 year*	*2 to 3 years*	*4 to 5 years*	*6 to 10 years*	*11 to 20 years*	*Over 20 years*
	61 (27%)	*20 (9%)*	*23 (10%)*	*19 (8%)*	*41 (18%)*	*35 (15%)*	*39 (13%)*
Length of Membership at Any Church	*Not a member of any church*	*Less than 1 year*	*2 to 3 years*	*4 to 5 years*	*6 to 10 years*	*11 to 20 years*	*Over 20 years*
	15 (6%)	*6 (3%)*	*8 (3%)*	*12 (5%)*	*25 (11%)*	*50 (21%)*	*119 (51%)*
Number of Worship Services Attended Per Month	*1 to 2*	*3 to 4*	*5 to 8*	*9 to 12*			
	20 (9%)	*92 (40%)*	*69 (30%)*	*47 (21%)*			
Number of Activities Participated in Per Month	*0*	*1 to 2*	*3 to 4*	*5 to 10*			
	68 (29%)	*95 (41%)*	*40 (17%)*	*30 (13%)*			
Number of Close Friends at Church A	*0*	*1 to 2*	*3 to 4*	*5 to 10*	*10+*		
	46 (19%)	*55 (24%)*	*46 (20%)*	*36 (16%)*	*50 (21%)*		
Number of Acquaintances at Church A	*0*	*1 to 2*	*3 to 4*	*5 to 10*	*10+*		
	11 (5%)	*19 (8%)*	*39 (17%)*	*44 (18%)*	*120 (52%)*		

Research Question 1

What are the psychometric properties of the BFNE-S, General and Context-specific, in the church setting?

Research Hypothesis 1

The BFNE-S, General and Context-specific, displays psychometric properties in the sample that are similar to those demonstrated for other populations taken from university or clinical settings.

To answer Research Question 1, descriptive statistics and Cronbach alphas were calculated and compared with results found in other studies. SPSS Version 16.0 (SPSS, Inc., Chicago, IL) was utilized for all analyses in the current study except the confirmatory factor analysis portion of Research Question 1.

Table 22 presents descriptive statistics for the items on the BFNE-S, General and the BFNE-S, Context-specific, as well as values for skewness and kurtosis. Data screening revealed the scores for both instruments were approximately normally distributed. Inspection of the skewness and kurtosis values revealed that for the BFNE-S, General, one value each for skewness and kurtosis was greater than the absolute value of 1.

For the BFNE-S, Context-specific, seven skewness values were greater than the absolute value of 1; however, six of the skewness values greater than the absolute value of 1 were 1.33 or less; the largest skewness value was 1.61. Only three kurtosis values were greater than the absolute value of 1 (-1.219, 1.103, and 2.00).

Table 22

Descriptive Statistics for BFNE-S, General and BFNE-S, Context-specific

	BFNE-S, General					BFNE-S, Context-specific				
Item	N	*M*	*SD*	Skewness	Kurtosis	*N*	*M*	*SD*	Skewness	Kurtosis
I worry about what other people will think of me even when I know it does not make any difference.	238	2.37	1.16	0.40	-0.73	239	2.27	1.23	0.70	-0.51
I am concerned if I know people are forming an unfavorable impression of me.	238	2.86	1.30	0.08	-1.13	239	2.80	1.37	0.16	-1.22
I am frequently afraid of other people noticing my shortcomings.	239	1.99	1.09	1.00	0.19	239	1.85	1.12	1.25	0.67
I often worry about what kind of impression I am making on someone.	239	2.50	1.22	0.41	-0.86	239	2.37	1.30	0.59	-0.81
I am afraid others will not approve of me.	239	1.94	1.07	0.90	-0.15	239	1.86	1.12	1.17	0.44
I am afraid that people will find fault with me.	236	1.97	1.04	0.83	-0.10	237	1.83	1.09	1.33	1.10
Other people's opinions of me bother me.	239	2.18	1.08	0.71	-0.25	239	2.01	1.13	1.02	0.26
When I am talking to someone, I worry about what they may be thinking about me.	238	1.82	0.99	1.16	0.78	239	1.69	1.02	1.61	1.99
I am usually worried about what kind of impression I make.	239	2.15	1.07	0.80	0.13	239	2.03	1.10	1.07	0.54
If I know someone is judging me, it has a big effect on me.	239	2.35	1.24	0.60	-0.58	239	2.23	1.29	0.75	-0.52
Sometimes I think I am too concerned with what other people think of me.	237	2.13	1.26	0.90	-0.31	239	2.00	1.32	1.14	0.04
I often worry that I will say or do the wrong things.	236	2.30	1.17	0.64	-0.43	237	2.15	1.23	0.94	-0.11

Note: The minimum for all items was 1 (*Not at all like me*) and the maximum was 5 (*Extremely like me*).

For both versions of the BFNE-S, scores from the 12 items were summed to produce a score, which could range from 12 to 60. Listwise deletion was utilized for missing values. The BFNE-S, General, mean and standard deviation (26.50 and 10.39, respectively) and the BFNE-S, Context-specific mean and standard deviation (25.22 and 11.09, respectively) were similar to values obtained in previous research. The means in the current study were slightly lower than in previous research, and the standard deviations were larger than all but one of the previous studies. Review of four previous studies, as displayed in Table 25, revealed that the means in previous studies ranged from 26.81 (for a non-anxious community sample) to 51.50 (for a social phobic sample). Standard deviations ranged from 4.78 (for a non-socially anxious community sample) to 12.50 (for a panic disorder sample).

Table 23

Norms Reported for BFNE Scale (ordered by mean)

Study Author(s)	*N*	Sample Description	*M*	*SD*	*Cronbach Alpha*
Watson, 2009	232	Members, regular attenders, and visitors in a large evangelical church – BFNE-S, Context-specific	25.22	*11.09*	*.94*
Watson, 2009	226	Members, regular attenders, and visitors in a large evangelical church – BFNE-S, General	26.50	*10.39*	*.93*
Weeks et al., 2005[a]	1,385	Non socially anxious	26.81	*4.78*	*.90*
Collins et al. 2005[b]	30	Community sample (non-anxious)	29.20	*8.20*	*.97*

Rodebaugh, et al.	1,049	Archival data (anxious and nonanxious)	29.41	*7.72*	Not reported
Duke et al., 2006	355	Individuals in a shopping mall	32.30	*7.34*	*.94*
Collins et al., 2005[b]	99	Individuals with panic disorder	39.80	*12.50*	*.97*
Weeks et al., 2005[a]	138-165 (missing data varied)	Individuals with social anxiety	46.91	*9.27*	*.92*
Collins et al., 2005[b]	*82*	*Individuals with social phobia*	*51.50*	*7.30*	*.97*

[a] The Weeks et al. (2005) study consisted of two samples.
[b] The Collins et al. (2005) study consisted of three samples. Inter-item reliability was assessed with a subsample (*n* = 107).

Reliability. Internal consistency reliability of the BFNE-S, General, and BFNE-Context-specific scores was assessed for the sample of 239 participants. Cronbach's alpha coefficient revealed that scores for both scales had exceptional internal consistency (Nunnally, 1994). Cronbach's alpha for the BFNE-S, General, scores was .93 (95% confidence interval [CI] = .92, .95), with a value of .94 (95% CI = .93, 95) for the BFNE-S, Context-specific scores.

These values are consistent with results of previous studies. The item-total correlation for the BFNE-S, General, ranged from .64 to .79, and from .64 to .80 for the BFNE-S, Context-specific. The lowest item-total correlation for both versions of the scale was for Item 4 ("I often worry about what kind of impression I am making on someone").

Confirmatory Factor Analysis

This section, addressing Research Question 1, consists of results for four different confirmatory factor analyses (CFAs). One- and two-factor CFA models were conducted for both versions of the BFNE-S (the General and the Context-specific versions). The two-factor model was investigated because some researchers (Duke et al., 2006; Rodebaugh et al., 2004; Weeks et al., 2005) had utilized a two-factor model of the BFNE, consisting of four items that were originally worded negatively. Results for the one-factor model, General and Context-specific, are presented, followed by results for the two-factor model, General and Context-specific.

Model Specification, Input Data, and Model Estimation. Figure 3 presents the one-factor model utilized for the BFNE-S, General and Context-specific. The model was identified by fixing the first factor loading (i.e., pattern coefficient) to 1.0 (Brown, 2006).

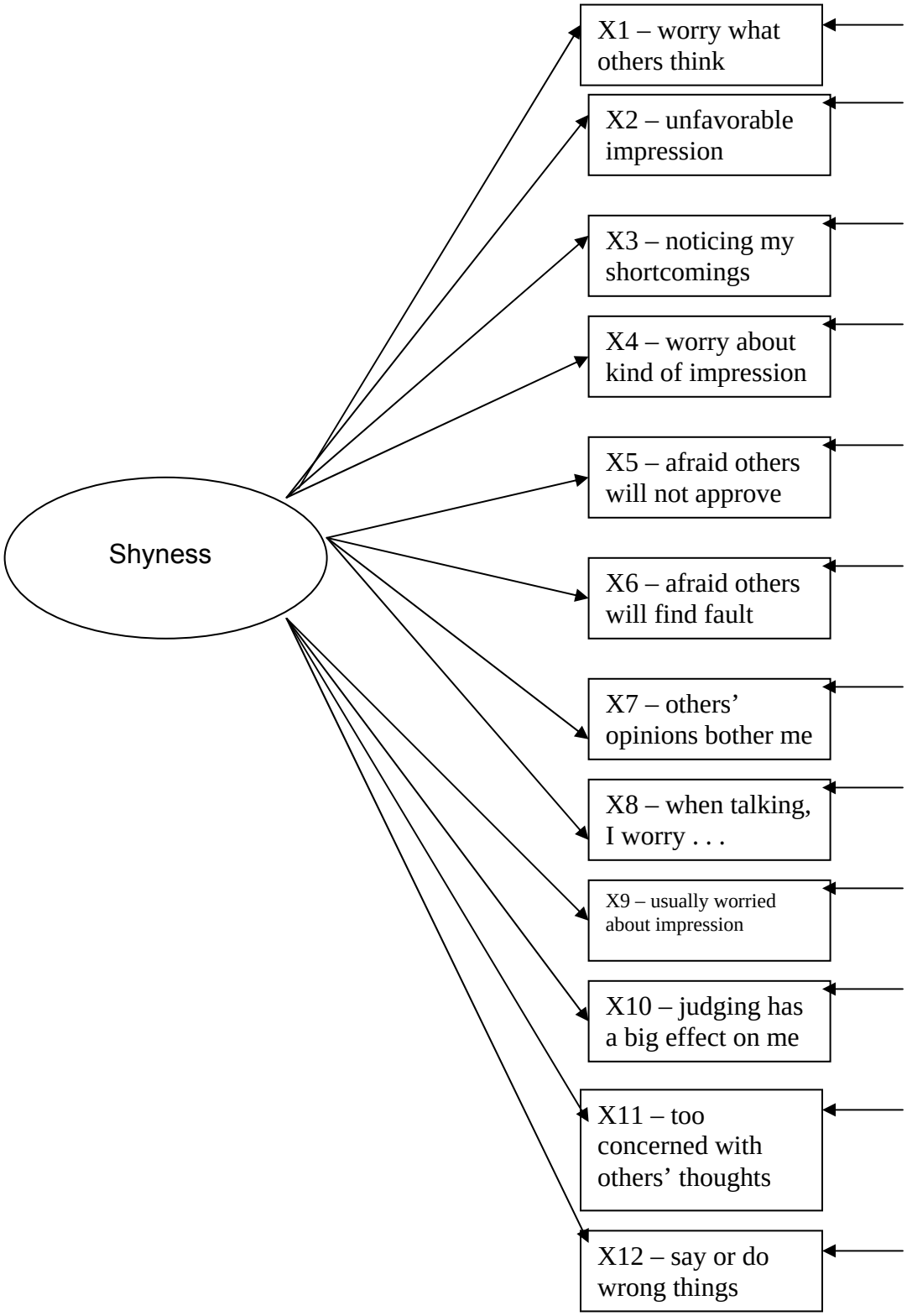


Figure 3 *One-factor BFNE-S*

A CFA was conducted to evaluate the unidimensional model of shyness reported in the literature (Crozier, 2001). The BFNE-S, General and Context-specific, was administered to 239 church members, regular attenders, and visitors. The CFA was performed with the Mplus program 4.1 (L. K. Muthen & B. O. Muthen, 2001). Listwise deletion was utilized for missing data, resulting in a final sample of 199, which was adequate for the analysis. Hatcher (1994, p. 260) states that for confirmatory factor analyses ". . . a minimally acceptable number of observations would be the larger of 150 or 5 observations per parameter to be estimated." Descriptive statistics were computed for the 12 observed variables of both versions of the BFNE-S (General and Context-specific). As explained in the Results for Question 1 section, item scores from the BFNE-S, General and Context-specific, were examined and found to be approximately normally distributed.

For both versions of the BFNE-S, a covariance matrix of 12 observed variables was analyzed. The estimation method employed was maximum likelihood (Brown, 2006)

One-factor model, fit indices. Table 24 presents fit indices for the BFNE-S, General and Context-specific versions. The chi square values indicated a statistically significant amount of misfit; specifically, the BFNE-S, General, yielded a statistically significant chi-square statistic, $\chi^2(54, N = 199) = 148.83$, $p < .001$, as did the BFNE-S, Context-specific, $\chi^2(54, N = 199) = 183.87$, $p < .001$. It should be noted, however, that the chi-square statistic is sensitive to sample size (Bollen, 1989). Distefano and Hess (2005) suggests the following cut-offs for

Table 24

Fit Indices for BFNE[a]-S, General- and Context-specific, One- and Two-Factor Models[b]

		One-Factor Model		Two-Factor Model[d]	
Instrument		BFNE-S General	BFNE-S Context-specific	BFNE-S-General	BFNE-S Context-specific
Fit Indices	Cutoff[c]				
χ^2		148.83	183.87	143.42	179.19
df		54	54	53	53
CFI	>.90	.93	.92	.93	.92
RMSEA	<.08	.09	.11	.09	.11
SRMR	<.08	.05	.05	.05	.05
TLI	>.95	.91	.90	.92	.90

[a] Brief Fear of Negative Evaluation-Straightforward
[b] *n* = 199
[c] Distefano (2005).
[d] The second factor was composed of Items 2, 4, 7, and 10.

acceptable alternative fit indices in evaluating CFAs: CFI > .90; RMSEA < .08; SRMR < .08; and TLI > .95. As presented in Table 26, results are somewhat mixed for the one-factor model. The CFI and SRMR indicated acceptable levels of fit, whereas the other fit indices (RMSEA and TLI) indicated less-than-acceptable levels of fit. The fit is almost the same, with very slightly better fit for the BFNE-S, General.

Parameter estimates, one-factor model. Table 27 presents standardized and unstandardized pattern coefficients. All of the obtained *t* values for the standardized factor coefficients for the one-factor model were statistically significant ($p < .001$), with *t* values greater than 3.192 (Hatcher, 1994). Standardized factor coefficients ranged from .608 to .834 for the BFNE-S,

General and from .615 to .827 for the BFNE-S, Context-specific, indicating that all coefficients were moderately large (Hatcher, 1994).

The highest standardized factor pattern coefficient for both versions of the BFNE- S was .83 for Item 11 ("Sometimes I think I am too concerned with what other people think of me"). The lowest standardized factor pattern coefficient for the BFNE-S, General was Item 2 ("I am concerned if I know people are forming an unfavorable impression of me"), whereas the lowest standardized factor pattern coefficient for the BFNE-S, Context-specific, was .62 for Item 4 ("I often worry about what kind of impression I am making on someone").

Unstandardized factor pattern coefficients for the BFNE-S, General, ranged from 0.86 to 1.48 and for the BFNE-S, Context-specific, from 0.96 to 1.37. For both versions of the BFNE-S, the highest unstandardized factor pattern coefficient was for Item 11 ("Sometimes I think I am too concerned with what other people think of me") and the lowest unstandardized pattern coefficient was for Item 8 ("When I am talking with someone, I worry about what they may be thinking about me").

Residual variance estimates ranged from 0.37 to 0.70 for the BFNE-S, General and from 0.38 to 0.68 for the BFNE-S, Context-specific. This suggests that the indicators were reliable indicators of the construct of shyness (Brown, 2006). All residual variance estimates were statistically significantly different from zero. To review unstandardized estimates, please refer to Table 25.

Table 25

Model Results for the One-Factor BFNE-S, General, and BFNE-S, Context-specific [a]

	BFNE-S, General			BFNE-S, Context-specific		
Item	Unstandardize Pattern coefficients	Standard Error	Standardized Pattern coefficients	Unstandardized Pattern Coefficients	Standard Error	Standardized Pattern coefficients
1. I worry about what other people will think of me even when I know it does not make any difference.	1.00	0.00	0.62	1.00	0.00	0.66
2. I am concerned if I know people are forming an unfavorable impression of me.	1.09	0.15	0.61	1.08	0.13	0.65
3. I am frequently afraid of other people noticing my shortcomings.	1.04	0.13	0.71	0.99	0.11	0.71
4. I often worry about what kind of impression I am making on someone.	1.03	0.14	0.63	0.99	0.13	0.62
5. I am afraid others will not approve of me.	1.15	0.13	0.79	1.06	0.11	0.80
6. I am afraid that people will find fault with me.	1.12	0.13	0.78	1.11	0.11	0.82
7. Other people's opinions of me bother me.	1.12	0.13	0.76	1.08	0.11	0.80
8. When I am talking to someone, I worry about what they may be thinking about me.	0.86	0.11	0.65	0.96	0.10	0.76
9. I am usually worried about what kind of impression I make.	1.02	0.12	0.71	1.03	0.11	0.79
10. If I know someone is judging me, it has a big effect on me.	1.15	0.14	0.69	1.09	0.12	0.70
11. Sometimes I think I am too concerned with what other people think of me.	1.48	0.16	0.83	1.37	0.13	0.83
12. I often worry that I will say or do the wrong things.	1.29	0.14	0.79	1.18	0.12	0.76

[a] All estimates were statistically significantly different from zero.
Note: For the first item, the pattern coefficient was constrained to zero for model identification purposes.

Modification Indices for One-factor Model. After overall goodness of fit was evaluated, modification indices were examined. In a one-factor model, the only potential source of misfit involves correlations between pairs of error terms. The following portion of the discussion reviews sources of misfit for the BFNE-S, General, followed by sources of misfit for the BFNE-S, Context-specific. Next,

similarities and differences between sources of misfit for the two versions of the one-factor model are highlighted.

Modification indices for the one-factor model of the BFNE-S, General, revealed a few localized areas of misfit in the model, with 11 indices greater than 3.84, as depicted in Table 26. The critical value of 3.84 was chosen because it is a statistically significant source of misfit for one degree of freedom at the .05 level. Only two modification indices were greater than 10. Review of the four items involved (Items 1, 2, 4, and 8) reveals that for the item pair 1 and 2, Item 2 was originally worded negatively. Items 4 and 8 both have the word “worry” in common, which may have caused the errors associated with these items to be correlated.

