

THE SCHOOL COUNSELING OFFICE ENVIRONMENT EVALUATION: AN  
INSTRUMENT DEVELOPMENT STUDY

by

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## ABSTRACT

JOSEPH ANTHONY ELIZONDO. The School Counseling Office Environment Evaluation: An Instrument Development Study  
(Under the direction of DR. CLARE MERLIN-KNOBLICH)

In this instrument development study, I sought to develop and validate the School Counseling Office Environment Evaluation (SCOFFEE), a measure of the therapeutic nature of a school counseling space. Using the theory of Supportive Design, I conducted a literature review to establish the first set of items for the SCOFFEE, which was then reviewed by experts in the field of school counseling and school counseling instrument development ( $N=5$ ). I then conducted a pilot study with practicing school counselors ( $N=166$ ) and refined the instrument. I conducted a primary data collection ( $N=264$ ) with practicing school counselors and analyzed results by conducting a confirmatory factor analysis and by using Item Response Theory to examine each item. Results indicated that the SCOFFEE can be best understood as two distinct tools: the SCOFFEE Belief Questionnaire, which may be used to evaluate the elements present in a school counseling office, and the SCOFFEE Inventory, which may be used to evaluate school counselor beliefs about the elements of their school counseling spaces. These SCOFFEE instruments can be used together or separately to help researchers to measure the discrepancy between school counselor beliefs about space and where school counselors work. Individually, the SCOFFEE Beliefs Questionnaire can be used to compare school counselor beliefs with other instruments to examine relationships between these beliefs and other school counselor traits. In addition, the SCOFFEE Inventory provides researchers with an opportunity to control variables when conducting research in school counseling settings, to provide an effective description of school counseling spaces, and to also examine relationships between school counselor or student traits while comparing those results to what is and is not present in the school counseling space.

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## DEDICATION

This dissertation is dedicated to my wife, Stephanie, who has a special way of making me feel like I can do things beyond any of my own expectations (like this), and who has again and again sacrificed so much to see me succeed. It is also dedicated to my sweet dog Betsy for being my study buddy through every late night (of which there were many), and to my family and friends that I have missed.

Finally, I dedicate this dissertation to my grandmother, Maria Consuelo Yeomans, who fought so hard and was limitless in her love for her family. In honor of her courageous fight with Alzheimer's, I ask you to call someone you love, and tell them that you love them.

“If you’re after getting the honey, then you don’t go killing all the bees.”

-Joe Strummer, The Mescaleros, *Johnny Appleseed*

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## LIST OF ABBREVIATIONS

CFA: Confirmatory Factor Analysis

CFI: Comparative Fit Index

GPCM: Graded Partial Credit Model

ICC: Item Characteristic Curve

IRT: Item Response Theory

RMSEA: Root Mean Square Error Approximation

SCOFFEE: School Counselor Office Environment Evaluation

SRMR: Standardized Root Mean Square Residual

TCC: Test Characteristic Curve

TIF: Test Information Function

TLI: Tucker-Lewis Index

## CHAPTER 1: INTRODUCTION

For professional counselors, the counseling relationship is a paramount component to developing meaningful outcomes with clients (Cochran & Cochran, 2015; Hansen, 2014; Hatchett, 2017; Rayle, 2006). The elements that contribute to the formation of a counseling relationship should then be of great interest to researchers and practitioners. Research suggests that one of these factors is the space in which a counselor provides services (Gass, 1984; Miwa & Hanyu, 2006; Pressly & Hessacker, 2001).