Modification indices for the one-factor model of the BFNE-S, Context-specific, revealed 17 indices greater than 3.84 and 4 indices greater than 10. Review of the items involved in modification indices greater than 10 revealed two of the same item pairs as for the BFNE-S, General (Items 1 and 2 and Items 4 and 8) as well as Items 5 and 6 and Items 4 and 9. Items 5 and 6 share the word “afraid” and Items 4 and 9 share the word “worry.” As stated earlier, these similarities in wording may have caused the correlated error for these item pairs.

Regarding similarities and differences between the two versions, the largest modification index for both versions was for the correlation between the error variance associated with Items 1 and 2. The second largest was for Items 4 and 8. More localized areas of misfit were found for the BFNE-S, Context-specific, than for the BFNE-S, General, four for the former and two for the latter.

Additional item pairs showing misfit were Items 5 and 6 and Items 4 and 9. Areas of misfit were similar across the two version of the BFNE-S. Table 28 lists the five highest modification indices for the one-factor BFNE-S, General and Context-specific models.

Table 26

Five Highest Modification Indices - One-factor BFNE-S, General and Context-specific Versions

Item Numbers and Text of Item Pairs	Modification Index	Modification Index
	BFNE-S, General	BFNE-S, Context-specific
1. I worry about what other people will think of me even when I know it does not make any difference. 2. I am concerned if I know people are forming an unfavorable impression of me.	22.02	24.23
4. I often worry about what kind of impression I am making on someone. 8. When I am talking to someone, I worry about what they may be thinking about me.	17.26	13.91
2. I am concerned if I know people are forming an unfavorable impression of me. 10. If I know someone is judging me, it has a big effect on me.	11.72	13.08
2. I am concerned if I know people are forming an unfavorable impression of me. 5. I am afraid others will not approve of me.	8.45	12.37
4. I often worry about what kind of impression I am making on someone. 6. I am afraid that people will find fault with me.	6.85	9.27

Two-factor model. As stated earlier, this analysis includes evaluation of the two-factor model for both versions of the BFNE-S. Other researchers have investigated a two-factor model consisting of negatively worded items (Duke et al., 2006; Rodebaugh et al., 2004; Weeks et al., 2005). A two-factor CFA was

conducted, with the second factor composed of the four items that had been negatively worded in the original BFNE-S. All the items in both versions of the BFNE-S were positively worded. One pattern coefficient in each set of factors was set to 1.0 to identify the model.

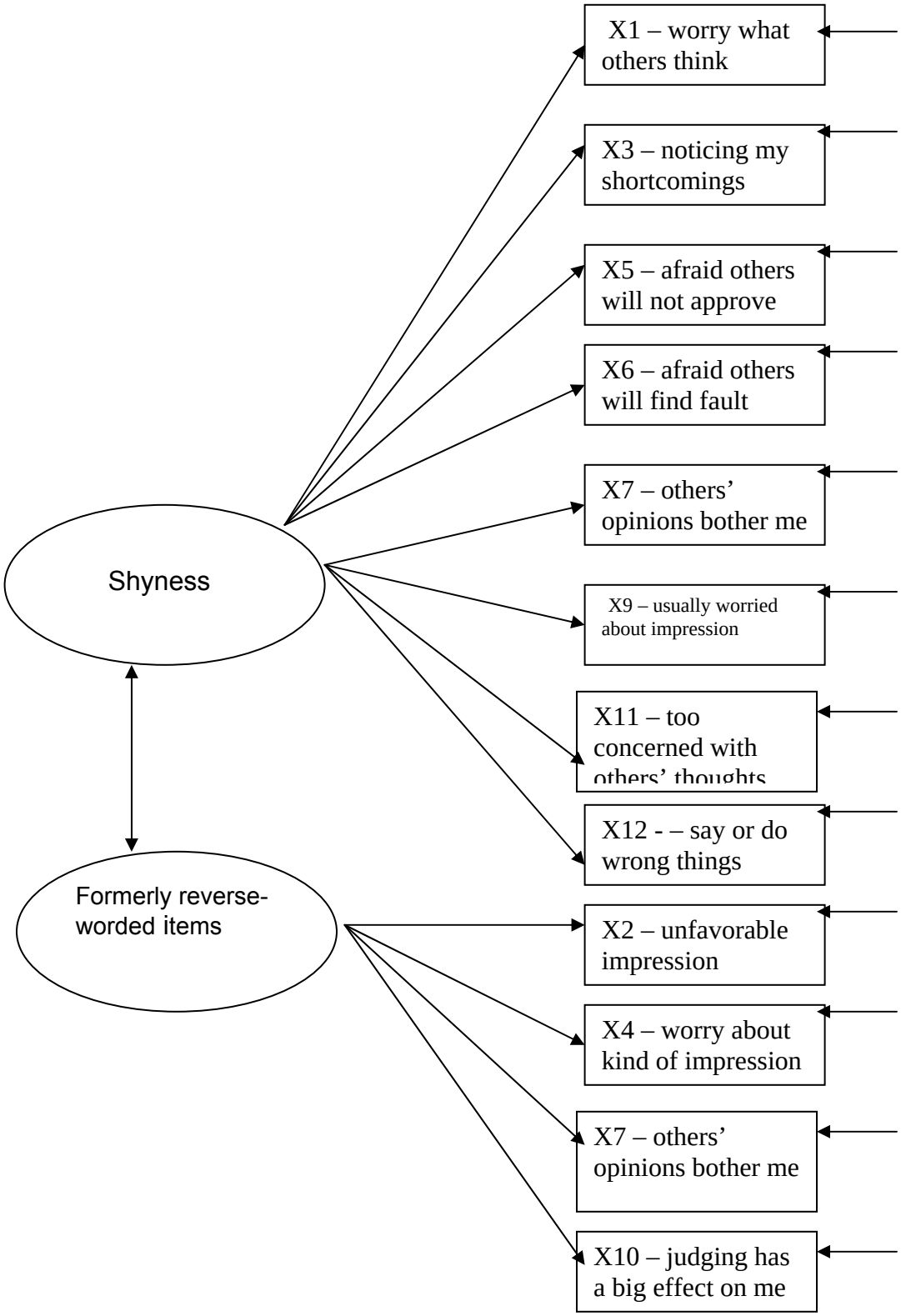


Figure 4 *Two-factor BFNE-S*

Two-factor model, measures of fit. The two-factor model yielded fit indices nearly identical to those of the one-factor model, as presented in Table 29. The two-factor BFNE-S, General, yielded a statistically significant chi-square statistic, χ^2 (53, N = 199) = 143.42, p < .001, and the two-factor BFNE-S, Context-specific, also yielded a statistically significant chi-square statistic, χ^2(53, N = 199) = 179.19, p < .001. The statistically significant chi square indicated a poor fit (Brown, 2006). It should be kept in mind that, as mentioned earlier, the chi-square statistic is sensitive to sample size (Bollen, 1989). As was the case for both versions of the one-factor model, for both versions of the two-factor model, acceptable levels of fit were found utilizing the CFI and the SRMR, and less-than-acceptable levels of fit were found using the RMSEA and the TLI, based upon the criterion selected (Distefano & Hess, 2005).

Parameter estimates, two-factor model. Table 29 presents standardized and unstandardized pattern coefficients for the two-factor model. Model parameters were evaluated for the two-factor model as well. As was the case with the one-factor model, all of the obtained t values for the standardized pattern coefficients were statistically significant (p < .001), with values greater than 3.19 (Hatcher, 1994). For the two-factor model, general, standardized factor pattern coefficients ranged from .62 to .84 for Factor 1 (Shyness) and from .64 to .78 for Factor 2 (Reverse-worded Items). For the two-factor BFNE-S, Context-specific model, standardized factor pattern coefficients ranged from .30 to .61 for Factor 1 and from .39 to .58 for Factor 2. The highest standardized factor pattern coefficient for the two-factor BFNE-S, General, was .84 for Factor 1 with Item 11

("Sometimes I think I am too concerned with what other people think of me"), and the lowest was for Factor 1 with Item 1 ("I worry about what other people think of me even when I know it does not make any difference"). The highest standardized coefficient for the two-factor BFNE-S, Context-specific, was .87 for Factor 1 with Item 1 ("I worry about what other people think of me even when I know it does not make any difference") and for Factor 1 with Item 5 ("I am afraid others will not approve of me").

Unstandardized pattern coefficient estimates suggested that the indicators were reliable indicators of the construct of shyness (Brown, 2006, p. 156). Unstandardized factor coefficient estimates for the two-factor BFNE-S, General, ranged from 0.87 to 1.49 for Factor 1 and from 0.91 to 1.02 for Factor 2. Unstandardized factor pattern coefficient estimates for the two-factor BFNE-S, Context-specific, ranged from 0.43 to 0.87 for Factor 1 and from 0.45 to 1.02 for Factor 2. The largest unstandardized factor coefficient for the two-factor BFNE-S, General, was 1.49 for Factor 1 with Item 11 ("Sometimes I think I am too concerned with what other people think of me") and the smallest was 0.87 for Factor 1 with Item 8 ("When I am talking to someone, I worry about what they may be thinking about me"). The largest unstandardized factor coefficients for the two-factor BFNE-S, Context-specific, was 1.38, for Factor 1 with Item 11, and the smallest was 0.97, for Factor 1 with Item 8.

Residual variance estimates ranged from 0.87 to 1.49 for the two-factor BFNE-S, General and from 0.43 to 1.02 for the BFNE-S, Context-specific, suggesting that the indicators were reliable indicators of the construct of shyness

(Brown, 2006). All residual variance estimates were statistically significantly different from zero. To review unstandardized estimates, please refer to Table 29.

Table 27

Model Results for the Two-Factor BFNE-S, General, and BFNE-S, Context [a]

	BFNE-S, General			BFNE-S, Context-specific		
	Unstandardized Pattern coefficients	Standard Error	Standardized Pattern coefficients	Unstandardized Pattern coefficients	Standard Error	Standardized Factor loadings
Factor 1 by Item:						
1. I worry about what other people will think of me even when I know it does not make any difference.	1.00	0.00	0.62	1.00	0.00	0.66
3. I am frequently afraid of other people noticing my shortcomings.	1.04	0.12	0.71	0.93	0.11	0.71
5. I am afraid others will not approve of me.	1.15	0.13	0.79	1.07	0.11	0.80
6. I am afraid that people will find fault with me.	1.13	0.12	0.78	1.12	0.11	0.82
8. When I am talking to someone, I worry about what they may be thinking about me.	0.87	0.11	0.65	0.97	0.10	0.80
4. I often worry about what kind of impression I am making on someone.	1.02	0.12	0.71	1.03	0.11	0.79
11. Sometimes I think I am too concerned with what other people think of me.	1.49	0.16	0.84	1.38	0.14	0.83
12. I often worry that I will say or do the wrong things.	1.29	0.14	0.79	1.18	0.13	0.76
Factor 2 by Item:						
2. I am concerned if I know people are forming an unfavorable impression of me.	1.00	0.000	0.65	1.00	0.00	0.68
9. I am usually worried about what kind of impression I make.	0.91	0.12	0.64	.89	0.11-	0.62
7. Other people's opinions of me bother me.	1.00	0.11	0.78	0.99	0.10	0.83
10. If I know someone is judging me, it has a big effect on me.	1.02	0.12	0.71	0.99	0.11	0.71

[a] All estimates were statistically significantly different from zero.

The correlation between factors for the two-factor BFNE-S, General was .95 and .96 for the BFNE-S, Context-specific. This high correlation between the two factors provides support for the one-factor solution originally presented for the instrument in previous research. The high correlation also meant that the second factor was not contributing much unique information. Nonetheless, modification indices for the two-factor model were also reviewed to identify areas of misfit in the model.

Modification Indices for two-factor model. With the BFNE-S two-factor model, there are two sources of potential misfit: correlated error and secondary pattern coefficients. Modification indices for the two-factor model of the BFNE-S (General) revealed three indices greater than 10 and 16 indices greater than 3.84, as portrayed in Table 30. Of the three indices greater than 10, two involved correlated error and one was a secondary loading. For the BFNE-S, Context-specific, there were 6 indices greater than 10 and 16 greater than 3.84. Of the six indices greater than 10, 5 involved correlated error and one was a secondary loading. The misfit was very similar across both versions (General and Context-specific) of the two-factor model BFNE-S. In comparing modification indices for the two-factor model, there were more modification indices greater than 10 for the Context-specific than for the General version of the BFNE-S. The largest source of misfit for both versions of the two-factor model was correlated error.

For the BFNE-S, General, the first of the three item pairs involved in modification indices greater than 10 was Items 1 and 2. Items 4 and 9 have the word “worry” in common, which may have caused error variances to correlate.

Another source of misfit was the secondary loading of Item 2 on Factor 1 (modification index greater than 10).

Review of modification indices for the two-factor model of the BFNE-S, Context-specific, revealed 17 indices greater than 3.84 and 6 greater than 10. The largest modification index represented a correlated error involving Items 1 and 2. The second largest modification index was a secondary loading for Item 8 on Factor 2; Factor 2 consisted of all the items that had originally been worded negatively. Careful consideration disclosed no plausible explanation for this result.

Items 4 and 9 had the second largest modification index for both versions in the two-factor general model. Other item pairs having modification indices greater than 10 included Items 4 and 10 (which were both worded negatively originally), Items 5 and 6 (which share the word afraid), and Items 1 and 10 (with Item 10 having been worded negatively).

Regarding similarities and differences between the two-factor models of the BFNE-S, General, and the BFNE-S, Context-specific, modification indices for the two-factor model of the BFNE-S, General, revealed slightly more localized areas of misfit than in the one-factor model, with 16 indices greater than 3.84 and 3 greater than 10. The largest modification index for the two-factor model Context-specific model was for the correlated errors involving Items 1 and 2, as was the case with the General model

Table 28 lists the five highest modification indices for the two-factor BFNE-S, General and Context-specific versions.

Table 28

Five Highest Modification Indices - Two-factor BFNE-S, General and Context-specific versions

Item Numbers and Text of Item Pairs	Modification Index
BFNE-S, General	
1. I worry about what other people will think of me even when I know it does not make any difference. 2. I am concerned if I know people are forming an unfavorable impression of me.	25.717
4. I often worry about what kind of impression I am making on someone. 8. When I am talking to someone, I worry about what they may be thinking about me.	16.578
Factor 1 (Shyness) 2. I am concerned if I know people are forming an unfavorable impression of me.	9.734
2. I am concerned if I know people are forming an unfavorable impression of me. 10. If I know someone is judging me, it has a big effect on me.	8.281
Factor 2 (Originally Reversed Items) 8. When I am talking to someone, I worry about what they may be thinking about me.	7.824
BFNE-S, Context-specific	
1. I worry about what other people will think of me even when I know it does not make any difference. 2. I am concerned if I know people are forming an unfavorable impression of me.	25.867
Factor 2 (Originally Reversed Items) 8. When I am talking to someone, I worry about what they may be thinking about me.	16.512
4. I often worry about what kind of impression I am making on someone. 9. I am usually worried about what kind of impression I make.	14.127
4. I often worry about what kind of impression I am making on someone. 10. If I know someone is judging me, it has a big effect on me.	13.278
5. I am afraid others will not approve of me. 6. I am afraid that people will find fault with me.	12.938

Comparisons across all four models. Confirmatory factor analyses of the BFNE-S, General and Context-specific, were conducted to investigate whether the data suggested utilizing a two-factor model, rather than the one-factor model on which most of previous literature was based. The data revealed nearly identical fit indices for both versions of the BFNE-S and highly similar parameter estimates and modification indices.

The individual items most often listed as indicating misfit were Items 2, 4, 1, 8, and 10. It is interesting that these are almost the same four items (Items 2, 4, 7, and 10) that were formerly negatively worded. It is possible that the reason for this is in how the scale has been developed. The original Fear of Negative Evaluation Scale (which had 22 items in dichotomous, true-false format) was written at a time when only exploratory factor analysis was available; thus, some items might have been redundant.

Table 29 presents modification indices for the four CFA models in this study (General and Context-specific versions of the one-factor as well as the two-factor model). As can be seen, the most problematic item pair was Items 1 and 2, which had the largest modification index across all four models. Other item pairs showing misfit were Items 4 and 8, Items 5 and 6, and Items 4 and 9. The number of modification indices greater than the statistically significant value of 3.84 (with one degree of freedom) is lowest for the one-factor, general version. The higher number of statistically significant modification indices for the Context-specific version of the one- and two-factor models may possibly be due to order

effects. All participants in the study completed the BFNE-S, General, immediately followed by the BFNE-S, Context-specific.

Table 29

Comparison of Modification Indices for the Four Models in This Study

	One-Factor Model		Two-Factor Model	
	General	Context-specific	General	Context-specific
Largest M.I.[a]	22.024	24.234	25.717	25.867
Item Pair	1,2	1,2	1,2	1,2
M.I.s >3.84[b]	11	17	16	17
Number M.I.s>10	2	4	3	6
	1,2	1,2	1,2	1,2
Item Pairs with M.I.s>10	4,8	4,8	4,9	4, 9
	--	5,6	--	4, 10
	--	4,9	--	5, 6
	--	--	--	4,8
	--	--	--	1,10
Items Loading on More Than One Factor[c]	--	--	Factor 1, Item 2	Factor 2, Item 8

[a] Modification Index
[b] Statistically significant, with 1 degree of freedom, at the .05 level
[c] Not relevant for one-factor model.

To the extent possible, comparisons were made across all four models evaluated in this study. It is essential to bear in mind that with a one-factor model, the only source of misfit is correlated error, whereas a two-factor model had two sources of misfit: secondary as well as correlated error. Consistent with parsimony, the one-factor model was utilized in the current study.

Based on descriptive statistics, Cronbach's alpha, and a confirmatory factor analysis, BFNE-S, General and Context-specific, displayed psychometric properties that are similar but not identical to those in previous research. The means and standard deviations of both versions of the BFNE-S were generally

similar to values obtained in previous research with similar samples; however, the means for the BFNE-S, General and the BFNE-S, Context-specific were lower than those in previous research with similar samples, and the standard deviations for both versions of the BFNE-S were larger than the standard deviations that had been found in previous research. Internal consistency reliability, as measured by Cronbach's alpha, was consistent with previous studies, and confirmatory factor analysis also revealed findings similar to previous studies.

Research Question 2. What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting? A paired sample *t* test was conducted to answer this question because each participant provided two scores (Hatcher & Stepanski, 1994).

Research Hypothesis 2. Perceived fear of negative evaluation is lower in the church setting compared to the non church setting.

Listwise deletion was utilized for missing data. Review of box plots for scores from the BFNE-S, General and Context-specific revealed two outliers for the BFNE-S, Context-specific. A score was considered an outlier if it was farther than 1.5 times the interquartile range away from the median. Removal of the two outliers did not affect statistical significance and will not be discussed further. The outliers were included in the data utilized in all analyses.

The paired-samples *t* test revealed a statistically significant difference between mean levels of fear of negative evaluation in the general setting and in the Context-specific setting, $t(220) = 4.03$; $p < .001$. The mean score on the

BFNE-S, General, was 26.50 (*SD* = 10.39) and the mean for the BFNE-S, Context-specific, was 25.22 (*SD* = 11.09). The effect size, utilizing the Dunlap, Cortina, Vaslow, and Burke (1996) formula for a paired *t* test, was negligible (0.01).

Research Question 3. What is the effect of gender on perceived fear of negative evaluation for males and females in the church setting compared to the non church setting?

Research Hypothesis 3. The difference in perceived fear of negative evaluation in the church setting compared to the non church setting is the same for males and females.

Levene's test for gender in the general setting and in the Context-specific setting indicated no evidence of heterogeneity of variances. A repeated measures ANOVA was conducted to test the effect of gender on self-reported fear of negative evaluation as measured by the BFNE-S, General. A statistically significant within-subjects main effect for setting was found, $F(1, 212) = 13.87$, $p < .01$. The effect size of .06, utilizing η^2, was negligible. No statistically significant within-subjects interaction effect was observed between context and gender, $F(1, 212) = .01$, $p > .05$. No statistically significant between-subjects main effect was observed for gender, $F(1, 212) = .02$, $p > .05$.

Research Question 4. What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for individuals of different races?

Research Hypothesis 4. The difference in FNE between the church and non-church setting is the same for different races.

Levene's test for both comparisons indicated no evidence of heterogeneity of variances. A repeated measures ANOVA was conducted to test the effect of race on self-reported fear of negative evaluation as measured by the BFNE-S, General. A statistically significant main effect for setting was found, $F(1, 208) = 6.40$, $p < .05$. No statistically significant within-subjects interaction effect between setting and race was observed, $F(3, 208) = 0.840$, $p > .05$. No statistically significant between-subjects main effect for race was found, $F(3, 208) = 2.16$, $p > .05$.

Research Question 5. What is the difference in levels of perceived acceptance between people inside and outside the church setting?

Research Hypothesis 5. Levels of perceived acceptance by people in the church setting are higher than the levels of perceived acceptance by people outside the church setting.

For five items on the perceived acceptance checklist, respondents were asked to indicate their levels of acceptance when thinking about situations outside the church and inside the church as well. Respondents were also asked to indicate perceived level of acceptance while at their place of work or business and when with their family at home. For both versions of the Perceived Acceptance Checklist, scores from the five items were summed to produce a score, which could range from 5 to 25. Listwise deletion was utilized for missing values. Cronbach's alpha for the Perceived Acceptance-General checklist

scores was less than optimal at .67 (95% CI = .60, .74), with a value of .73 (95% CI = .67, .78) for the Perceived Acceptance checklist, Context-specific scores.

Table 30 presents descriptive statistics for the individual items on the perceived acceptance checklists, as well as two items (perceived acceptance at one's work or place of business and with one's family) for which only one rating was obtained. The Perceived Acceptance Checklist, General, mean and standard deviation (8.73 and 2.48, respectively) were very similar to the Perceived Acceptance Checklist, Context-specific, mean and standard deviation (8.66 and 2.71 respectively). Both distributions of scores were relatively normal, with skewness and kurtosis values less than the absolute value of 1, except that the Perceived Acceptance Checklist, Context-specific had a kurtosis value of 1.94, indicating a slight leptokurtic distribution.

Because of the markedly kurtotic distributions for two items, perceived acceptance by God in the general setting and in the Context-specific setting (5.34 and 6.96, respectively), a Wilcoxon signed ranks test was conducted to investigate the difference between reported levels of perceived acceptance. The Wilcoxon signed ranks test failed to reveal a statistically significant difference between mean levels of perceived acceptance in the general setting (Mdn = 7.20) and in the Context-specific setting (Mdn = 7.20), $Z = -1.111$, $p > .05$. The median and standard deviation for perceived acceptance at work of place of business and with one's family were similar to medians and standard deviations for the other items on the checklist; however, perceived acceptance with one's family was positively skewed (2.62) and markedly leptokurtic (7.39).

Table 30

Descriptive Statistics for Items on the Perceived Acceptance Checklist

	Perceived Acceptance, General							*Perceived Acceptance, Context-specific*						
	N	Min	Max	*M*	*SD*	Skew-ness	Kurtosis	N	Min	Max	*M*	*SD*	Skew-ness	Kurtosis
By people in general.	237	1	4	1.81	0.63	0.58	1.23	236	1	4	1.81	0.71	0.86	1.20
By friends and acquaintances.	236	1	3	1.47	0.54	0.51	-0.93	237	1	5	1.54	0.65	1.27	2.90
When you meet someone you do not know.	235	1	4	2.13	0.73	0.13	-0.40	236	1	4	2.03	0.75	0.24	-0.48
By yourself.	237	1	5	1.80	0.87	1.17	1.48	236	1	5	1.78	0.90	1.33	1.89
By God.	236	1	5	1.50	0.91	2.230	5.34	235	1	5	1.45	0.86	2.52	6.96
Non-comparative Items														
At your place of work or business.	234	1	5	1.75	0.86	1.43	2.63	--	--	--	--	--	--	--
With your family at home.	235	1	5	1.42	0.86	2.62	7.39	--	--	--	--	--	--	--

Note: Scale ranged from 1 (Very Accepted) to 5 (Very Unaccepted)

Research Question 6. What is the difference in self-reported levels of comfort outside the church setting and inside the church setting? A paired samples *t* test was conducted to answer Research Question 6 because each participant provided two scores (Hatcher & Stepanski, 1994).

Research Hypothesis 6. Levels of self-reported comfort for people in the church setting are higher than the levels of comfort for people outside the church setting.

Scores from the 10 items for each scale were summed to produce a score, which could range from 10 to 50. Listwise deletion was utilized for missing values. Internal consistency reliability of the Comfort Scale, General, and Context-specific scores was assessed for the sample of 224 and 221 participants, respectively. Cronbach's alpha coefficient for both versions of the Comfort Scale revealed that scores from both versions of the Comfort Scale had exceptional internal consistency. Cronbach's alpha for scores pertaining to the Comfort Scale, General, as well as to the Context-specific, was .86 (95% CI = .83, .88). The item-total correlation for the Comfort Scale, General, ranged from .51 to .68, and for the Comfort Scale, Context-specific, from .49 to .67. The lowest item-total correlation for the Comfort Scale, General, was .5 for Item 3 (comfort with small groups) and for the Comfort Scale, Context-specific, the lowest item-total correlation was .49 for Item 8 (comfort with being assertive). The highest item-total correlation for the Comfort Scale, General, was .67 for Item 5 (comfort in social situations) and the highest item-total correlation for the Comfort Scale, Context-specific, was .67 for Item 5 (comfort in social situations).

Table 31

Descriptive Statistics for the Comfort Scale, General and Context-specific

	Comfort Scale, General					Comfort Scale, Context-specific				
Item - Level of comfort with:	*N*	*M*	*SD*	Skewness	Kurtosis	*N*	*M*	*SD*	Skewness	Kurtosis
1. Being the focus of attention	233	2.84	1.24	0.18	-1.00	235	2.88	1.24	0.13	-1.02
2. Large groups	236	2.67	1.26	0.32	-1.01	236	2.56	1.25	0.44	-.84
3. Small groups	235	2.29	1.08	0.57	-.52	234	2.18	1.10	0.86	.077
4. Authority figures by virtue of knowledge (intellectual superiors, experts) or by virtue of role (police, teachers, superiors at work)	238	2.19	.94	0.45	-.49	238	2.04	0.94	0.76	0.22
5. Social situations in general	237	2.30	1.00	0.64	.07	238	2.13	0.99	0.82	0.37
6. New interpersonal situations in general	233	2.39	1.01	0.47	-.39	234	2.26	0.97	0.60	-.22
7. Strangers	237	2.64	1.07	0.34	-.60	237	2.48	1.02	0.57	-.17
8. Situations where assertiveness is required (e.g., when complaining about faulty service in a restaurant)	237	2.70	1.17	0.35	-.81	237	2.65	1.16	0.41	-.75
9. Being evaluated or compared with others (e.g., when being interviewed, when being criticized)	238	2.94	1.17	0.08	-1.13	236	2.90	1.22	0.13	-1.00
10, An opposite sex group or a member of the opposite sex	235	2.73	1.11	0.30	-.76	237	2.56	1.09	0.51	-.41
	221					224				

Note: The minimum for all items was 1 (Very Comfortable) and the maximum was 5 (Very Uncomfortable).

Table 31 displays descriptive statistics for the Comfort Scale, General, and the Comfort Scale, Context-specific, as well as values for skewness and kurtosis. Data screening revealed the scores for both instruments were approximately normally distributed. Inspection of the skewness and kurtosis values revealed that for the Comfort Scale, General, all skewness values were less than the absolute value of 1 and two values for kurtosis were greater than the absolute value of 1 (1.01 and 1.13). For the Comfort Scale, Context-specific, all skewness values were less than the absolute value of 1, and one kurtosis value was greater than the absolute value of 1 (-1.02).

The distribution of scores for the Comfort Scale, General, as well as Context-specific, were approximately normal, with skewness and kurtosis values all being less than the absolute value of 1. Responses to the 10 level of comfort questions were subjected to a paired samples *t* test. The paired-samples *t* test revealed a statistically significant difference between mean levels of comfort in the general setting and in the Context-specific setting, $t(219) = 1.37$, $p > .05$. The mean score on the Comfort Scale, General, was 23.31 ($SD = 6.76$) and the mean for the Comfort Scale, Context-specific, was 22.64 ($SD = 6.70$). The effect size, utilizing the Dunlap et al.'s (1996) formula for a paired *t* test, was negligible (0.09).

Research Question 7. To what extent do context-specific issues influence self-reported levels of fear of negative evaluation in the church setting?

Research Hypothesis 7. Greater depth and breadth of involvement in church activities are associated with reduced self-reported fear of negative evaluation.

Section B of the Personal Concerns and Issues Survey included six questions about various aspects of the respondents' relationship with other church members and regular attenders. After careful consideration, it was decided to utilize responses to four of the six questions. The four questions utilized in the current study were: length of membership at Church A, regularity of attendance, number of activities participated in per month, and number of close friends at Church A.

The decision was made not to use responses to the remaining two questions (length of membership at any church and approximate number of acquaintances) to form composite variables. There seemed to be substantive differences in what the variables were believed to be measuring. Length of membership at Church A was chosen rather than membership at any church because it was less skewed than was length of membership at any church (72% of the respondents had been members of some church for 10 or more years, whereas only 28% had been members at Church A for the same length of time) and it seemed to measure the characteristics of the person most relevant to the environment under investigation. Approximate number of close friends at Church A was utilized because it can reasonably be assumed that this would be a more valid indicator of how often the respondent had meaningful interpersonal contact than would the approximate number of acquaintances. It was believed that the

regularity of attendance and the number of activities participated in per month would give a measure of the depth of affiliation.

A multiple regression was utilized to answer Research Question 7. Table 32 contains means, standard deviations, and Pearson correlations. The bivariate correlations, utilizing pair-wise deletion, revealed that only one predictor variable had a statistically significant relationship with fear of negative evaluation in the church setting: friends (r = -.14, p < .05). This small effect size indicates that individuals with lower levels of fear of negative evaluation reported having slightly more friends at Church A than do individuals with higher levels of fear of negative evaluation. The correlations between the remaining context variables and BFNE-S, Context-specific scores [membership at Church 1 (r = -.07, p > .05), attendance (r = .03, p > .05), and activities (r = .02, p > .05)] were not statistically significant.

Utilizing multiple regression, BFNE-S, Context-specific scores were regressed on the linear combination of membership, attendance, friends, and activities. The equation containing these three variables accounted for 1.6% of the variance in BFNE-S, Context-specific scores, $F(4, 203) = .802$, $p > .05$, $R^2 = .016$.

Beta weights, or standardized multiple regression coefficients, were reviewed to ascertain the relative importance of the four context variables in predicting scores on the BFNE-S, Context-specific. Table 33 indicates that none of the context variables had statistically significant beta weights. The activities

and friends variables might have multicolinearity because the structure coefficients were large and the beta weights were small.

Table 32

Descriptive Statistics for Context Variables (Membership, Attendance, Activities and BFNE-S, Context-specific Scores)

Item	*M*	*SD*	*N*
Length of Membership	3.80	2.19	229
Regularity of Attendance	3.65	0.92	229
Number Activities Participated in per Month	2.16	1.02	234
Number of Close Friends	2.96	1.43	234

Note. Context variables were on an ordinal scale.

Table 33

Standardized Multiple Regression Coefficients for Context Variables (Membership, Attendance, Activities, and Friends)

Item	Beta	*Structure Coefficients*	*t*
Length of Membership	-.03	.40	-.35
Regularity of Attendance	.07	.61	.87
Number Activities Participated in per Month	.02	.15	.23
Number of Close Friends	-.11	-.24	-1.33

Research Question 8. How do shy people typically think, feel, and behave in an environment hypothesized to have less fear of negative evaluation and self-focus?

Research Hypothesis 8. At least 75% of individuals with high levels of FNE will report thoughts, feelings, and behaviors related to six church situations that are consistent with the Clark and Wells (1995) model and that will be at least 10% more than those with low levels of FNE.

It should be noted that BFNE-S, Context-specific results were divided into three levels of shyness for Research Question 7, based on the distribution of scores in the sample. For Research Questions 8 and 9, the BFNE-S, Context-specific results were divided into three levels of shyness, based upon norms reported in research involving community samples in a previous study utilizing the general population (Duke et al., 2006), as depicted in Table 34, and consideration of the distribution of scores.

Table 34

Shyness Levels for Research Questions 8 and 9

Shyness Level	BFNE-S, Context-specific, Score
Minimal-to-Low	12 to 28.62
Low	28.631 to 35.96
High	35.97 to 48.00

The responses to the write-in questions in the Personal Concerns and Issues Survey were entered into an Excel spreadsheet, to facilitate coding. Based on the Clark and Wells (1995) model of social phobia, the author constructed a coding table (see Table 35). The author explained and discussed the Clark and Wells model of social phobia in detail with a second coder, a

colleague. Additionally, the second coder read selected portions of research regarding shyness and the Clark and Wells (1995) model of social phobia. Discussion included examples of behaviors, thoughts, and feelings that were consistent and inconsistent with the model. Thoughts that were consistent with the model were, for example, “I wish I wasn’t so uncomfortable to go up to someone and start a conversation, ”which is avoidance (a safety behavior) as is “When can I leave to go home?” A comment inconsistent with the model was, for example, when one respondent reported thinking “How can I make this a moment filled with purpose?” while meeting with a friend.

Table 35

Coding Guidelines Based on the Clark and Wells (1995) Model of Social Phobia

Focus of Analysis	Clark and Wells Model Component	Examples
Behaviors	Safety Behaviors	Avoiding situations. Avoiding initiating interpersonal contact. Minimizing the stress of interpersonal contact by averting eyes, speaking in short sentences, etc.
Thoughts	Excessively high standards for social performance. Conditional beliefs concerning consequences. Unconditional negative beliefs about the self,	“I must not show any sign of weakness” and “I should only speak when other people pause” “If I am quiet, people will think I am boring'” and “If people get to know me, they will not like me.” “I am odd (or different)” and “I am unlikable”
Feelings	Anxiety and other emotional distress, such as fear or worry.	Anxious. Insecure. Intimidated.
Comments irrelevant to the model		“No specific thoughts”, “That’s a good point. I never looked at it that way” or “Listen closely; I only have hearing in one ear”

Working together, the author and second coder coded a sample of five sets of comments regarding whether the comment was consistent with the Clark and Wells (1995) model. (Each set of comments consisted of one participant's responses describing his/her thoughts, feelings, and behaviors in the six church situations, i.e., each "set" of comments consisted of 18 responses from one participant.) Working independently, the author and second coder then coded another sample of five sets of comments. The percent of agreement between the author and the second coder was 89%. After discussion, the percent of agreement was 93%, which was considered a satisfactory rate of agreement. These 10 responses were withdrawn from the data set and were not utilized subsequently, except as training material for coding conducted for Research Question 9.

The remaining responses to the write-in items were ordered by BFNE-S, Context-specific scores, and five sets of comments were selected from minimal-to-low, medium, and high levels of shyness. Items having short, medium and long responses, based on visual scan, were selected. The order of comments was then randomized with respect to BFNE-S, Context–specific score, and the score was removed from the file used for coding so that both coders were unaware of the self-reported shyness level of the person whose comments they were coding.

The total number of comments analyzed was 270; each of 15 participants had 18 comments (thoughts, feelings, and behaviors in six situations). The total

word count for all comments was 4,493. Utilizing comment as the unit of analysis, the author and the second coder coded the 270 write-in comments. Comments that were irrelevant to the Clark and Wells model and comments that were ambiguous were marked as uncodable. The initial rate of agreement was 87%. After discussion, the rate of agreement was 92%. The comments marked as uncodable were removed from subsequent analysis. Table 36 presents the proportion of comments that were marked as uncodable and as codable with respect to theory. Only comments codable with respect to the theory were included in the final calculation of responses that were consistent or inconsistent with theory.

Table 36

Percent of All (270) Comments Irrelevant and Relevant to Theory

Shyness Level	Number (Percent) of *Uncodable* Comments	Number (Percent) of *Codable* Comments	Number of Comments per Shyness Level
Minimal-to-Low	48 (53%)	42 (47%)	90
Medium	44 (49%)	46 (51%)	90
High	35 (39%)	55 (61%)	90

Note: Sample size was five individuals per shyness level, for a total of 15.

Table 37 and Figure 5 present results of the coding for Part A of Research Question 8. Results varied by shyness level. For individuals with minimal–to-low shyness, 26% of behaviors were consistent with the Clark and Wells model. For individuals with a medium level of shyness, 39% of behaviors were consistent

with the model. Finally, 62% of behaviors of individuals with a high level of shyness were consistent with the Clark and Wells model.

Table 37

Percent of Comments Consistent with the Clark and Wells (1995) Model by Shyness Level

Shyness Level	Number (Percent) Comments Consistent with Theory	Number (Percent) Comments *Inconsistent* with Theory	Total Number of Relevant Responses Coded
Minimal-to-Low	11 (26%)	31 (74%)	42
Medium	18 (39%)	28 (61%)	46
High	34 (62%)	18 (38%)	55

Note: Sample size was five individuals per shyness level, for a total of 15.