Researchers have previously examined elements of counseling spaces and their effects on clients and research participants. For example, researchers have studied lighting (Barazawa & Hanyu, 2013; Miwa & Hanyu, 2006), the presence of windows (Ulrich, 1991), the aesthetic beauty or softness of a space (Goelitz & Kahn, 2008; Maslow & Mintz, 1956), the positioning of a desk in a space (Widgery & Stackpole, 1972), the arrangement of seating in a space (Sanders & Lehmann, 2018), and the presence of personal effects or home décor in an work space (Miwa & Hanyu, 2006). Researchers have also studied how elements of a counseling space impact the perceptions of the people within them (Barazawa & Hanyu, 2013; Delprato & Jackson, 1975; Devlin, et al., 2009; Goelitz & Kahn, 2008; Hearn, 2006; McElroy, et al., 1983; Maslow & Mintz, 1956; Miwa & Hanyu, 2006; Sanders & Lehmann, 2018; Ulrich, 1991; Widgery & Stackpole, 1972), their impressions of security and comfort (Barazawa & Hanyu, 2013; McElroy, et al., 1983), their willingness to engage with the therapist after seeing their workspace (Gass, 1984), and their willingness to self-disclose with the counselor (Miwa & Hanyu, 2006). These elements of a counseling space can affect the counseling relationship and it is important for counselors to assess and address elements of their space that may hinder their work with

clients and students. Despite these findings, no measure has been developed to assess the therapeutic nature of a counseling space.

Similarly, there has been no measure developed to understand the therapeutic nature of a school counseling space and research on school counseling spaces in general is limited. A review of literature on the ERIC database and Google Scholar revealed only one published article about the effects of a physical school counseling space on a school counselor's ability to deliver counseling services (Cook & Malloy, 2014). When considering the counseling spaces of school counselors, this lack of research and lack of a published measure provides a myriad of concerns. For example, school counselors often lack the ability to choose their space, redesign their space, or decorate their space in ways that can create a space more attuned to building a counseling relationship and delivering counseling services (Cook & Malloy, 2014). Though school counselors do not have as much control over their office as counselors in other specialties may (e.g., clinical mental health counseling, couples, and family counseling, etc.), this lack of control over their space does not change the impact that the counseling space can have on their relationships with students (Cook & Malloy, 2014). A school counseling office's physical environment can have an impact emotionally, physiologically, consciously, and unconsciously, and can affect a client's ability to cope and their stress levels (Cook & Malloy, 2014).

Another unique element of school counseling is the assignment of students. When a school employs more than one school counselor, students are commonly assigned to their school counselor by the first letter of their last name or by grade level, leaving no choice on the part of the student to be paired with a counselor they find most desirable (Gallant & Zhao, 2011). Research has not been published on how counselor assignment affects the school counselor and student relationship, but studies related to client preferences give reason for concern regarding

the lack of school counselor choice for students. For example, research indicating that when clients have a choice in counselor, preferences exist based on race (Haviland et al. 1983; Morten & Atkinson, 1983; Nioplias et al., 2018; Terrell & Terrell, 1984; Townes et al. 2009) and gender (Bernstein et al., 1987; Haviland et al. 1983; Pikus & Heavey, 1996; Stamler et al., 1991).

Despite these possible obstacles to establishing a counseling relationship with students, school counselors are expected to create a counseling environment in their space that is conducive to addressing all domains of school counseling, including social/emotional counseling (ASCA, 2019). Given that the physical elements in a counseling office increase self-disclosure (Pressly & Hessacker, 2001), and the aforementioned elements (i.e., lighting and windows) that have been shown to affect the inhabitants of a space, school counselors may be able to use their office as a tool to invite more opportunities for social/emotional counseling by increasing the therapeutic environment in their space (Barazawa & Hanyu, 2013; Cook & Malloy, 2014; Miwa & Hanyu, 2006; Ulrich, 1991).

In addition to the absence of a measure and research on the school counseling space, no found research addresses how school counselors feel about their space. No researchers have examined how school counselors believe elements of their spaces may influence their ability to counsel students, though there is reason to believe school counselors may not be working in ideal spaces for counseling. Because school administrators are typically responsible for managing school facilities (Lunenburg, 2010), assigning resources, and distributing responsibilities to staff (National Policy Board for Educational Administration, 2015), it is likely school counselors are assigned spaces and resources based on the administrators' perceptions of a school counselor's role. School administrators may have conflicting and non-conforming views on the roles of the school counselor (Amatea & Clark, 2005). For example, when principals were asked to rank



their priorities for school counselors, helping students with personal growth and development was ranked third out of four options, behind improving academic achievement and planning for post-secondary education. Only 12% of principals surveyed listed personal growth and development counseling as the top priority (Radford, et al., 2009). This set of priorities exists despite the fact that supporting personal growth and development is an inherent element of social/emotional counseling, one of three school counseling domains that are paramount to delivering a model school counseling program (ASCA, 2019). This perception of the school counselor's role may influence an administrator's opinion on what makes a school counseling space appropriate for the tasks they assign, perhaps preferring a space that is more suited for administrative work than for counseling. Gathering information about school counselor perceptions of their counseling spaces can be beneficial in understanding if their assigned spaces are appropriate for their work.

Furthermore, researchers have suggested that positive outcomes with clients and client analogues may be the result of the counselor responding more positively to those changes (Miwa & Hanyu, 2016). In other words, counselors in physical space studies may perform better themselves due to changes in the environment (Miwa & Hanyu, 2016). In turn, the counselors then receive more positive responses from clients (Miwa & Hanyu, 2016). Therefore, though previous research has focused on how space acts as a de-stressor for clients, the space may also promote improved performance for counselors, as well, given research indicating that a given space has a general effect on all people within it (Cook & Malloy, 2014; Miwa & Hanyu, 2016; Pressley & Hessacker, 2001; Wells, 2000). This effect of space on the counselor adds one more reason to explore the beliefs school counselors have regarding their spaces.

### **Research Study**

This study was a response to the need for a measure with which to assess school counseling spaces and the lack of research on school counselor beliefs about their counseling spaces. The focus of this study was the school counseling space and the development of a measure that can assist school counselors in creating the best spaces possible for themselves and their students. The target population for this study and the resulting measure were practicing school counselors in the United States. To that end, in this instrument development study, I created and refined a measure, the School Counseling Office Environment Evaluation (SCOFFEE). My intent was to develop an instrument that could be used to help school counselors assess the elements of their school counseling spaces that contribute to the therapeutic environment by limiting or reducing stress. The measure also captured school counselors' beliefs about how each element in their office influences their ability to establish a school counseling relationship with students.

The aim of this study was to produce an instrument that will address three goals. First, I sought to create a measure to be used by school counselors to audit their counseling spaces while providing data regarding school counselor beliefs about elements of their spaces. Second, my intention for the instrument was to build an advocacy tool that can be used to advocate for spaces more conducive to building therapeutic school counseling environments and school counseling relationships with students. Third, I intended to create a measure that could be used in conjunction with other measures in future studies that examine the effects of the counseling space on student perceptions of their counselors, school counselor burnout, multicultural school counseling, and other important factors of school counseling associated with the established environment. The construction of this measure was based on identifying stressors and distressors in existing literature as defined by the theory of Supportive Design.

### **Theory of Supportive Design**

Analyzing the school counseling space requires dissecting and examining individual pieces of both décor and design. To begin to conceptualize these individual elements of the school counseling space, a theoretical base is needed that examines them as pieces of both the school counselor's identity as a mental health professional and of as an administrative member of the school faculty. The construction of this measure can be achieved through the lens of Supportive Design.

Ulrich (1991) presented the theory of Supportive Design to promote wellness in healthcare facilities. In this theory, wellness is promoted by minimizing stress in the therapeutic setting. Stress can be reduced by avoiding stressors and obstacles that reduce coping with stress. Thus, the theory of Support Design emphasizes designing spaces that expose clients to “social situations that have stress reducing influences” (p. 99).

Supportive Design has three key concepts:

- “Health facilities should not raise obstacles to coping with stress, contain features that are in themselves stressors, and thereby add to the total burden of illness.
- Healthcare environments should be designed to facilitate access or exposure to physical features and social situations that have stress reducing influences.
- Target groups should include patients, visitors, and healthcare staff” (Ulrich, 1991, p.99).

With small changes to adjust for the school counseling space, these three core elements of the Supportive Design framework are expressed in the following three points:

- School facilities should not raise obstacles to coping with stress or contain features that are stressors.

- School environments should be designed to facilitate access and exposure to features and situations that have stress reducing influences.
- Target groups should include students, staff, faculty, and visitors.

One assumption made by Ulrich's (1991) theory of Supportive Design that can also be assumed for school counseling space is that healthcare spaces support coping with stress. By focusing on controlling surroundings, providing access to support services, and providing positive distractions, the theory of Supportive Design promotes wellness. Applying the concepts of Supportive Design to school counseling spaces can help school counselors identify the most salient elements to creating a supportive and therapeutic environment.