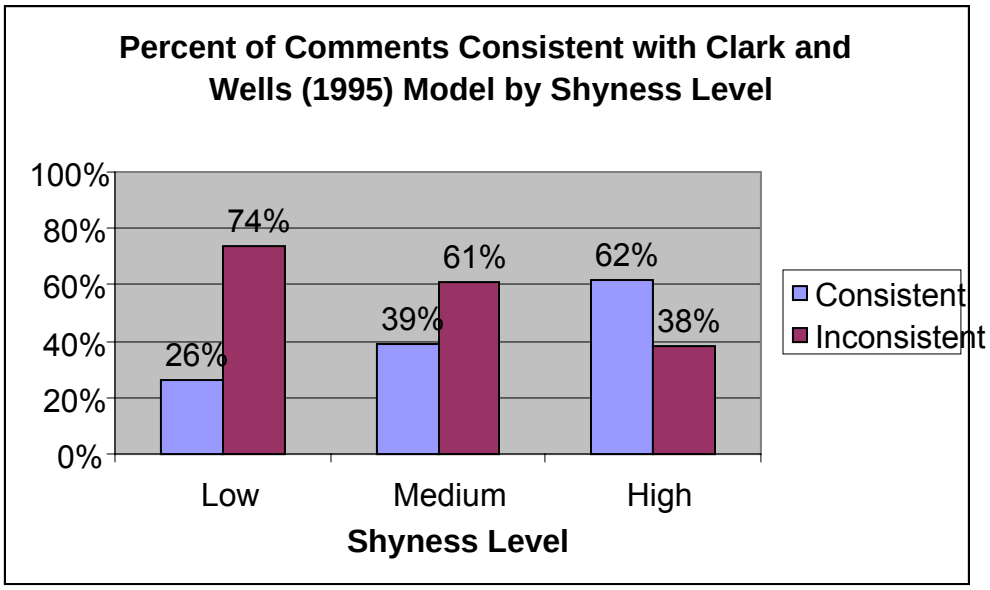


Figure 5 *Percent of Comments Consistent and Inconsistent with the Clark and Wells (1995) Model of Social Phobia*

Table 38 presents examples of comments that were coded as consistent with theory and as inconsistent with theory.

Table 38

Examples of Comments Consistent and Inconsistent With Theory (Clark and Wells' [1995] Model of Social Phobia}

Scenario	Comment Consistent with Theory	Comment Inconsistent with Theory
When in a group	I hope I'm not called on.	Comfortable with this group of people.
	I may say something wrong or not express what I truly think or feel.	
	Like others are looking at me.	Happy, contented, enlightened.
When with friends	Be polite as expected.	Happy to be with friends.
	Will someone please ask me how I am doing?	Feeling connected to friends and acquaintances.
When at a social function	Stick with people I know and try to find someone to talk to.	Overall: Happy to be part of a joyous occasion.
	Standing at the edges of	Comfortable with the

	the room.	group of people at the gathering.
When interacting with authority	Reserved, stern, uncomfortable, shy.	I would be feeling good about the possibility to help.
	This person is better than me (although I know they are not), and I need their approval.	Glad that I attend a church with a loving pastor and family.

The comments were coded again utilizing phrase as the unit of analysis. From the total number of phrases (281), 34 (12%) comments were irrelevant and were removed from the analysis, leaving a total of 247 phrases to be coded as consistent or inconsistent with the Clark and Wells (1995) model.

When utilizing phrase as the unit of analysis, a similar pattern of results was found, as displayed in Table 39 and Figure 6. Those participants with lower levels of shyness had more phrases for descriptions of their thoughts, feelings, and behaviors that were inconsistent with the Clark and Wells (1995) model than those participants with higher levels of shyness (80% inconsistent compared with 20% consistent). For individuals with high levels of shyness, 68% of the phrases they used when describing their thoughts, feelings, and behaviors were consistent with the Clark and Wells (1995) model, and only 32% of their comments were inconsistent.

Table 39

Percent of Phrases Consistent with the Clark and Wells (1995) Model by Shyness Level

Shyness Level	Number (Percent) Phrases Consistent with Theory	Number (Percent) Phrases *Inconsistent* with Theory	Total Number of Relevant Phrases Coded
Minimal-to-Low	14 (20%)	57 (80%)	71
Medium	37 (46%)	44 (54%)	81
High	65 (68%)	30 (32%)	95
Totals	116	131	247

Note: Sample size was five individuals per shyness level, for a total of 15.

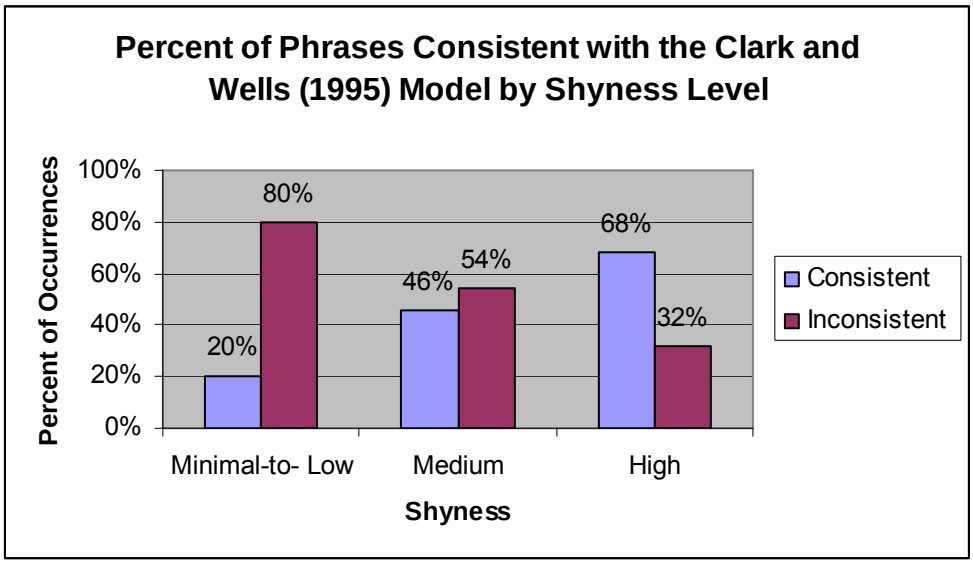


Figure 6 *Percent of Phrases Consistent with the Clark and Wells (1995) Model by Shyness Level*

The comments were coded again, utilizing individual participant as the unit of analysis. As Table 40 and Figure 7 indicate, participants with higher levels of shyness were somewhat more likely to report behaviors, thoughts, and feelings that were consistent with theory more often than did those with lower levels of shyness. The results of this analysis indicate what percentage of the 15 individual participants made comments consistent with theory. The finding that the trend in results by participant as the unit of analysis is similar to that for results by comment as well as by phrase as the unit of analysis, lends another measure of credibility to the findings. It suggests that more individual participants with higher levels of shyness reported behaviors, thoughts, and feelings consistent with theory than did participants with lower levels of shyness, not merely that more comments or phrases were made consistent with theory, as would have been the case had only one or two participants with a high level of shyness made comments consistent with theory.

Table 40

Descriptive Statistics for Percent of Participant Comments Consistent With Theory by Level

	Percent of Participant Comments Consistent with Theory		
Shyness Level	Mean	*SD*	Range
Minimal-to-Low	21%	21%	50%
Medium	32%	18%	42%
High	70%	14%	34%

Note: Sample size was five individuals per shyness level, for a total of 15.

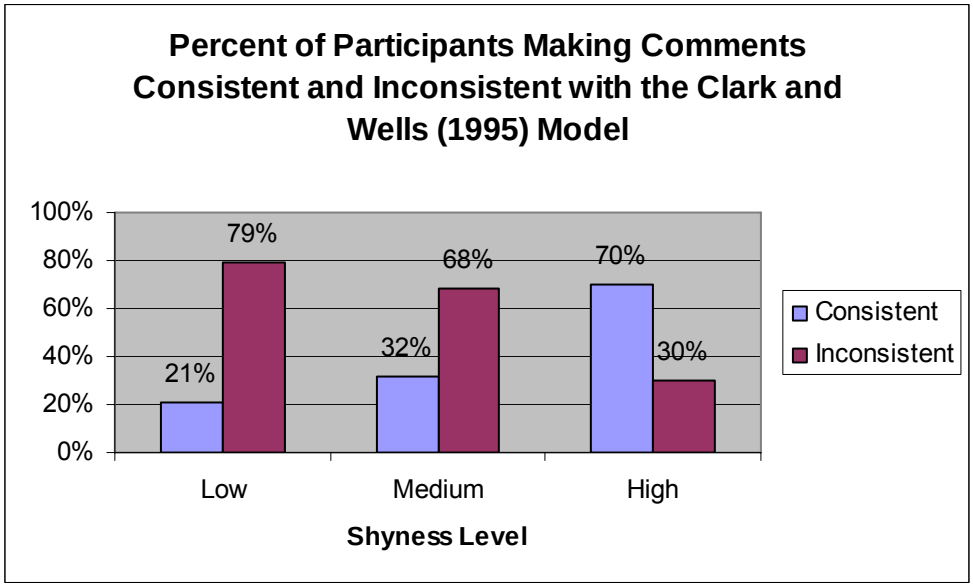


Figure 7 *Percent of Participant Comments Consistent and Inconsistent with the Clark and Wells Model*

Of the 127 comments that were marked as uncodable, approximately 90 concerned thoughts, feelings, and behaviors in two of the six church situations (in worship services and when performing a specific job for which the individual had volunteered.) These comments were subjected to inductive analysis, and results are described below. The remainder of the comments marked as uncodable with respect to theory were highly diverse and contained no information relevant to the analysis and consequently were not coded. The comments regarding thoughts, feelings, and behaviors during worship services and when conducting a job, though not directly relating to the Clark and Wells (1995) model, were related to the findings of Spurr and Stopa (2002). These comments indicated that when in worship services or conducting a job, nearly all behaviors, thoughts, and

feelings were focused on the task involved or else were focused on others, rather than self, for all levels of shyness.

With only 15 comments in each of six sections for the behavior, thoughts, and feelings questions regarding worship services and jobs, at most four coding categories were utilized for each question. In reporting what they did during worship services, 14 respondents talked about activities that would typically be expected, such as singing, standing when everyone else does, worshipping, or reading the Bible. One response was about the length of service. Only one individual described behavior consistent with the Clark and Wells model, stating that "I sit or stand quietly, trying not to receive any attention."

Most of the comments (n = 8) about thoughts during worship services concerned thoughts about God, four comments indicated self-reflection about one's relationship with God, and two addressed concern about the other person's welfare. Only one respondent reported thoughts consistent with the Clark and Wells model: "Sometimes I am intimidated to worship at church because I worry that people are watching and judging. Sometimes I am able to break through and worship and other times I just struggle."

The responses describing feelings during worship services were mixed. Five were positive, four were both positive and negative, three were both positive and negative, one comment was not applicable, and one person did not answer this question. Again, only one comment was typical of the thoughts a shy individual might be expected to have, according to the Clark and Wells (1995) model.

Responses that concerned behaviors, thoughts, and feelings when performing a job were also analyzed inductively. Fourteen of the 15 individuals whose comments were selected for analysis had a formal job to perform in the church. Each of the 14 responses regarding behavior when performing a job was different, as expected because each person had a different job. Examples include, “Working with children,” “Singing. I am in the choir,” and “Greeting people as they come in.” Regarding what the respondents were thinking while performing their jobs, eight of the individuals reported having thoughts about the task they were performing or ways to help others, three made positive statements such as “I love what I do”, one individual was wondering why more people did not help, and one person reported feeling uncomfortable teaching a Sunday School class even though preparations had been made. Regarding feelings while performing a job in the church setting, nine individuals reported positive feelings (such as “Joyful and focused” or “Thankful for the opportunity to help out”), one reported both positive and negative feelings, one reported feeling “anxious and uncomfortable” and two made comments about the work itself or why they had not done more.

Based on results presented in this section, Research Hypothesis 8 was partially supported. For each of the three units of analysis (comment, phrase, and individual participant), as depicted in Table 41, the pattern of response was the same. As previously described, individuals with high levels of shyness made more comments consistent with the Clark and Wells (1995) model than individuals with medium levels of shyness, and individuals with medium levels of

shyness made more comments consistent with theory than individuals with minimal to low levels of shyness.

Table 41

Coding Results by Unit of Analysis

Shyness Level	Unit of Analysis	Percent of Units Consistent with Theory
Minimal to Low		26%
Medium	Comment	39%
High		62%
Minimal to Low		20%
Medium	Phrase	46%
High		68%
Minimal to Low		21%
Medium	Individual	32%
High	Participant	70%

Note: Sample size was five individuals per shyness level, for a total of 15.

Research Question 9. To what extent is self-reported fear of negative evaluation associated with attentional focus upon self and negative quality of thought in the six church situations?

Research Hypothesis 9. Focus upon self and negative quality of thought related to the six church situations are associated with higher levels of self-reported fear of negative evaluation.

The responses to the 18 write-in items described above were also analyzed for attentional focus and quality of thought by the author and the second coder. The author explained to the second coder the nature of the task referenced in each of the four scenarios. Working together, the author and second coder coded five sets of comments (previously utilized for training) for focus of attention and quality of thought. Then, working independently, the author and second coder coded a second set of five sets of comments, attaining a 90% level of agreement, which rose to 92% after discussion. The author and the second coder coded the 270 comments for focus of attention and quality of thought, attaining a 91% level of agreement. Table 42 and Figures 8 and 9 present the results. For Research Question 9, all 270 comments were relevant to the content being analyzed, and all comments were coded.

Table 42

Results of Coding for Focus of Attention and Thought Quality

Shyness Level	Focus of Attention		Thought Quality	
	Task or Others	Self	Positive	Negative
Minimal-To-Low	85 (94%)	5 (6%)	68 (75%)	22 (25%)
Medium	74 (82%)	16 (18%)	59 (65%)	31 (35%)

High	58 (64%)	32 (36%)	45 (50%)	45 (50%)

Note: Sample size was five individuals per shyness level, for a total of 15.

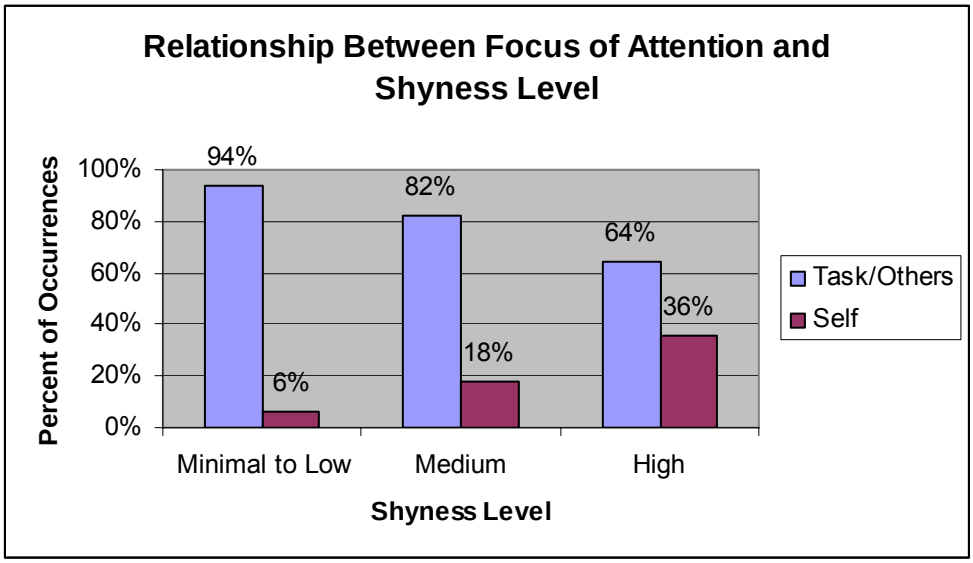


Figure 8 *Relationship Between Focus of Attention and Level of Shyness (as measured by the BFNE-S, Context-specific)*

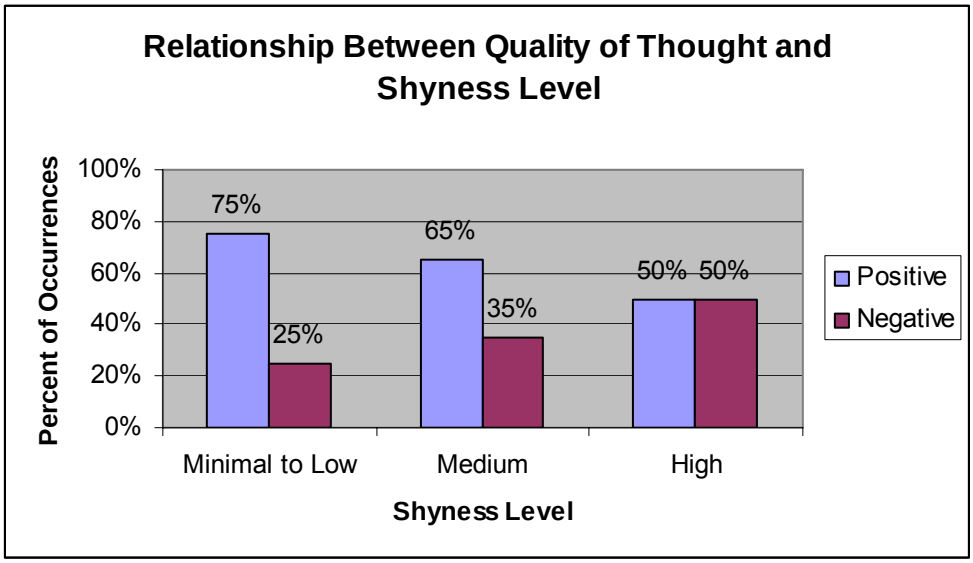


Figure 9 *Relationship Between Quality of Thought and Level of Shyness (as measured by the BFNE-S, Context-specific)*

As was seen with the analyses for Research Question 8, level of shyness was found to be related to the focus of attention. For this sample of participants, individuals reporting a minimal level of shyness tended to focus on the task at hand and to have a positive quality to their reported thoughts. As the level of shyness increased, respondents reported focusing more on the self, rather than the task at hand, and their thoughts tended to have a negative quality more often. Table 43 presents examples of coding for the Focus of Thought and Quality of Thought analyses.

Table 43

Examples of Coding for Focus of Thought and Quality of Thought

	Positive Quality of Thought	Negative Quality of Thought
Focus on Task or Others	"I would feel comfortable with the group of people at the gathering" and "How can I help others?" (social situation)	"The praise and worship and sermon could each be shorter" and "There is a lot of emotionality and we cater to these people." (worship situation)
Focus on Self	"Talking with others and genuinely enjoying	"I feel awkward whenever I am standing around"

	myself" (social situation) and "How grateful I am for all that God has done for me and my family." (worship service)	(social situation) and "I wish these people would know the real me and the conversation would not be such a surface conversation." (group situation)

To explore the statistical significance of the difference between quality and focus of thought for different levels of shyness, coded results were totaled. Comments reflecting a focus of thought on task or others received a score of 1, as did comments indicating a positive quality of thought. Comments indicating a focus of thought on self or a negative quality of thought, received a zero.

Data screening revealed the Focus on Task or Others and Positive Thought Quality data to have skewness and kurtosis values less than the absolute value of 1. Two one-way ANOVAs were conducted to measure the relationship for the 15 participants between scores on the BFNE-S (M = 34.31, SD = 8.66) and Focus of Thought on Task or Others (M = 14.47, SD = 3.02) and Positive Quality of Thought (M = 10.73, SD = 3.37).

A one-way ANOVA for Focus of Thought was statistically significant, F (2, 12) = 8.19, $p < .01$. The means were 17.0, 14.8, and 11.6 for minimal, medium and high levels of shyness respectively, indicating that lower levels of shyness were associated with a tendency to focus more on the task at hand or others,

rather than on the self. Post hoc multiple comparison tests revealed the Scheffe test for focus of thought was statistically significant at the .01 level between minimal to low and high levels of shyness.

A one-way ANOVA for Quality of Thought was also statistically significant, F (2, 12) = 9.48, $p < .01$. The means for Positive Quality of Thought were 13.6, 11.8, and 9.0 for minimal, medium and high levels of shyness respectively, indicating that lower levels of shyness were associated with a tendency to have a more positive quality of thought. Post hoc multiple comparison tests for Quality of thought revealed the Scheffe test was statistically significant at the .05 level between minimal to low and high levels of shyness.