### **Variables of Interest**

#### **Outcome Variables**

In this instrument development study, the outcome variables were the items included in the SCOFFEE. These items were initially selected through a thorough review of literature regarding effective elements of the counseling space. Items were then reviewed and refined through a development process as outlined by DeVellis (2016). This process included tests for reliability and validity, as well as the use of a pool of experts in school counseling, school counseling relationships, and counseling spaces (DeVellis, 2016).

#### ***Item Variable Categories***

Research about the effects a space may have on individuals focuses primarily on two areas of interest: design (Barzawa, Hanyu, 2013; Delprato & Jackson, 1975; Gass, 1984; McElroy, et al., 1983; Pressly & Hessacker 2001; Widgery & Stackpole, 1972) and décor (Devlin, et al., 2009; Maslow, Mintz, 1956; McElroy, et al., 1983; Miwa & Hanyu, 2006). Thus, the instrument developed in this study also included items addressing both design and décor. A

review of this research informed the initial design of the measure, providing an organization of the included items. For each item, participants were asked to provide a response on a 7-point Likert scale of agreeability to the statement, “I feel (the element of the space) has a positive impact on the therapeutic nature of my counseling space.” These responses were used to understand the degree of the school counselor’s belief that these elements matter to making their space more therapeutic.

**Design.** Design includes elements of a space that involve structure. These include the size of the space, the lighting of the space, the presence of a window, furnishing, and the layout of the furniture in the space (Barzawa, Hanyu, 2013; Delprato & Jackson, 1975; Gass, 1984; McElroy, et al., 1983; Pressly & Hessacker 2001; Widgery & Stackpole, 1972). Researchers have identified these elements as having an impact on a person’s perception of another’s character (Maslow & Mintz, 1956; Miwa & Hanyu, 2006; McElroy, et al., 1983), their own sense of security and comfort (Barazawa & Hanyu, 2013; McElroy, et al., 1983), anxiety in counseling clients (Widgery & Stackpole, 1972), willingness to see the therapist that uses that space (Gass, 1984), willingness to self-disclose while in the space (Miwa & Hanyu, 2006), and cognitive ability (Delprato & Jackson, 1975).

**Décor.** Décor includes elements of the space that involve decoration. These include personal photographs and effects, credentials, and tidiness of a space (Devlin, et al., 2009; Maslow, Mintz, 1956; McElroy, et al., 1983; Miwa & Hanyu, 2006). Elements of décor differ from design in that they are more controllable by the counselor than many of the design elements. Still, researchers have shown these elements of décor have an effect on people who experience these spaces (Devlin, et al., 2009; Maslow & Mintz, 1956; McElroy, et al., 1983; Miwa & Hanyu, 2006). Décor can affect a client’s perception of a counselor’s professional

ability and qualifications (Devlin, et al., 2009; McElroy, et al., 1983), and client willingness to self-disclose while in the counseling space (Miwa & Hanyu, 2006). Elements of décor may also positively affect clients' first impressions of counselors (Devlin, et al., 2009).

### **Need for the Measure**

Researchers have examined design and décor in relation to the therapeutic space since the mid-20<sup>th</sup> century (Kasmar et al., 1968; Maslow & Mintz, 1956; Widgery & Stackpole, 1972). In school counseling, however, only one research article has been published related to the effects of design and décor (Cook & Malloy, 2014). To create a school counseling relationship with a student that is effective, school counselors need to understand the way their counseling spaces are affecting their students, and previous literature indicates that environmental elements affect people (Barazawa & Hanyu, 2013; Delprato & Jackson, 1975; Devlin, et al., 2009; Goelitz & Kahn, 2008; Hearn, 2006; Maslow & Mintz, 1956; McElroy, et al., 1983; Miwa & Hanyu, 2006; Sanders & Lehmann, 2018; Ulrich, 1991; Widgery & Stackpole, 1972). The SCOFFEE, for this reason, could be a useful measure for school counselors who want to increase the effectiveness of their counseling space to reduce stressors in their office and create a school counseling environment that invites counseling opportunities for all students. The SCOFFEE can also provide valuable information that can be shared with school administration in efforts to advocate for more appropriate counseling spaces on campus.