Research Hypothesis 9 is supported by the results of this analysis. The relationship between focus upon task or others and level of shyness and the relationship between positive quality of thought and shyness were found to be statistically significant.

This chapter has presented results of the data analyses conducted for this study. Results for both quantitative and qualitative data were reviewed. In Chapter 5, these results will be interpreted with respect to previous research. Chapter 5 also explains the limitations of the current study and discusses implications for future research.

CHAPTER 5

DISCUSSION

This chapter summarizes the major findings of this study and interprets those findings in light of the research questions, after which the results are compared with previous research. Limitations of the study are also reviewed. Finally, implications of the findings are discussed, and recommendations for future research are presented.

Overview of Method and Summary of Findings

This study addressed nine research questions regarding the psychometric properties of the BFNE-S and the effect of reduced fear of negative evaluation on shyness. The sample was taken from an evangelical church, with a modal age range of 50-60. Data were collected utilizing Surveyonkey, a data collecting software, as well as paper/pencil. The survey consisted of demographic questions, the 12 items of the BFNE-S, General, 12 items of the BFNE-S Specific, 10 items about comfort in various social situations, 7 items regarding perceived acceptance in various situations, as well as 18 write-in responses about typical thoughts, feelings, and behaviors in church situations that were similar to the 10 situations that researchers have identified as being difficult for shy people. The BFNE-S performed reasonably well, and 62% of the responses about thoughts, feelings, and behaviors reported by individuals with high levels of shyness were consistent with the Clark and Wells (1995) model of social phobia, an extreme form of shyness, as compared with 39% and 26% of the responses

of individuals with medium and low levels of shyness, respectively. Table 44 presents a summary of the findings for the nine research questions in this study.

Table 44

Summary of Major Findings

Purpose	Research Question	Research Hypothesis	Analysis and Results
1. To evaluate the psychometric properties of the BFNE-S, General and Context-specific, in a sample taken from the church setting, a previously unstudied population.	What are the psychometric properties of the BFNE-S, General and Context-specific, i.e., the church?	The BFNE-S, General and Context-specific, displays psychometric properties in the sample that are similar to those demonstrated for other populations taken from university or clinical settings.	(A) Descriptive statistics and Cronbach alpha for scores from the BFNE-S, General and Context-specific, were generally similar to those in previous studies, although the means were lower and the standard deviations larger. (B) Confirmatory factor analysis for scores from the BFNE-S, General and Context-specific supported a one-factor model of shyness in the setting utilized in the current study.
2. To compare levels of perceived fear of negative evaluation (FNE) inside and outside the church setting.	What is the difference in perceived fear of negative evaluation in the church setting compared to the non-church setting?	Perceived FNE is lower in the church setting compared to the non-church setting.	A dependent samples *t*-test to examine differences in means revealed a statistically significant lower level of perceived fear of negative evaluation in the church setting than outside the church setting. The effect size was negligible (0.01).
3. To compare levels of perceived fear of negative evaluation inside and outside the church setting across gender.	What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for males and females?	The difference in FNE between the church and non-church setting is the same for males as for females.	A repeated measures ANOVA revealed no statistically significant difference in perceived FNE for males and females in the church setting compared to the non church setting.
4. To compare levels of perceived fear of negative evaluation inside and outside the church setting across race.	What is the difference in perceived fear of negative evaluation in the church setting compared to the	The difference in FNE between the church and non-church setting is the same for different races.	A repeated measures ANOVA revealed no difference in perceived FNE for Caucasians, African Americans, Hispanics, and persons of multiracial background in the church

	non church setting for individuals of different races?		setting compared to the non church setting.
5. To compare the levels of perceived acceptance by people inside and outside the church setting.	What is the difference in perceived acceptance between people inside and outside the church setting?	Levels of perceived acceptance by people in the church setting are higher than the levels of perceived acceptance by people outside the church setting	(A) Descriptive statistics for the items on the perceived acceptance checklist, outside and inside the church setting, were very similar. (B) A dependent samples *t*-test failed to reveal a statistically significant difference in levels of perceived acceptance by people inside and outside the church setting.
6. To compare levels of self-reported comfort for people in the church setting compared to outside the church setting.	What is the difference in self-reported levels of comfort outside the church setting and inside the church setting?	Levels of comfort perceived by people in the church setting are higher than the levels of comfort outside the church setting.	The dependent samples *t*-test revealed a statistically significant difference between mean levels of comfort in the general setting and in the Context-specific setting. The effect size was negligible (.09).
7. To understand how Context-specific issues (extent of involvement in church activities) relate to self-reported fear of negative evaluation in the church setting	To what extent do Context-specific issues relate to self-reported levels of fear of negative evaluation?	Greater depth and breadth of involvement in church activities are associated with reduced self-reported fear of negative evaluation.	A multiple regression for fear of negative evaluation using length of membership, regularity of attendance, number of activities participated in per month, and number of close friends as predictor variables failed to reveal a statistically significant relationship.
8. To seek confirmation or disconfirmation of the Clark and Wells (1995) model via examining the extent to which the thoughts, feelings, and behaviors of shy individuals in the church setting are consistent with the model.	How do shy people typically think, feel, and behave in an environment hypothesized to have less fear of negative evaluation and self-focus?	At least 75% of the responses of individuals with high levels of FNE will report thoughts, feelings, and behaviors related to six church situations that are consistent with the Clark and Wells (1995) model and that will be at least 10% more than those with low levels of FNE	Sixty-two percent of the thoughts, feelings, and behaviors for individuals with high levels of shyness in the church setting were consistent with the Clark and Wells (1995) model compared with 39% of individuals with medium levels of shyness and 26% of individuals with low levels of shyness.
9. To seek support of theory via examining the extent to which attentional focus is	To what extent is self-reported fear of negative evaluation	Focus upon self and negative quality of thought related to the six church	(A) A one-way ANOVA revealed a statistically significant difference between attentional focus scores and

related to self-reported levels of fear of negative evaluation.	associated with attentional focus upon self and negative quality of thought in the six church situations?	situations are associated with higher levels of self-reported fear of negative evaluation.	scores from the BFNE-S, Context-specific, for individuals with minimal to low and high levels of shyness. (B) A one-way ANOVA revealed a statistically significant difference between thought quality scores and scores from the BFNE-S, Context-specific, for individuals with minimal to low and high levels of shyness.

Research Question 1. Confirmatory factor analyses of the BFNE-S, General and Context-specific, were conducted to investigate whether the data suggested utilizing a two-factor model, rather than the one-factor model on which most of previous literature was based. The data revealed nearly identical fit indices for both versions of the BFNE-S and highly similar parameter estimates and modification indices. The confirmatory factor analyses supported the one-factor model of shyness reported in extant literature and, consistent with parsimony, the one-factor model was utilized in the current study. Accordingly, researchers in the area of shyness can continue with a greater degree of confidence that the items on the BFNE-S represent an essentially unidimensional construct.

The higher number of statistically significant modification indices for the Context-specific version of the one- and two-factor models may have been due to order effects. It is speculated that respondents may have hurried through the Context-specific version of the BFNE-S because it immediately followed the general version. They may have been impatient responding to the items they

thought they had responded to previously if they did not read the directions carefully.

Research Question 2. In considering findings regarding the BFNE-S, it should be kept in mind that the current study utilized two versions of the BFNE-S. Respondents were asked to complete the questions when thinking about situations in general outside the church, and these responses constituted the distribution of scores for the BFNE-S, General. Respondents were asked to complete the questions again when thinking about situations in general inside the church; those responses comprised the distribution of scores for the BFNE-S, Context-specific.

The most significant finding concerning the BFNE-S was that the instrument performed reasonably well with a sample of individuals recruited from a church setting. The distributions of scores were similar in that they approximated a normal distribution; however, the means for both versions were lower and the standard deviations larger than those reported in previous research for non-socially anxious samples (Collins et al., 2005; Duke et al., 2006; Rodebaugh et al., 2004; Weeks et al., 2005).

The means for the BFNE-S, General and Context-specific, were compared with those in previous studies. Cohen's *d* effect sizes were calculated to assess the practical significance of the difference in scores between the current study and previous ones. Effect sizes are ranked in order of size, as displayed in Table 42. The largest effect size (2.59) was found for the BFNE-S, General, with the Collins et al. (2005) study, which consisted of individuals with social phobia. The

smallest effect size (0.05) was for the BFNE-S, General, and the non-socially anxious sample in the Weeks et al. (2005) study, as depicted in Table 45.

Table 45

Effect Sizes Reported for BFNE Scale (ordered by effect size)

						Effect Size	
Study Author(s)	*N*	Sample Description	*M*	*SD*	*Alpha*	*BFNE-S, General*	*BFNE-S, Context-specific*
Watson, 2009	232	Members, regular attenders, and visitors in a large evangelical church – BFNE-S, Context-specific	25.22	*11.09*	*.94*	--	--
Watson, 2009	226	Members, regular attenders, and visitors in a large evangelical church – BFNE-S, General	26.50	*10.39*	*.93*	--	--
Weeks et al., 2005[a]	1385	Non socially anxious	26.81	*4.78*	*.90*	0.05	*0.26*
Collins et al. 2005[b]	30	Community sample (non-anxious)	29.20	*8.20*	*.97*	0.27	*0.37*
Rodebaugh, Woods, Thissen, Heimberg, Chambless, & Rapee, 2004	1,049	Archival data (anxious and non-anxious)	29.41	*7.72*	--	0.35	*0.50*
Duke et al., 2006	355	Individuals in a shopping mall	32.30	*7.34*	*.94*	0.99	*1.16*
Collins et al., 2005[b]	99	Individuals with panic disorder	39.80	*12.50*	*.97*	1.61	*1.69*
Weeks et al., 2005[a]	138-165	Individuals with social anxiety	46.91	*9.27*	*.92*	1.87	*1.91*
Collins et al., 2005[b]	*82*	*Individuals with social phobia*	*51.50*	*7.30*	*.97*	*2.59*	*2.57*

[a] The Weeks et al. (2005) study consisted of two samples.
[b]The Collins et al. (2005) study consisted of three samples. Inter-item reliability was assessed with a subsample (*n* = 107).

It is possible that the lower means were found because participants in the sample were older. The modal age range for the current study was 50 to 60 years (51% were 50 or more years of age, with 77% being 40 years of age or

more) and the modal age range was 50 to 60 years, whereas previous studies focused on younger participants. The correlation between the BFNE-S, General, and age in the current study was $r = -.19$, $p < .01$. The correlation between the BFNE-S, Context-specific, and age was $r = -.22$, $p < .01$.

The findings also suggest that the shyness regular church attenders report experiencing in the church environment is similar to what they experience outside the church environment, though not as intense. The reader might recall that 91% of the survey respondents reported attending church 3 or more times per month.

The larger standard deviations for scores from the BFNE-S, General and Context-specific versions, compared to those from previous studies, might be explained, again, by differences in the participants' ages. It is possible that greater diversity in age led to greater diversity in scores.

A repeated measures ANOVA was conducted to test the effect of age on self-reported fear of negative evaluation as measured by the BFNE-S, General. A repeated measures ANOVA was conducted to test the relation between age and self-reported fear of negative evaluation as measured by the BFNE-S, General and BFNE-S, Context-specific. Levene's test for both comparisons indicated no evidence of heterogeneity of variances. A statistically significant main effect for setting was found, $F(1,215) = 13.79$, $p < .01$. No statistically significant interaction effect between setting and age was observed, $F(2,215) = 2.16$, $p > .05$. A statistically significant between-subjects main effect for age was found, $F(2,215) = 6.94$, $p < .01$. Pair-wise comparisons among the three age groups revealed that individuals in the 31 to 60 age group had less fear of

negative evaluation than did the 21 to 30 age group, and individuals in the 60 plus age group had less fear of negative evaluation than the 21 to 30 age group.

It would have been interesting to compare the stability of the participants' responses across settings (in church and outside church) with participants' scores on the state/trait anxiety inventory (Spielberger et al.,1970). Such a comparison might have helped account for the relatively small difference between self-reported state anxiety inside and outside church. If the sample had many individuals with high trait anxiety, those individuals would likely tend to report high levels of anxiety in any situation. The decision was made not to include this instrument, however, because the survey was quite lengthy.

A chi square was utilized to determine whether there was a statistically significant relationship between the question on the Zimbardo's Shyness Survey (1974), "Are you shy?" and the scores on the BFNE-S, Context-specific, were compared utilizing a Pearson chi square. This relationship was statistically significant, χ^2 (2) = 17.82, $p < .001$), which supported the validity of the BFNE-S as a measure of shyness.

Research Questions 3 and 4. Another important finding was that the results of this study indicated no statistically significant differences between the genders or among the races in levels of perceived fear of negative evaluation inside and outside the church setting. This seemed unsurprising because research regarding gender differences is mixed (Bruch et al., 1989; Pilkonis, 1977), as discussed previously in Chapter 2. Research has been conducted on the effect of cultural influences on shyness; however, information on race, but not

on cultural background, was collected. This represents a limitation of the current study.

Research Question 5. It was hypothesized that individuals would report feeling more accepted inside the church than outside. However, no statistically significant difference was found in self-reported levels of acceptance. This finding is consistent with the results for the BFNE, which showed little difference in perceptions of the church setting and outside the church.

Research Question 6. The hypothesized difference between comfort outside and inside the church when in situations known to be difficult for shy people was found to be statistically significant; however, the effect size was negligible. This very small difference is consistent with the small differences found for other variables that were used in comparing participant responses outside the church with responses for inside the church. The effect sizes were negligible.

Research Question 7. Four aspects of the respondents' relationship with other church members and regular members were utilized to explore the effect of Context-specific issues (depth and breadth of involvement in church activities) to self-reported levels of fear of negative evaluation in the church setting, as measured by the BFNE-S, Context-specific. The four aspects were length of attendance, regularity of attendance, number of activities participated in per month, and number of close friends. Of the four, only one (number of close friends) was found to have a statistically significant relationship with fear of negative evaluation. A multiple regression analysis also failed to reveal any

statistically significant relationships between the context variables and fear of negative evaluation. Again, this lack of measurable difference is consistent with the lack of or small differences between participant responses pertaining to outside the church and participant responses pertaining to inside the church.

Research Question 8. Regarding the Clark and Wells (1995) model of social phobia, it was predicted that individuals with high levels of shyness would tend to report a greater percentage of statements reflecting safety behaviors, excessively high standards for social performance, conditional beliefs concerning consequences, unconditional negative beliefs about the self, and anxiety and other emotional distress, such as fear or worry compared to individuals with lower levels of shyness. This prediction was supported in that 62%, 39%, and 26% of the self-reported behaviors, thoughts, and feelings of individuals with high, medium and low-to-minimal levels of shyness in the six church situations, respectively, were consistent with the Clark and Wells (1995) model of social phobia.

This finding suggests that the majority of individuals with high levels of shyness have the same kinds of thoughts, feelings, and behaviors in the church setting as in other settings. Much of the research has been conducted in the highly competitive environment of the university or in the clinical setting. It was hypothesized that the church setting would hold less potential for fear of negative evaluation. Although the current study revealed that the church setting showed only slightly less potential for fear of negative evaluation, it should be noted that participants reported feeling fairly comfortable and accepted, as measured by the

items addressing those topics. The means were 8.73 and 8.66, respectively, for five items regarding acceptance outside and inside the church setting. The scale for responses ranged from 1 to 5, with 1 indicating the participant felt "Very Accepted" and 5 indicated "Very *Un*accepted. Additionally, means for the 10 items regarding the comfort scale were 23.31 and 22.64 respectively for 10 items regarding comfort outside and inside the church setting. The scale ranged from 1 to 5, with 1 indicating a feeling "Very Comfortable" and 5 indicating feeling "Very Uncomfortable."

It was thus not possible to understand whether operating in an environment with less potential threat enables individuals with high levels of shyness, or social phobia, to overcome the hidden assumptions and habits delineated in the Clark and Wells (1995) model. As mentioned earlier, these assumptions and habits involve safety behaviors (such as avoiding situations), excessively high standards ("I must not show any sign of weakness"), and negative emotions, such as anxiety. The way in which the data were collected also could have affected the responses. Conducting interviews, with the opportunity to ask clarifying follow-up questions, might also have yielded different results.

It is also possible that some people who attend church, even those who attend regularly, perceive the environment as holding even greater potential for being evaluated negatively in that they do not feel they are accepted. In citing Schaller (1978), McIntosh and Martin (1992) concluded that:

there is considerable evidence which suggests that at least one-third, and perhaps as many as one-half, of all Protestant church members do not feel a sense of belonging to the congregation of which they are members. They have been received into membership, but have never felt they have been accepted into the fellowship circle. (p. 77)

Research Question 9. The statistically significant and practically significant relationship between attentional focus scores and shyness levels as measured by the BFNE-S, Context-specific, was related to the results described above. Individuals with high levels of shyness were found to focus more often on the self than when in social situations than individuals with minimal to low levels of shyness, who tended to focus more often on the task at hand or other people. This finding also lends support to previous research findings (Spurr & Stopa, 2002).

Additionally, statistically significant and practically significant relationships were found between thought quality scores and shyness levels as measured by the BFNE-S, Context-specific. High levels of shyness were found to be associated with negative thought quality. That is, individuals with high levels of shyness tended to have more negative thoughts when experiencing the scenarios utilized in this study than did individuals with low to minimal shyness levels. This is consistent with Clark and Wells' (1995) explication of the processes activated when an individual with social phobia perceives a social threat, whether that threat is real or not, in that the individual's negative assumptions are activated. These negative assumptions include, as described

earlier, self critical thoughts, such as “I’m unacceptable” or “I am weird.” These findings are consistent with previous research and further support the utility of including efforts to change the focus of attention when attempting to modify shy behaviors and their consequences.

A second major finding regarding Research Question 9 concerned the focus of attention. Of special interest was the fact that the Clark and Wells (1995) model of social phobia accounted for less than 1% of thoughts, feelings, and behaviors in two settings where the participant would typically be expected to focus attention on the task or others, rather than on the self. The two settings were when in worship services and when fulfilling the duties of a designated job, such as singing in the choir or helping with children. A key feature of the Clark and Wells (1995) model is the shift in focus of attention from the environment to self. The shift in focus of attention is so foundational to the model that the first part of the cognitive treatment for social phobia based on the model begins with encouraging the patient to “. . . drop their safety behaviors and focus their attention on the other person(s) in the interaction and on what is being said” (Clark, 2001, p. 421). In this study, individuals with high levels of shyness reported acting, thinking, and feeling much like individuals with low-to-minimal levels of shyness when their attention was focused on activities that were presumably important to them (i.e., participating in worship and performing a job for which they had volunteered). Why these individuals were able to shift focus away from self is not clear. Future research will need to investigate this issue.

Participants reported that during worship services they were thinking "How much I love God and how grateful I am for all he has done for me and my family", and that they were "Thanking God for getting me where I am and how I got here", and "Considering God, thinking what my part in His plan I have . . . " When conducting a job, some individuals said they were thinking things like, "Hope I can make all welcome, comfortable and make them smile" and "I can make a difference in these young lives. I am so thankful to have this opportunity."

Comparison of Findings with Theoretical Framework

Two salient characteristics of the sample should be kept in mind when considering results for the current study. As mentioned previously, a large percentage of survey respondents were older (51% were 50 or more years of age, with 77% being 40 years of age or more) and the modal age range was 50 to 60 years. The ages of participants in previous studies tended to be much lower, as displayed in Table 46. Many survey respondents were also long-time members of Church A (46% had been members for five or more years). It seems likely that these two findings account for at least some, perhaps a great deal, of the disparity between actual and predicted results

Table 46

Participant Ages in Previous Studies of the BFNE Scale

Study Author(s)	*N*	Sample Description	*M*	*Range*
Collins et al., 2005	82	Individuals with social phobia	38	*17-68*
	99	Individuals who experience		

		panic disorder		
	30	Community sample (non-anxious)	33	*20-49*
Weeks et al., 2005	138-165 (missing data varied)	Individuals with social anxiety	32.39	--
	138-165	Non socially anxious	33.12	--
Duke et al., 2006	355	Individuals from a shopping mall	43	*18 to 86*
Rodebaugh, Woods, Thissen, Heimberg, Chambless, and Rapee, 2004	*1,049*	*Archival data (anxious and nonanxious)*	*22.5, 23.2, 20.5, and 20.7*	--

Results of this study generally lend support for the Clark and Wells (1995) cognitive model of social phobia, which emphasizes the role of the shift in attention that occurs when an individual perceives, whether accurately or inaccurately, that he or she is about to be evaluated negatively. Although 75% had been hypothesized, more than one half (62%) of the behaviors, thoughts, and feelings of individuals with self-reported high levels of shyness were consistent with the Clark and Wells (1995) model when the individuals were in an environment determined, albeit by self-report measures, to hold slightly less potential for fear of negative evaluation. The reader will recall that according to

Weeks et al. (2005), fear of negative evaluation is the core feature of social anxiety disorder, or shyness.

Also lending support to the Clark and Wells (1995) model is the finding that the model explained less than 1% of behaviors, thoughts, and feelings of individuals when they were engaged in activities that directed their attention to a task and/or to others, rather than the self, such as attending a worship service or performing a job. Recall that in the Clark and Wells (1995) model, one of the two key components that maintain social phobia is focusing of attention upon self, with the other being negative thoughts about the self. When one is in a worship service, one's attention is generally on the speaker and the singers and God. When performing a job, an individual typically is concentrating on what has to be accomplished. The findings support the assertion by Wells (2001) that many shy individuals possess adequate social skills and are able to function quite adequately in social situations once their attention is focused outward, rather than inward.

The 6 situations utilized in the current study were extremely similar to the 10 situations known to be difficult for shy people (Crozier, 2001). The discomfort reported by shy individuals in their write-in comments regarding thoughts, feelings, and behaviors in four of the six situations also supported this component of the current study's theoretical framework. The four situations where individuals with higher levels of shyness reported being uncomfortable more often than did individuals with lower levels of shyness were when interacting in groups, in social situations, with friends and acquaintances, and

with persons in authority. Pearson correlations revealed that higher levels of fear of negative evaluation were associated with higher levels of *discomfort*. (The response options for the comfort items ranged from 1 [“Very Comfortable”] to 5 [“Very Uncomfortable”]. Specifically, the correlation between the BFNE-S, Context-specific, and comfort in general outside the church was $r = .21$, $p < .01$, and the correlation with comfort inside the church was $r = .17$, $p < .05$. The correlation between the BFNE-S, General, and comfort in general outside the church was $r = .22$, $p < .01$ and with comfort inside the church was $r = .18$, $p < .01$

The findings of the current study also provided further evidence that scores obtained with the BFNE-S have very good psychometric properties, and these properties are consistent with those reported by Orsillo (2001). Cronbach alphas for both versions of the BFNE-S were excellent and similar to those reported in previous research (Collins et al., 2005; Duke et al., 2006; Rodebaugh et al., 2004; Weeks et al., 2005). The confirmatory factor analyses provided additional evidence supporting the validity of the one-factor model of shyness reported in the literature (Crozier, 2001).

Limitations

The findings of this study should be interpreted with caution due to limitations and possible threats to internal validity as well as to external validity of the findings. Regarding limitations, order effects were not assessed for the components of the Personal Concerns and Issue Survey. All respondents completed the BFNE-S, General followed by the BFNE-S, Context-specific.

Second, another limitation of the study was that completing the BNFE-S scale might have influenced how participants described their thoughts, feelings, and behaviors. It is also possible that extremely shy individuals might have declined to participate due to discomfort in disclosing information about what is often experienced as a significant and embarrassing personal problem. Alternatively, participants who had low levels of shyness might have declined participation if they believed the topic of the study to be unimportant. If that were the case, the findings might not have been valid for the sample utilized in the study. The researcher attempted to minimize the possibility of biased selection of participants when presentations were made to solicit participants by emphasizing the need for non-shy as well as shy individuals to participate. The researcher also provided reassurances that all data would be treated confidentially, stating that any reports that were written would not include information that would enable individuals to be identified.

The reader will recall that the data were collected electronically and participants did not need to interact socially or in any way with the researcher. The distance created by collecting data electronically might have reduced fear of negative evaluation, which would have, presumably, allowed participants to give a more accurate response than if they had been interacting face to face.

The church selected for the study was an already-formed group that likely differed in important ways from other churches or other settings in which perceived potential for negative evaluation might exist. This limitation,

unavoidable due to study design, was handled by exercising an abundance of caution in drawing conclusions and in making generalizations.

Threats to Internal Validity

The most important threat to internal validity was that the data were correlational, and the researcher had no ability to control the setting. Researcher bias was another threat to internal validity. It was possible that the halo effect occurred during analysis of qualitative data because the researcher had prior knowledge about the participants in general and personal assumptions about how participant beliefs might account for some of the results (Onwuegbuzie, 2003b); however, every attempt was made to avoid letting that knowledge influence the interpretation of the findings. Results and interpretations of all data were discussed with committee members until consensus was obtained. During data analysis, it was understood that knowledge of the participants' shyness levels as measured by the BFNE-S, Context-specific, might cause the researcher to perceive most or all participant responses as findings consistent with theory. To mitigate that possibility, the researcher, as well as the second coder, were not aware of the participant's shyness level, and findings were discussed with colleagues who served as disinterested peers who had no stake in the findings and interpretations (Lincoln & Guba, 1985, p. 308). Finally, a reflective researcher journal was maintained, as a tool to make obvious, and thus more avoidable, any hidden assumptions that might have influenced interpretation.

Confirmation bias, the tendency for a researcher to find what he or she wants to find and to ignore, or misinterpret, anything else (Nickerson, 1998),

represented a considerable threat to internal validity. The researcher could have perceived level of shyness as influencing participant responses. As Greenwald, Pratkanis, Leippe, and Baumgardner (1986) note, this type of potential bias is most often present when the aim of a study is to test, rather than create, theory. Careful attention was paid to this threat through several means. Throughout the study, and particularly during the analysis stage, the researcher discussed her ideas with disinterested colleagues who had no personal stake in the research and who were unfamiliar with the church environment. Findings were also discussed with peers who were familiar with the church environment. Additionally, a second coder was utilized in analyzing the responses to the open-ended questions about thoughts, feelings, and behaviors in the six church situations. The coder was trained, sample comments were coded together, and discussion of the findings ensued until a satisfactory rate of agreement (90% or greater) was obtained. Additionally, the researcher kept a reflexive journal, as described by Lincoln and Guba (1985). Throughout the study, the researcher made journal entries to record relevant information about herself as well thoughts and decisions about methods and analyses.

The reflexive journal was a valuable tool in maintaining objectivity and avoiding biases. The researcher had to work constantly to be aware of her personal bias—that is, the strong desire to find a way to help individuals with high levels of shyness feel more comfortable in the church setting and begin finding out what might keep them from becoming more connected with the church. Entries made before data were collected indicate a high level of emotion, both

positive and negative, which made it challenging to be objective. Statements included: “It is frustrating to have to do so much paperwork, in such detail [the IRB process], just to collect data. I know it is necessary but it takes so long and I want to get on with it”, and “It is exciting to finally be submitting the IRB. It doesn’t seem possible after all these years of wanting to help shy people that I am finally doing the research!”

Entries while data were being collected and a report was being written for the church indicate, again, frustration. “I know I need to be patient but I wish I did not have to collect 250 surveys!”, “It is taking so long to analyze the comments for the church questions. I know it will take as long to write this as it does to write a report at work, and I am learning a lot about part of the data. I know I cannot wait until after the dissertation is finished to do this, so I will just keep working and know that it will all get done eventually.”

After the church report was completed and the researcher began analyzing the data for the dissertation, it was difficult to be patient with the need to proceed one step at a time. One comment is a good example of the impatience to find out the results all at once: “Why does it take so long for every aspect of every question? Why does it have to be so tedious? Well, if I try to go fast, I will make mistakes.”

Perhaps the most important items recorded in the journal concerned the interpretation of data. Personal reflection reveals that had there not been numerous discussions with co-chairs the results would have been interpreted and presented, albeit unintentionally, in a biased and inaccurate manner. For

example, the researcher had initially coded the write-in comments and then had the second coder indicate the percentage of agreement. When a co-chair required that the comments be coded independently by the second coder, the researcher was frustrated with the delay that caused. One comment was "I do not want to wait and have the coder do the coding independently. I have used the percent of agreement before. I can see the point, though. . . " After the coding had been re-done, one entry notes, "I can see it changed the results, so I am glad for having done it. It made the analysis more accurate." The researcher was again frustrated initially with the next draft with the necessity to go back and re-categorize all the comments, adding a category regarding whether the comments were relevant to the topic or not. Again, it was worth it, even with all the extra work, because it dramatically improved the accuracy. One comment was, "I hope this is the last time I have to re-do this piece but if there is something else wrong, I want to find it out and fix it." Somewhere along the way, the researcher developed a degree of patience, an essential quality for one who wishes to conduct quality research.

The process of analyzing data and interpreting the results was lengthy and involved numerous emails and telephone conference calls between the researcher and the co-chairs. It felt at times to the researcher that the discussions were obstructive but personal reflection always revealed the accuracy of the co-chair's comments and perceptions.

In sum, the deep interest in the subject was a great benefit to the researcher in conducting the current study in that it provided motivation and the

patience to undergo a lengthy, detailed process. However, it also created a threat to the validity of interpretations that were made regarding both the qualitative component of the study as well as statements relating findings of the current study to previous research. It was difficult not to see the results as indicating the causal linkages that were predicted. The researcher experienced in a very meaningful way the benefits of extensive collegial discussion, especially when topics of personal interest are involved. Recording personal reflections after engaging in discussions helped work through and resolve many questions and helped clarify thinking that became, at times, muddied by intense personal interest.

Threats to External Validity

Threats to external validity in the current study included population validity. The utilization of one church congregation from which to draw the sample constituted a threat to population validity, and it is recognized that findings of the current study may not be generalizable to churches of other denominations or to churches differing significantly from the congregation utilized in the study. The potential inability to generalize findings beyond the church setting to the everyday world is an even larger threat to ecological validity, but unavoidable due to study design.

The threat of self-selection or “volunteer bias” (Bordens & Abbott, 2004, p. 122) is of particular relevance to the current study. Rosenthal and Rosnow (1975) have reported that persons who volunteer for research often tend to be more social than do non-volunteers. It is possible that individuals who were less

social could have declined to participate. An attempt was made to minimize the potential effects of volunteerism by emphasizing the critical need for participants with social anxiety.

Regarding the potential threat to the trustworthiness of findings (Lincoln & Guba, 1985), or legitimation threats pertaining to the qualitative component of the study (the extended response questions), prolonged engagement was inherent in study design, in that the researcher had approximately 29 years of experience in the church setting, as well personal experience with being shy. Typically, the purpose of prolonged engagement is to ensure, to the extent possible, that the researcher has sufficient experience with the phenomenon or culture under investigation (Lincoln & Guba, 1985).

Another aspect of study design is that the researcher had given the subjects comprising the study much thought whereas participants were asked to comment about situations to which they may not have given much thought. Had the participants been allowed to reflect on the questions for a period of time before responding, more depth and breadth of responses would likely have been obtained.

Throughout the study, the researcher attempted to maintain awareness of the possibility of personal bias potentially distorting the findings. As Lincoln and Guba (1985) state, ". . . awareness [of that possibility]. . . is a great step toward prevention" (p. 304). Although the researcher was removed from the data collection process and there was no personal interaction with the participants, the researcher recognized the potential for personal beliefs and assumptions to

influence interpretations. The reflective journal and discussions with colleagues and peers helped reduce that possibility.

Several methods were utilized to enhance researcher legitimation. According to Patton (1990), triangulation is ". . . the combination of methodologies in the study of the same phenomena or programs" (p. 187). In an effort to obtain maximal legitimation, negative case analysis was utilized. As Patton (1990) explains, "Where patterns and trends have been identified, our understanding . . . is increased by considering the instances and cases that do not fit within the pattern" (p. 463). Particular attention was given to responses to thoughts, feelings, and behavior comments that seemed to indicate shyness operates differently in the church setting than in the everyday world. In fact, one third of the scenarios utilized in the study (behaviors, thoughts, and feelings during worship services and when performing a job) were subjected to negative case analysis. These scenarios included individuals with high BFNE scores but comments inconsistent with the Clark and Wells (1995) model.

Comments from individuals with high levels of shyness that were consistent with the Clark and Wells (1995) model were (when interacting with authority figures),"This person is better than me (although I know they are not), and I need their approval." and (regarding social occasions), "I do not go to many just social things because it is hard to make small talk and I feel awkward standing around." Inconsistent comments included statements such as thinking when conducting a job, "I hope I can make all welcome, comfortable and make

them smile." and (when in a group) "What encouraging words can I speak? How can I make this a moment filled with purpose?"

Individuals with low-to-minimal levels of shyness reported that when with friends they would " . . . visit, say hi, what are you up to, ask how are things" and they would be "having fun and joking around" at a social occasion. In some cases, individuals with low-to-minimal levels of shyness made comments consistent with the Clark and Wells (1995) Model. One participant said that when teaching a class "Most of the time I felt uncomfortable in front of the class leading the discussion even though I felt I was prepared."

Benefits of mixed methods research. As Onwuegbuzie and Leech (2004, p. 770) state, the "ability to extract significance from . . . data is compromised by the limitations inherent in the method of extraction." Onwuegbuzie and Leech contend that the Interpretation of significant findings in both quantitative and qualitative research can be enhanced by mixed methods data analyses. The interpretation of significant findings in the quantitative portion of this study was undertaken sequentially (Onwuegbuzie & Leech, 2004). The qualitative data were utilized to ascertain the level of consistency among the thoughts, feelings, and behaviors of individuals with high levels of shyness, as measured quantitatively by the BFNE-S, and a well-established theory, the Clark and Wells (1995) model of social phobia.

From the inception of the current study, the researcher planned to utilize mixed methods techniques. Collins, Onwuegbuzie, and Sutton (2006) conceptualize mixed methods research as involving 13 steps, beginning with ". . .

determination of the goal of the study . . . [and ending with] ". . . writing the final report, and . . . reformulating the research questions (p. 69-70)." The goals of the study were to extend the usefulness of a well-researched theory as well as to explore the psychometric properties of an extensively used measure of shyness in a previously unexplored setting. A quantitative measure was necessary to ascertain which individuals had high, medium, and low-to-minimal levels of shyness. Quantitative measures were also utilized to gauge the nature of the environment and the effect of characteristics of that environment on participants. Comparisons of findings with existing theory were made possible through qualitative analysis.

Implications for Future Research

To explore further the validity of scores obtained with the BFNE-S, it would be useful to conduct a study in different environments and seek to understand individuals in those environments with high and low fear of negative evaluation. The data could be used to determine whether the environment was categorized as having high or low potential for negative evaluation. As the current study has indicated, assumptions can be inaccurate. It should also be helpful to include the State-Trait Anxiety Inventory (Spielberger, et al, 1970) as one of the measures in a future study comparing the effect of different environments on shyness. Trait anxiety could be controlled for statistically.

Future research regarding the church setting should utilize a sample consisting of more individuals who are not long-term members and regular attenders. As stated previously, had the sample in the current study included

fewer individuals with a long-term relationship with the church, the results might have been substantially different. Although the relationship between fear of negative evaluation and length of membership was not strong, participants who were relatively new to the church might have reported feeling less accepted and the open-ended comments for individuals with medium levels of fear of negative evaluation might have been more consistent with the Clark and Wells (1995) model. Had such been the case, they might have thought, felt, and acted more like a person with a high level of shyness. Exploration of the 10 situations known to be difficult for shy people would also be helpful. Interviews could be conducted or surveys could be administered to explore why individuals with high levels of shyness feel uncomfortable in such situations and what has either helped alleviate their levels of discomfort or what they believe would provide a greater degree of comfort. Finally, a follow-up study involving in-depth interviews over a fairly long period of time with shy individuals could provide deeper understanding of the functioning of the Clark and Wells (1995) model of social phobia.

Additionally, future studies could probe how people use their religious beliefs to help them cope with difficult situations, in particular shyness. It is possible that coping mechanisms are different for individuals with high levels of shyness compared to those with medium or low levels. It would also be interesting to explore if strong religious beliefs change an individual's perspective about shyness and about being evaluated.

Based on results of this study (Research Question 9), a study to gauge the effect on shyness of a shift in attention from self to others or the situation at hand might provide guidance for treatment. A long-term study could be undertaken with participants keeping diaries of how they felt when they were able to concentrate on other people rather than themselves when they were engaged in social situations. Analyzing the comments in the diaries could provide information on what kinds of things help individuals focus on others, rather than self.

In concert with keeping diaries, or perhaps in a separate study, individuals could wear an unobtrusive device to record physiologic responses, such as heart rate, when in various situations.

Conclusions

The field of measurement has benefitted from the current study in that it provides additional evidence regarding the generalizability of scores yielded by the BFNE-S across settings. The psychometric properties of the BFNE-S were found to be robust in a setting not utilized in previous studies. The BFNE-S can be used with greater confidence as a result of the current study with older adults operating in a church setting. The BFNE-S can facilitate research and hence extend theory. Confirmatory factor analysis revealed a good, although not optimal, fit for the one-factor model of shyness.

The current study has provided evidence supporting one of the most well-researched theories of shyness. Research indicates shyness can be affected by many environmental conditions (Henderson & Zimbardo, 2001). Two of the most

critical environmental factors are fear of negative evaluation (Weeks et al., 2005) and self-focus (Spurr & Stopa, 2002). Shyness has been studied most often either in the highly competitive environment of college, where evaluation is central, or in clinical populations where self-focus is obviously paramount. Descriptions from shy individuals of their thoughts, feelings, and behaviors in the church setting were compared with descriptions in previous research. Comparison of participant responses with existing theory, which is based upon data collected in traditional settings, such as the university, helped gauge the extent of convergence with theory.