### **Purpose of the Study and Research Questions**

The purpose of this study was to develop and validate the SCOFFEE. Three research questions guided the study. They were:

1. Based on previous literature, what are elements of space that can affect the counseling environment?

2. What is the factor structure of the SCOFFEE?
3. What is the evidence for validity for the SCOFFEE?

### **Developing and Validating a Survey**

Psychometrics are commonly used to measure psychological phenomena as opposed to more concrete and tangible variables (DeVellis, 2016). In this study, I used DeVellis' (2016) measurement validation method, which is based in theoretical measures but acknowledges requirements for more atheoretical models that address variables in the physical world. The method was broad enough to support the ordinal Likert scale responses to items about beliefs, as well as the categorical and dichotomous items that were included in the measure (DeVellis, 2016).

The measurement development process in the proposed study included eight steps. In the first step, constructs were defined through a literature review, and the elements were identified as design and décor in counseling spaces (DeVellis, 2016). Step two used the information gathered through this literature review to construct items (DeVellis, 2016). In step three, the items were developed into questions, and response options were created for each (DeVellis, 2016; Pett et al., 2003). Each item on the SCOFFEE listed an office element (e.g., desk, pictures, window) and required a response to the question, "I feel (the element) has a positive impact on the therapeutic nature of my counseling space." Participants responded to these questions using a 7-point Likert scale (DeVellis, 2016). In addition, binary questions (i.e., yes/no) indicated which elements were present in the counseling space (DeVellis, 2016).

In step four, a group of five experts reviewed the draft items (DeVellis, 2016). I encouraged experts to provide feedback about question clarity, appropriateness, and effectiveness (DeVellis, 2016). Next, in step five, I conducted a pilot study with a convenience

sample ( $N = 166$ ) to refine the measure's questions (DeVellis, 2016). I used results from the pilot study to examine trends in responses and discover where questions needed to be made clearer or rewritten to solicit wanted redundancy (Pett et al., 2003). In step six, I combined rewritten items and finalized the measure for the primary data collection.

In the primary data collection, I recruited a large sample ( $N = 264$ ) of professional school counselors in the U.S. to complete the measure (DeVellis, 2016). In step seven, I analyzed the data from the participants by conducting a confirmatory factor analysis to examine internal validity, other forms of item correlation, and item variances (DeVellis, 2016; Pett et al., 2003). I then organized the measure into categories based on this evaluation of relationships. This continuity was used to organize the final form of the SCOFFEE. In the eighth and final step, optimized the scale by dropping weak and conflicting items, as determined by the factor analysis. I also assessed the length of the measure for appropriate brevity, while paying attention to how these changes affect the alpha levels of the measure to maintain reliability (DeVellis, 2016).

### **Assumptions**

The following are assumptions relative to this project:

- A measure can be created to measure the physical therapeutic nature of an office based on the physical elements of the office.
- Stressors and de-stressors in a school counseling space affect the therapeutic nature of the space.
- Research on the effects counseling spaces have on people is transferrable to school counseling spaces.
- School counselors desire to provide support to all students.
- Students are affected by the spaces around them.



- School counselors are affected by the spaces around them.
- These effects on counselors and students have an impact on the formation of a school counseling relationship.
- School counselor participants will be honest and thoughtful in their responses in this study.

### **Delimitations**

The following are delimitations considered and selected for my study:

- Experts involved in the validation process were practicing school counselors, researchers with school counseling experience, or researchers with experience in investigating the effects of the environment on counselors and clients.
- Participants were practicing school counselors in the U.S. who are fully licensed/certified and approved to practice school counseling by the standards of their state.
- School counselor participants completed the survey online.

### **Limitations**

The following are limitations identified for this study:

- This data was collected during the recovery from the COVID-19 pandemic and results may have been impacted by the pandemic's influence on school counseling participants. Impacts may include increased stress or anxiety stemming from this return to school buildings.
- Some experts and participants may not consider the counseling space significant and therefore may have chosen not to participate or provide biased opinions in the validation phase of development. Participants may not have been honest when reporting their beliefs about the school counseling space.