Results have suggested that, for individuals with high levels of shyness, shyness manifests itself in the same way in an environment different than the ones utilized in most previous research. We can continue research with a greater degree of confidence that existing theory is robust and that it is generalizable to many settings. This information should help inform future research in this area and assist with efforts to alleviate what is a significant social problem for approximately 40% to 50% of the population at some time in the life span (Carducci, 2000; Zimbardo et al., 1974). Furthermore, results of this study lend support to the utility of urging shy individuals, in therapy or when utilizing self-help methods to overcome shyness, to learn to focus their attention on the task at hand rather than on the self when entering a social situation. For all levels of shyness, nearly all of the reported thoughts when involved in two specific tasks (attending worship services and when performing a volunteer job) were focused on the task or on other individuals, rather than self. It is the focus

on self when entering a social situation that sets the cycle of negative thoughts and feelings described in the Clark and Wells (1995) model.

The field of education has benefitted from the current study because shy behaviors can significantly interfere with performance in school (Collins, 1996). This study suggests that for all levels of shyness, shifting the focus of attention from self to others or the task at hand did help individuals exhibit less shy behaviors and have more positive thoughts, both of which should benefit shy students. As Collins noted, being able to participate in discussion and feeling free to ask questions are important in education. Shy students of all ages could be particularly encouraged to change their focus of attention from self to the task at hand or others. It is hypothesized that doing so might help reduce anxiety and enhance learning.

As mentioned previously and displayed in Table 41, two salient characteristics of the sample should be kept in mind when considering results. A large percentage of survey respondents were older (51% were 50 or more years of age, with 77% being 40 years of age or more) and were long-time members of Church A (46% had been members for five or more years). It seems likely that these two findings account for at least some of the disparity between mean scores on the BFNE-S in this study compared to previous research and the expected difference between fear of negative evaluation inside and outside the church setting. Research indicates that most individuals experience a period in their lives when they are shy (Carducci, 1999). Further, “many of those who are not shy now report being shy at some time in the past” (Zimbardo, 1977, p. 5). It

is hypothesized that had the sample included more people under 40 years of age, there would have been a larger percentage of individuals reporting moderate or high levels of shyness, although the difference between shyness inside and outside the church might have remained similar. In the sample utilized in the current study, age was negatively correlated with levels of shyness. That is, older individuals tended to reported lower levels of shyness than did younger individuals in this sample. Specifically, the correlation between the BFNE-S, General, and age was $r = -.19$, $p < .01$. The correlation between the BFNE-S, Context-specific, and age was $r = -.22$, $p < .01$.

Regarding the effect of membership on results, when one has been a member of any organization for five or more years, one has presumably made at least a few relatively close friends and many acquaintances and has attained a certain level of comfort when participating in activities of that organization. The relationship between length of membership and comfort outside the church setting was not statistically significant ($r = .06$, $p > .05$), nor was the relationship between length of membership and comfort inside the church setting ($r = .09$, $p > .05$). In contrast, the relationships between length of membership and number of acquaintances and number of close friends were, however, statistically significant ($r = .30$, $p < .01$ and $r = .37$, $p < .01$, respectively). Again, had the sample included a larger segment of individuals who were not members and/or who had been attending regularly for only a short period of time, the findings might have been more similar to those that were expected. For example, if more of the participants had been non-members who had been attending only a few weeks,

there might have been more of a difference between perceived levels of comfort and acceptance inside and outside of the church.

The foregoing limitations of sample characteristics notwithstanding, the current study has provided additional evidence regarding the psychometric properties of one of the most commonly employed measures of shyness, the BFNE-S, in a setting not utilized in previous studies. The confirmatory factor analysis exhibited an acceptable level of fit for the one-factor model of shyness. Finally, analysis of participant responses regarding their thoughts, feelings, and behaviors in situations known to be difficult for shy people has provided evidence supporting one of the most well-researched theories of shyness, the Clark and Wells (1995) model of social phobia. The study has also provided implications and suggestions for future research into a significant social problem that affects between 40% and 50% of the population at some time in the life span (Carducci, 2000; Zimbardo et al., 1974).

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APPENDICES

Appendix A: **Personal Concerns and Issues Survey**

Your help is needed for a research study that will:

- assist in evaluating the needs of the congregation,
  - be part of a doctoral dissertation for a member, and
    - lay the foundation for future research

We are asking visitors, attendees and members to take this survey, which has three sections.

Section A contains questions about our church that are not part of the dissertation research. Sections B and C, the dissertation research, will explore how feeling accepted affects relationships at church, especially for people with social anxiety. *Your help is vital, even if you have no social anxiety at all.* Future research will build upon the findings from these three sections of the survey.

The University of South Florida Institutional Review Board requires that I keep your study records confidential. All records will be kept secure in my home office. No names or any other identifying information will be used in any report. The four dissertation committee members (professors at the University of South Florida) and the senior Pastor at _____ will see the results of the study but they will not know which individuals gave the responses.

If members of the Institutional Review Board or with the Department of Health and Human Services need to see the study records, by law, they must keep the records completely confidential.

Taking the survey may help you understand more about yourself. There are no known risks in taking the survey but if you experience emotional discomfort, you will be given the name of a qualified counselor you may contact.

We may publish what we learn from this study. If we do, we will not let anyone know your name or anything else that would let people know who you are.

If you have any questions problems regarding this study, please email me at _____or call me at _____ (before 8:00 p.m.).

You should not feel that there is any pressure to take part in the study. If you want to take part, please turn the page.

Thank you very much for taking time to share your thoughts.

Appendix A: Continued

SECTION A

Section A is **not** part of the dissertation research. Answers to these questions will be in a separate report for the church.

1. Are you a member of the Leadership Team? (Please circle) Yes. No.

2. How did you hear about this survey? Please check only one option.

	Staff meeting
	A staff member
	A Leadership Team member
	Sunday School
	Wednesday night service
	Sunday morning service
	Other (Please explain)

3. What could our church do to be a more loving church for you?

_____

_____

_____

_____

_____

_____

4. What is your greatest need with which our church could help you?

_____

_____

_____

_____

_____

If you wish, you may submit your survey now.
We hope you will continue with Section B, which should take about 20 minutes.

Appendix A: Continued

SECTION B

Instructions: Please answer the questions below thinking about situations in general outside the church. There are no right or wrong answers. The goal is to find out how you as an individual feel.

Not at all like me	Slightly like me	Moderately like me	Very like me	Extremely like me
1	2	3	4	5

Statement	Rating
1. I worry about what other people will think of me even when I know it does not make any difference.	
2. I am concerned if I know people are forming an unfavorable impression of me.	
3. I am frequently afraid of other people noticing my shortcomings.	
4. I often worry about what kind of impression I am making on someone.	
5. I am afraid others will not approve of me.	
6. I am afraid that people will find fault with me.	
7. Other people's opinions of me bother me.	
8. When I am talking to someone, I worry about what they may be thinking about me.	
9. I am usually worried about what kind of impression I make.	
10. If I know someone is judging me, it has a big effect on me.	
11. Sometimes I think I am too concerned with what other people think of me.	
12. I often worry that I will say or do the wrong things.	

Appendix A: Continued

SECTION B - Continued

Instructions: Please answer the questions below thinking about situations in general inside the church. There are no right or wrong answers. The goal is to find out how you as an individual feel.

Not at all like me	Slightly like me	Moderately like me	Very like me	Extremely like me
1	2	3	4	5

Statement	Rating
1. I worry about what other people will think of me even when I know it does not make any difference.	
2. I am concerned if I know people are forming an unfavorable impression of me.	
3. I am frequently afraid of other people noticing my shortcomings.	
4. I often worry about what kind of impression I am making on someone.	
5. I am afraid others will not approve of me.	
6. I am afraid that people will find fault with me.	
7. Other people's opinions of me bother me.	
8. When I am talking to someone, I worry about what they may be thinking about me.	
9. I am usually worried about what kind of impression I make.	
10. If I know someone is judging me, it has a big effect on me.	
11. Sometimes I think I am too concerned with what other people think of me.	
12. I often worry that I will say or do the wrong things.	

Appendix A: Continued

SECTION B - Continued

Instructions: Please answer the questions below thinking about situations in general outside the church.

Very Comfortable	Comfortable	Neither	Uncomfortable	Very Uncomfortable
1	2	3	4	5

Situation	Rating
1. Being the focus of attention	
2. Large groups	
3. Small groups	
4. Authority figures by virtue of knowledge (intellectual superiors, experts) or by virtue of role (police, teachers, superiors at work)	
5. Social situations in general	
6. New interpersonal situations in general	
7. Strangers	
9. Situations where assertiveness is required (e.g., when complaining about faulty service in a restaurant)	
9. Being evaluated or compared with others (e.g., when being interviewed, when being criticized)	
10. An opposite sex group or a member of the opposite sex	

Appendix A: Continued

SECTION B - Continued

Instructions: Please answer the questions below thinking about situations in general inside the church.

Very Comfortable	Comfortable	Neither	Uncomfortable	Very Uncomfortable
1	2	3	4	5

Situation	Rating
1. Being the focus of attention	
2. Large groups	
3. Small groups	
3. Authority figures by virtue of knowledge (intellectual superiors, experts) or by virtue of role (police, teachers, superiors at work)	
4. Social situations in general	
5. New interpersonal situations in general	
6. Strangers	
7. Situations where assertiveness is required (e.g., when complaining about faulty service in a restaurant)	
8. Being evaluated or compared with others (e.g., when being interviewed, when being criticized)	
9. An opposite sex group or a member of the opposite sex	

Appendix A: Continued

SECTION B – Continued

Instructions: Please answer the questions below thinking about situations in general outside the church.

Very Accepted	Accepted	Neither	Unaccepted	Very Unaccepted
1	2	3	4	5

How accepted do you feel . . .	Rating
1. By people in general	
2. By friends and acquaintances	
3. When you meet someone you do not know	
4. By yourself	
5. By God	

Using the same scale, how accepted do you feel in general . . .	1-5
6. At your place of work/business (If you are not employed outside the home, please respond based on how you feel when you go into a relatively formal setting, like renewing your driver's license)	
7. With your family at home	

Appendix A: Continued

SECTION B – Continued

Instructions: Please answer the questions thinking about situations in general inside the church.

Very Accepted	Accepted	Neither	Unaccepted	Very Unaccepted
1	2	3	4	5

How accepted do you feel . . .	Rating
1. By people in general	
2. By friends and acquaintances	
3. When you meet someone you do not know	
4. By yourself	
5. By God	

Appendix A: Continued

SECTION B – Continued

Instructions: Please answer the following questions by circling the option that best describes you.

1. How long have you been a member of this church?						
Not a member	Less than one year	2 to 3 years	4 to 5 years	5 to 10 years	10 to 20 years	Over 20 years

2. For how many years of your life have you been a member of any church?						
Not a member	Less than one year	2 to 3 years	4 to 5 years	5 to 10 years	10 to 20 years	Over 20 years

3. Approximately how many times a month do you attend worship services?				
0	1 to 2	3 to 4	5 to 8	8 to 12

4. Approximately how many times a month do you participate in church activities outside worship services?			
0	1 to 2	3 to 4	5 to 10

5. Approximately how many close friends do you have at this church?				
0	1 to 2	3 to 4	5 to 10	More than 10

6. Approximately how many acquaintances do you have at this church?				
0	1 to 2	3 to 4	5 to 10	More than 10

7. Please circle one option for each of the three categories below.				
GENDER		AGE IN YEARS		RACE/ETHNICITY
Male		Less than 21		Caucasian
Female		21 to 30		African American
		31 to 40		Hispanic or Latino
		40 to 50		Asian
		50 to 60		American Indian or Alaskan Native
		60 to 70		Multiracial
		70 plus		

Appendix A: Continued

Section B – Continued

For the following questions, please circle the correct option

1. Do you consider yourself to be a shy person?

   Yes

   No (If no, skip to #4)

2. If yes, have you always been shy?

   Yes

   No

3. If you are currently shy, is that in most or only in some situations?

   Most situations

   Some situations

4. Was there ever a prior time in your life when you were shy?

   Yes

   No

5. How desirable is it for you to be shy? (Please circle one.)

   Very undesirable Undesirable Neither Desirable Very desirable

Thank you very much for taking time to answer Section B.
We hope you will continue with the next section, which should take about 20 more minutes.

Appendix A: Continued

SECTION C

In the spaces provided, please describe what you most often do, think and feel in the church situations below. Every individual is different and there are no right or wrong answers. *Please provide as much detail as you can. Feel free to write on the back or to use an extra sheet of paper if you need more space*

WORSHIP SERVICES

If I were with you in a typical church service, what would I probably see you do?

_____

_____

_____

_____

_____

_____

What are some of the thoughts you might be having during a worship service?

_____

_____

_____

_____

_____

_____

_____

Please describe how you would be feeling.

_____

_____

_____

_____

_____

_____

_____

Appendix A: Continued

SMALL GROUP GATHERINGS

(for example, Sunday School class)

If I were with you in a small group gathering (like Sunday School, what would I probably see you do?

_____

_____

_____

_____

_____

_____

What are some of the thoughts you might be having?

_____

_____

_____

_____

_____

_____

_____

Please describe how you would be feeling.

_____

_____

_____

_____

_____

_____

SECTION C – Continued

SOCIAL EVENTS
(LIKE WEDDINGS, BABY SHOWERS, HOLIDAY CELEBRATIONS, ETC.)

If I were with you at a social event, what would I probably see you do?

_____

_____

_____

_____

_____

_____

_____

What are some of the thoughts you might be having?

_____

_____

_____

_____

_____

_____

_____

Please describe how you would be feeling.

_____

_____

_____

_____

_____

_____

_____

Appendix A: Continued

CONTACTS WITH FRIENDS AND ACQUAINTANCES AT CHURCH

If I saw you with some of your friends and acquaintance, what would I probably see you do?

_____

_____

_____

_____

_____

_____

_____

What are some of the thoughts you might be having?

_____

_____

_____

_____

_____

_____

_____

Please describe how you would be feeling.

_____

_____

_____

_____

_____

_____

Appendix A: Continued

SECTION C - Continued

INTERACTION WITH AUTHORITY FIGURES AT CHURCH
(E.G., PASTOR, STAFF, GROUP LEADERS)

If I saw you with people in authority at church, what would I probably see you do?

_____

_____

_____

_____

_____

_____

_____

What are some of the thoughts you might be having?

_____

_____

_____

_____

_____

_____

_____

Please describe how you would be feeling.

_____

_____

_____

_____

_____

_____

Appendix A: Continued

PLACES OF SERVICE

(like being a Sunday School teacher or a greeter)

If I saw you doing your designated job at church, what would I see you do? If you do not currently have a designated job, please indicate that.

_____

_____

_____

_____

_____

_____

_____

What are some of the thoughts you might be having while doing your job?

_____

_____

_____

_____

_____

_____

_____

Please describe how you would be feeling.

_____

_____

_____

_____

_____

Is there anything you would like to say about this survey or anything else you would like to say?

_____

_____

_____

_____

_____

_____

_____

_____

_____

_____

Thank you so much for taking time to share your thoughts. It took a great deal of thought to answer the questions, and your willingness to help is sincerely appreciated.

Appendix B

Formula for Effect Size

(Dunlap, Cortina, Vaslow & Burke, 1996)*

Effect size = $tc[\sqrt{(2(1-r))/n}]$, *tc* is the *t*-statistic from the dependent or correlated *t*-test and *r* is the correlation between the pretest and posttest measures. N is the number of pairs of scores for the group.

* Dunlap, W.P., Cortina, J.M., Vaslow, J.B., & Burke, M.J. (1996). Meta-analysis of experiments with matched groups or repeated measures designs. *Psychological Methods*, 1, 170-177.

Appendix C: Full Text of Write-in Responses

WORSHIP - DO	WORSHIP - THINK	WORSHIP - FEEL
attentive to what is going on and worshipping.	I wish I were closer to God. I wish my family were here with me.	Sometimes really into the service and involved in worship. At other times, sad, depressed, and disappointed in my relationship with God. Worried about how to overcome these feelings.
During the songs, eyes closed, hands raised. Sometimes jumping or dancing, sometimes quietly praying. Sometimes crying, sometimes shouting. During the part where the word comes forth, I would be listening quietly, with my bible in hand and usually taking notes on the sermon.	"God I love you so much and I need you." " Pour out your presence on your people." "If we would only catch a glimpse of who he is it would change the way we really worship."	It depends on the day and what I am going through. I am usually feeling whatever I have been going through that week. (Excited, discouraged, etc). Many times I am feeling thankful to be in his house and fortunate to be praising him. A lot of times I feel this even when I am happy or when I have tears rolling down my face. I just am thankful I can be there.
Following the leader singing, worshiping, reading the Bible	Considering God, thinking what my part in His plan I have, maybe drifting to other thoughts sometimes	Usually good spirits, but sometimes I can be negative or sullen if I have been experiencing down times or life problems
Greet everyone as I come in. Sit down closer to the back of the sanctuary. Read the bulletin just before service begins and greet individuals around me. During the music portion of the service I praise the Lord by clapping my hands, lifting my hands, and focusing on the Lord. I am not a great singer so I would sing softly. I would then engage my mind, body, soul and spirit in the message being delivered. Once the service ends I would greet more individuals and return home.	Attempting to hear what the Lord wants to speak to me through the message. What can I do to help others in the congregation. Studying the congregation to learn the age and ethnicity of those that are a part of the church. Ways to improve the assimilation of newcomers.	Joyful and contemplative.

Greet others, see that my family members are in their respective places of attendance/service, and give my undivided attention to the person who is teaching or preaching.	I pay attention to the words of the songs. In particular, there is much language used that the un-churched do not understand, and, there are terms used that even the churched may not fully understand. So, there is the assumption that the songs are understood just by participation, but I think this is a mistake.	I feel very good and church and look forward to attending, and cherish the opportunity for my family to also receive from the services.
Not a whole lot. I was raised in a very very strict church which frowned on any type of emotion involved in the worship service. I am not at all accustomed to the way in which a Pentecostal worship service is conducted. That is not to say I do not value the service or am not actively participating in my own way. I am slowly but surely becoming adjusted to the different worship styles. I very much prefer what I have experienced at _____ to what I have experienced at _____ or _____.	I often times think of how the words and emotions of the message apply to my life. This sometimes is troubling because as a person that is just starting to walk with God again there are many things I need to change in my life (I am getting back to where God needs me to be though). I also focus on the spirit of the message, not just the literal application of it. I try to let the message take on a life of it's own and allow it to illuminate things in my life that need attention.	I would probably feel reserved and a little shy. I would also feel anything from sorrow to joy depending on the message and what it is saying to me.
Sing, occasionally raise my hands	Sometimes I am intimidated to worship at church because I worry that people are watching and judging. Sometimes I am able to break through and worship and other times I just struggle.	If I feel that there is tension at worship time or I'm confused about a comment that gets made, I am more likely to be intimidated to worship freely.
Sing, pray, lift my hands and praise God, listen to sermon, talk with a couple of people	How I need to come every week to be reminded of God's faithfulness, that I would like to get involved in some kind of group when I have time, so I could feel like a part of the church,	I feel pretty comfortable at this church, but I am a little anxious about making a good impression.

sing, pray, praise, clap, listen to the pastor preach. TRY to use sign language. Smile.	Praise and worship God. Ask God for forgiveness. "Concentrate, focus and listen -- don't get distracted with handsome brothers and pastor's wife's beautiful shoes and outfits." I should close my eyes, lift my head to the heavens, praise God, and forget everything around me.	I'd like to be able to focus solely on God & worship.
Sing, pray, raise my hands in worship, sit quietly and listen, read my Bible, read the words on the screens, speak to others sitting around me, write a check and put it in the collection plate, read the bulletin	Enjoying singing as a form of worship when the songs are familiar and melodically easy to sing. Enjoying praising and worshipping the Lord. Enjoying the freedom to worship in my own way. Enjoying the sermon and gleaning from it what the Lord has to say to me. Enjoying seeing the corporate worship and thinking how pleasing it must be to God. Enjoying the joyful spirit in this church and the desire to make the Holy Spirit feel welcome and able to do His work amongst the congregation. May notice a regular who sits around me missing and hoping and praying he or she is OK. May notice an uneasy spirit or something or someone feeling amiss and will pray. Pray that if there are any unsaved individuals in church the Holy Spirit will convict them of their need for Jesus in their lives and that day will be the day of their salvation. Concern for others in the congregation who are going through trials.	Happy to be in the presence of the Lord. Happy to be with Christian brothers and sisters. Intent and interested in hearing the Word. Possibly sad if a fellow Christian is sad. Weepy if the Holy Spirit touches me. Feelings can be mixed throughout any given service, but mostly deeply touched by the work of the Holy Spirit.
Singing, talking quietly to God, eyes open at times and closed at others.	Thanking God for getting me where I am and how I got here.	I come in at one level, get brought down mentally, and then lifted mentally and spiritually. I always feel better when I leave than when I arrive.