### **Definitions**

The following are definitions for common terms that were used throughout this study:

**Administrative Environment** refers to one of two extremes of the school counseling environment. An administrative environment lacks elements of an office space that is conducive to building a counseling relationship with students, providing little to relieve stress and in some cases creating stress for students.

**Décor** refers to elements of the space that involve decoration and staging. These include personal photographs and effects, credentials, non-permanent lighting sources, office accessories, and tidiness of an office.

**Design** refers to elements of the space that involve structure. These include the size of the space, the lighting of the space, the presence of a window, furnishing, and the layout of the furniture in the space.

**School Counseling Environment** refers to therapeutic or administrative nature of the school counseling space.

**School Counseling Space** refers to the assigned space a school counselor is meant to work in. These spaces can vary from offices, to closets, to classrooms.

**School Counseling Relationship** refers to the bond between school counselor and student to explore issues and find goals related to academics, college and career planning, and personal/social issues.

**Stress** refers to feelings of distress or discomfort.

**Therapeutic Environment** one of two extremes of the school counseling environment. A therapeutic environment contains destressing elements and does not contain elements that cause stress in the people that inhabit that space.

### Summary

In this introduction I examined the elements of a school counseling office that contribute to fostering a therapeutic school counseling environment and outlined the aim of this study: to create the SCOFFEE, a measure of the physical therapeutic environment within the counseling space based on its contained physical design and décor elements. I also discussed the methods and models that I used in development of the SCOFFEE. I provided a study purpose, delimitations, limitations, and operational definitions for the development of the measure.

The SCOFFEE contains items that are based on literature about the effects of elements that are common in a counseling space and the effect of those elements on people. The instrument also measures school counselor beliefs about the effects these items have on the therapeutic nature of their counseling space. I intend for this measure to be useful to school counselors as a tool for assessing their counseling space and as a tool in advocating for spaces more conducive to counseling (those spaces that are more therapeutic). I also intend for the SCOFFEE to be used in conjunction with other measures to further examine how the therapeutic environment can affect elements of the counseling relationship and the effects of counseling spaces on school counselors by pairing it with scales related to school counselor burnout and self-efficacy.

### **Organization of Study**

In chapter one of this five-chapter dissertation study, I provided an introduction to the topics of school counseling office design and décor and how elements of each can impact the establishment of a school counseling relationship with students. In chapter two, I will describe the literature that is relevant to the SCOFFEE, including research contributed to the creation of items on the instrument. In chapter three, I will describe the process for developing and validating this measure. I will provide descriptions of participants, the research questions, the

validation process for the instrument, and the plan for analyzing the resulting data from that process. In chapter four, I describe the data, my analysis, and the results of the analysis. In chapter five, I conclude with discussions about the findings, implications, and limitations of this study, and I make suggestions for future research.

## CHAPTER 2: LITERATURE REVIEW

The aim of this study was to create a measure that will assist school counselors in measuring the therapeutic nature of their counseling space and school counselors' beliefs about the effects of the therapeutic nature of their counseling space. The measure may also help school counselors understand how the design and décor of their school counseling space may be inherently limiting the space's therapeutic nature. The therapeutic nature of a space was assessed based on stressors identified through the following review of literature. In this review, identified elements that may cause stress and elements that may be therapeutic in a school counseling space.

In this chapter, I will review research on physical design and décor and how spaces affect the people within them. I will first review the theoretical framework of the proposed study before exploring elements of design and décor, as well the study's population of interest. In the final portion of this chapter, I will discuss school counseling spaces and how the School Counseling Office Environment Evaluation (SCOFFEE) may support the profession.

### **Theoretical Framework**

The theoretical framework for the proposed study is the theory of Supportive Design. In this theory, spaces are identified as hard or soft, with hard spaces providing more stressors and soft spaces providing more elements that relieve stress, such as a sense of control and access to social support and positive distractions (Ulrich, 1991). Supportive Design suggests that stressors lead to behaviors that adversely affect wellness, including verbal outbursts, social withdrawal, and passivity (Ulrich, 1991). As such, stress is a major obstacle to healing, and understanding

how the design of a space can contribute to that stress is vital to encourage wellness (Ulrich, 1991).