Sit quietly, make an occasional comment to the person next to me and be respectful while participating in the worship experience.	That the praise and worship and the sermon could each be shorter in general. I think that most people have about a 20 minute attention span and that a shorter service is not hindering to the Spirit, and that the flow of the Spirit takes the service longer (time-wise) less often than we think.	I feel there is a lot of emotionalism exhibited by many and that sometimes we cater to those people.
Stand when asked too,sing,clap,bow my head, greet people with a smile.	Wondering why I am not as close to the Lord as I should be. In a forgiving spirit. and focusing on the Teaching of the pastor.	uplifted by the end of the service.
Stand, clap, sing softly because I am not a good singer, cry and smile both.	How much I love God and how grateful I am for all he has done for me and my family. How I wish I could	A mixture, happy, sad, tender, excited, peaceful, mostly just happy.
worshipping, praying, thinking	wanting forgiveness for my weaknesses, wanting the Lord to be close to me.	hungry, sometimes so happy, other times kind of sad that I am not a better worshipper.

GROUPS

GROUP - DO	GROUP- THINK	GROUP - FEEL
being attentive to the teacher doing the lesson.	These people are so friendly and accepting.	Comfortable with this group of people.

Talk to those around me and try to make everyone feel comfortable and like they are part of the group.	"I wish these people would know the real me and that the conversation would not be such a surface conversation." "How can I help them where they are at?" "I wish I could share my situation, struggles, etc with them and they could know truly know where I was at in my walk with Christ." "I hope something about this conversation will challenge me to go deeper with God."	If I am able to be helping someone with their issues I feel good. However, usually the conversations are just surface and I feel like it is a waste of time or like we are being fake. I feel disconnected and lonely.
I tend to sometimes avoid social contact in small groups, I find I do not interact with certain others easily	I don't want to really be here, trying to find common ground of discussion, something to talk about	Possibly distant if I am avoiding contact, but if I am feeling interested in interacting with others, usually good
Engaging those around me in conversation so that I can learn about them. Once the study begins I would be listening intently.	How can I help others. Does God want me to share anything that would be of value to the small group setting.	Joyful and contemplative
Eager to participate, and much wanting to engage others in whatever activity we are doing.	An expectation of learning something new about God's Word, and either the strengthen of relationships or the making of new ones.	Good.

Attempt to interact a little but standing off to the side or in the back of the group.	I try to take the situation in. I would attempt to identify where if at all do I fit in with this group. I would also try to identify anything intelligent I may have to add to the situation. I tend to be more reserved with any more then one or two people present.	Content
Usually talk to one person at a time or sit quietly while others are talking.	I might have something to add to the subject, but I would not readily volunteer to share it unless I really felt that the Holy Spirit was prompting me to.	Very nervous about sharing my thoughts.
Making conversation with one person at a time, asking people questions	I want this person to like me.	A little anxious if I don't know the people, less anxious if I do know the people, but I am always a little anxious.
Listening more than speaking -- unless very comfortable with group and topic.	How long will this take? I want to be home --unless very comfortable with group.	Anxious.

It would be completely dependent on how well I knew the other members of the small group. If I don't know them, I would be quiet, reserved and generally uncomfortable. If I know them, I would be fairly comfortable, talkative, laughing, possibly touch another on the arm or shoulder, be interested in the others and what they have to say - generally outgoing.	If I don't know the people in the group, I would be listening to them talk, observing their demeanor and behavior, looking for clues as to the sincerity of the individuals, how they treat one another, etc. If I know the group members I would be relaxed, thinking about the strengths of the different individuals, enjoying the interactions, happy to be included.	In a group of people I don't know I'd definitely feel very uncomfortable, unsure, probably unhappy really as I don't particularly like making small talk with people I don't know. In a group of people I know, it would be the complete opposite. I would be happy, relaxed, enjoying the whole thing.
Standing or sitting quietly and surveying the room. Being polite and greeting others.	Observing others, how they are responding to the person talking. Listening to the speaker.	Content.
Listen, and contribute. I'm not shy about speaking up to clarify or offer input.	It would depend on the small group and what the topic of discussion would be.	This would also depend on the people and the topic.
Wont' raise my hand to give an answer. Quiet	afraid to open up,	I would be shy.

Usually sit at the back or edge and not say much.	Why don't I ever speak up? I had something good to say but now the time is past to say it and I will look weird	Usually pretty uncomfortable if we have to talk to each other much. Fine if we are just sitting and listening.
Depends.. If I am with other singles that I know I am talking some and helping if needed. If I am with people I don't know well, you won't see me do much of anything. I kind of blend in the background.	If comfortable-- I never want it to end. If not- can't want until it's over.	If comfortable.. glad, happy If not...uncomfortable, sad, fearful sometimes
SOCIAL - DO	SOCIAL - THINK	SOCIAL - FEEL
Talking with others and generally enjoying myself.	Happy to be part of the event.	Comfortable with the group of people at the gathering.
Helping, serving, talking to others.	"Why do I feel like I have no true friends here even though I know everyone in this room." "I am thankful for the people in my life but I wish we got together more than just at weddings, holidays, baby showers, etc."	I would probably be feeling very thankful for the people in my life yet lonely because we never really hang out outside of these events and I wish they walked through every part of life with me.

I would probably be walking around and trying to visit with others, eating, playing with my computer etc	Thinking about what I might talk about with someone to see what they are like	Good, maybe looking for something to do
Assisting with the set up of the event in any way that I can - chatting to everyone as I go. Engaging in conversation with those seated/standing around me.	How can I help those around me? What words of encouragement can I speak that would benefit the hearers? Make them feel accepted.	Comfortable
I would participate in whatever level is required, not stepping out to break the order that has been established by the program.	Hoping that the program is followed (e.g., getting done on time). As a man, these are formal necessitates that I don't derive much pleasure from. They have their place, it's just that they are not too exciting -- but the memory of it will remain special to me.	I'm there. Neutral.
Mingle with one or two people. Other then that I would probably be on the side or in the back.	Just observing and taking it all in.	It really depends on the event. I could be indifferent, engaged and happy, or engaged and anxious (I tend to get anxious in large groups).

I would be sitting quietly unless there was someone there that I felt comfortable to talk with, mostly if they initiated the conversation.	I wish I wasn't so uncomfortable to go up to someone and start a conversation.	Intimidated
Stick with people that I know and try to find someone to talk to.	I am uncomfortable if I don't have anyone to talk to or don't know very many people. I wish I didn't have to be here.	Anxious, bored
Sit at a table. Try hard to be social.	When can I leave to go home.	Anxious.
I would hope there would be someone there I know and would sit with that person. I would speak to others when spoken to, otherwise sit quietly. I do not like to be singled out, made to go up front, or otherwise have attention focused on me.	I would be uncomfortable if there was no one at the function I knew and be thinking I wish it would end so I could leave.	Alone and uncomfortable if there was no one I knew at the function.
Greet other people.	Happy. Polite.	Happy.

Socialize. Generally with people I know, but I would try to speak with people that I do not know as well.	That I like hanging out with my church friends.	Welcomed.
Either help with the cooking or clean up after a function.	Wondering why I am not in a group fellowshipping. so I stay busy.	Kinda depressed, yet I stay busy.
I do not go to many just social things because it is hard to make small talk and I feel awkward standing around.	I usually stand at the edge of the crowd and look for someone I know. I want to leave as soon as I can, usually I wish I had not come.	Lonely and weird. Very nervous and tense. Frustrated with myself.
not much unless helping with the event	depends on who I'm with and the event.	the same .. depends
FRIENDS - DO	FRIENDS - THINK	FRIENDS - FEEL
Greeting and talking with that person.	How friendly everyone is at this church.	Accepted.
Helping out in areas of ministry at the church. Busy going or doing something for others.	"Did I help everyone that needed me." Did I take care of all my responsibilities?" "Will someone please ask me how I am doing."	Needed, wanted, used
Visit, say hi, what are you up to, ask how are things	Nothing in particular	Good

Laughing, talking.	What encouraging words can I speak? How can I make this a moment filled with purpose?	Joyful, extremely comfortable
I would just be there. I probably would not be a wall flower but also would not be the center of attention.	My thoughts would probably be on the subject at hand.	That depends on what the subject at hand was. I could have a full gamut of emotions at this point.
I would be talking to them.		fairly comfortable
Talking and laughing	I love these people, and they love me.	Relaxed and happy
With friend: talk, laugh, listen, share, enjoy company. With Acquaintances: be polite, listen, agree, smile.	Friends: Want to make plans and spend more time with them. Acquaintances: Be polite, and proceed to my destination.	Welcome.
Speak to them, stand around and talk with them, laugh with them.	I would be happy to see my friends and happy to interact with them.	Happy
Greet everyone, smile.	Happy to be with friends.	Content.
Have fun and joke around.	That I enjoy these people's company.	Loved.
I would be keeping my self busy,I have not fit into a group of clickish people. Do I want too! No	Why can't I fit in.	Depressed, that's why I keep myself busy. I don't want to show how much it hurts.
Talk to them, stand around, usually asking about them rather than talking about me.	I am okay with people I know but still a little nervous and always wondering if I said the right thing.	With new people, I do better sometimes because the talk is just superficial.

helping, talking, playing around some	I want to make closer friends, but I am not sure how to do that. I am shy and struggle with accepting myself as I am. So I have a hard time thinking people really like me or want to be around me. So sometimes I wonder if people will ever really love me or just deal with me.	I always happy to be with my friends at church.
AUTHORITY - DO	AUTHORITY - THINK	AUTHORITY - FEEL
Talking freely and comfortably with that person.	Thinking how much I like and respect that person.	Comfortable and accepted.
Speaking with confidence. At this church, although I would be confident, I might also be defensive even though I wasn't trying to be.	"What am I going to get in trouble for this time? Will what I say be used against me? Do they really trust me? Are they judging me? Why does it always seem like a fight?"	Frustrated, fake, angry, hurt
Listening, find out what is happening, trying to see if I can be part of getting a problem solved	Thinking of ways to get a job done, troubleshooting, problem solving	Good
Say yes sir, no ma'am. Be talkative, friendly, and respectful. Attempt to learn about them and the church.	Am I making an idiot of myself? What are they thinking about me?	Cautious and somewhat comfortable
Respect and appreciation for their position that they fulfill. Thankful. Acknowledgement.	A privilege. I know that our leaders our busy, so just to have a few minutes of their time is precious, so I try to make my moments with them encouraging as I know they have a lot of them in fulfilling their position.	Good.
You would see me exhibit reverence towards a person of authority at church. I would allow them to sit before I did, walk ahead of me, and essentially just follow their lead.	I would probably be focused on the details of the persons words and actions. I often find it interesting to observe what people in authoritative people do in situations. In the business world I believe in the principle of casting the shadow of a leader. In a church role I observe what that shadow looks like.	Reverence, happiness, intimidation, and maybe some awe.
It depends on the situation. I would be comfortable talking with them if they weren't trying to be controlling and it was a friendly encounter.	I would probably be worrying about what kind of impression I was making.	Comfortable as long as there was no strife.

Be very nice and a little shy	This person is better than me (although I know they are not), and I need their approval.	Anxious
Be respectful. Ask questions. Comfortable --not intimidated.	How can I show my appreciation for their hard, intense work.	Comfortable.
Speak, chat briefly	Happy to see the individual.	The more contact I had had with the individual, the more comfortable I would be.
Greet them with respect.	Glad to be in their presents.	Welcome, accepted.
Speak with them respectfully and honestly.	It would depend on the situation. I am not confrontational, so it would take something unusual to get me to "rock the boat".	It depends on the person. The less direct involvement I have with the person, the less likely I am to think that my input will make a difference in the decision making process.
Listen, may say something casual and respond with a few words.	None	Okay, at this point as long as they are not degrading me
I would ask whatever I needed to and then say thank you and probably walk away.	I do not want to bother them. They probably do not even know my name.	Nervous and not very comfortable.
not much.. I don't talk much to people I don't know well.	Not sure	Not sure

JOB - DO	JOB - THINK	JOB - FEEL
Teaching Sunday School.	Most of the time I felt uncomfortable in front of the class leading the discussion even though I felt I was prepared.	Anxious and uncomfortable.
Working with people, interacting with them, praying with them, giving them answers, helping lead them to the right resources, etc.	I love what I do.	Happy, thankful for the opportunity to help out, valued
Coordinating events, administration, helping with set up, greeting individuals, teaching, praying, connecting newcomers to the church.	Am I doing everything as God has intended me to do it? How can I do it better more effectively? Will it make a difference in the lives of others?	Joyful, focused, stressed (sometimes), fulfilled.
Full bore. Serious when the time calls for it, and cutting up when the time is appropriate. Engaged!	Reaching the goal by the prescribed time; satisfying the action items.	Fulfilled, and happy to being doing my part. Satisfaction comes from completion of the tasks/project.

Be attentive to the needs of the people I was serving.	I would be focused on the task at hand.	Dutiful
Working in the kitchen	I would enjoy serving.	Happy to be able to help.
I taught a class of teenage girls, and I loved leading a discussion with them.	I can make a difference in these young lives. I am so thankful to have this opportunity.	A little nervous, but fulfilled.
Greeting.	Hope I can make all welcome, comfortable and make them smile.	Happy.
Interacting with individuals, depending on the situation there could be laughter or tears, touching the person on the shoulder or arm.	Concern for the individual and what he/she might be experiencing. What can I do to help? Careful not to do or say the "wrong" thing.	Depends on the situation - possibly happy or possibly sad, possibly comfortable or possibly uncomfortable.
Something with my hands and using my life experiences.	Glad I could help someone.	Happy.
Interact with people. Follow instructions. Offer my input when it is appropriate.	That we need more people that see service as something that needs to be put into action.	That there is a lot more potential for this ministry to grow than what we are experiencing.
Be a blessing to the children,	none	just a joy to be helping with the children
Greeting people at the door as they come in.	I hope they like our church and we make the feel comfortable.	Fairly comfortable because I have done this for a while.
Singing.. I'm in the choir, and helping where needed.. I am part of the singles leadership team.	When I sing I try to picture the Lord standing in front of me, it helps me focus on Him and to feel close to Him.	when singing.. I love it, joy ,peace ,closeness to the Lord. I never want the music to stop.

Appendix D. Number and Percent of Missing Data

Research Question	Analysis	Missing Data for BFNE-General	Missing Data for BFNE-Context-specific
(1) What are the psychometric properties of the BFNE-S, General and Context-specific, i.e., the church?	(A) Descriptive statistics and Cronbach alpha for scores from the BFNE-S, General and Context-specific. (B) Confirmatory factor analysis for scores from the BFNE-S, General and Context-specific.	(A) Descriptives – 13 (5%) Cronbach – 14 (6%) (B) CFA, 1-factor and CFA, 2-factor – 40 (17%)	(A) Descriptives – 7 (3%) Cronbach – 8 (4%) (B) CFA, 1-factor and CFA, 2-factor – 40 (17%)
(2) What is the difference in perceived fear of negative evaluation in the church setting compared to the non-church setting?	A dependent samples *t*-test to examine differences in means between BFNE-S, general and context-specific versions .	18 (8%)	18 (8%)
(3) What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for males and females?	A repeated measures ANOVA to compare perceived FNE for males and females in the church setting compared to the non church setting.	40 (17%)	40 (17%)
(4) What is the difference in perceived fear of negative evaluation in the church setting compared to the non church setting for individuals of different races?	A repeated measures ANOVA to compare perceived FNE for Caucasians, African Americans, Hispanics, and persons of multiracial background in the church setting compared to the non church setting.	37 (15%)	37 (15%)

Appendix D (Continued)

(5) What is the difference in perceived acceptance between people inside and outside the church setting?	(A) Descriptive statistics for the items on the perceived acceptance checklist, outside and inside the church setting. (B) A dependent samples *t*-test for the difference in levels of perceived acceptance by people inside and outside the church setting.	(A) 9 (4%) B) 7 (3%)	(A) 6 (3%) (B) 7 (3%)
(6) What is the difference in self-reported levels of comfort outside the church setting and inside the church setting?	A dependent samples *t*-test of the difference between mean levels of comfort in the general setting and in the Context-specific setting (10 situation checklist)	19 (8%)	16 (7%)
(7) To what extent do Context-specific issues relate to self-reported levels of fear of negative evaluation?	A multiple regression for fear of negative evaluation using length of membership, regularity of attendance, number of activities participated in per month, and number of close friends as predictor variables	21 (9%)	21 (9%)
(8) How do shy people typically think, feel, and behave in an environment hypothesized to have less fear of negative evaluation and self-focus?	Percentage of thoughts, feelings, and behaviors for individuals with high levels of shyness in the church setting that were consistent with the Clark and Wells (1995) model.	0	0
(9) To what extent is self-reported fear of negative evaluation associated with attentional focus upon self and negative quality of thought in the six church situations?	(A) One-way ANOVA for focus of thought data and scores from BFNE-S, Context-specific. (B) One-way ANOVA for quality of thought data and scores from BFNE-S, Context-specific.	0	0

ABOUT THE AUTHOR

Freda Watson received a Bachelor's Degree in Psychology from the University of South Florida in 1999 and an M.A. in Curriculum and Instruction, with an Emphasis in Measurement and Research, from the University of South Florida in 2002. She entered the Ph.D. program at the University of South Florida in 2002.

While in the Ph.D. program, Ms. Watson was active in research. She has coauthored several publications and made several paper presentations at national and regional educational research associations. Her primary research interests are shyness, Christian growth, families in poverty, and mixed methods research.