The theory of Supportive Design offers guidelines to foster a “sense of control and access to privacy, social support, [and] access to nature and other positive distractions” to support clients coping with stress in healthcare environments (Ulrich, 2017, p. 5). Researchers have examined these guidelines in further literature investigating Supportive Design theory (Andrade & Devlin, 2014; Dilani, 2009; Fischl, 2006; Iyendo, 2017; Suess & Mody, 2017; Walden, 2006). For example, Dilani (2009) examined how hospitals have provided social support by offering a space where doctors can experience support from peers. Suess and Moody (2017) studied how positive interactions from doctors and nurses to patients increase comfort. And Andrade and Devlin (2014) examined the impact of hospital visits by loved ones. All of these researchers found that social support can help mitigate stress and anxiety in healthcare settings, in alignment with Supportive Design theory.

Researchers have also investigated access to nature and positive distractions regarding Supportive Design. Suess and Moody (2017) researched how designing a room to look less like a hospital room and more like a hotel room (by providing higher quality furniture, higher quality linens, and more colorful walls) impacts patients (Suess & Moody, 2017). Iyendo (2017) similarly investigated the use of nature sounds to improve the experience of patients in hospitals. Furthermore, Lee and colleagues (2007) extended the theory of Supportive Design to elderly care homes when they researched accessibility to views of nature. All of these studies also found that providing positive distractions was helpful in improving treatment, supporting the tenets of Supportive Design.

### **Elements of Supportive Design in Schools**

Supportive Design is a theory not only relevant to hospitals and elderly care homes. Its relevance is evident in schools, as well, given that attributes of schools that combat student stress can be classified into the guidelines of Supportive Design. Positive distractions, for example, provided by designing schools with greener landscapes and views of natural landscapes have been associated with higher school-wide academic performance, suggesting that manipulating the design of the environment can impact student performance (Li & Sullivan, 2015). And while school counselors may not have the ability to make many changes to the layout of a school, they do have the ability to change aspects of their space to make it less stressful and more inviting for students (Cook & Malloy, 2014).

Supportive Design links the ideas of control and stress and applies them to space. For example, choosing to play a favorite song to relieve some stress after a long day may be effective, but in another instance when the same music is being played loudly by your neighbor, you may find it intrusive or stressful (Ulrich, 1991). Ulrich stated "... if an individual has a sense of control (over) a potential stressor, the negative effects ... are markedly reduced or even eliminated" (p. 100). School counselors may impede a student's sense of control by Ulrich's definition in many ways, including by conducting counseling in a noisy part of the school, conducting counseling in a space that lacks privacy, or making students wait for long periods of time before meeting with them (Ulrich, 1991).

Social support is the second way in which stress is mitigated in Supportive Design. Social support is found through social interaction, and a healthcare setting or a school must provide opportunities for supportive interaction (Andrade & Devlin, 2014; Lee et al., 2007; Ulrich, 2017) as it is an indicator of experiencing less stress (Ulrich, 2017). Providing pleasant places for this interaction to occur is vital to results (Lee et al., 2007). Examples of pleasant places include

comfortable waiting areas, outdoor areas that allow for social interaction (Ulrich 2017), and places that still maintain an element of privacy that is needed for social interactions to result in meaningful conversation and support (Andrade & Devlin, 2014; Holahan & Slaikeu, 1977).

The third element of stress mitigation is positive distractions. These are elements of the surroundings that might break attention away from a serious moment to remind the client or student of something pleasant. Positive distractions are described as “happy laughing or caring faces, animals, and nature elements such as trees, plants, and water” (Ulrich, 1991, p.102). In a school counseling space, positive distractions may include the presence of a window and pictures that are shared on walls of pets, and animals (Ulrich, 1991).

### **Population of Interest**

The population of interest in this study was school counselors. The resulting measure from this study can be applicable for school counselors in elementary, middle, and high school settings. The American School Counselor Association (ASCA) directs school counselors to address the needs of students in three domains: academic, college and career, and social/emotional (ASCA, 2019). On campus, school counselors are expected to be culturally responsive leaders that collaborate with school faculty and stakeholders to provide services for students on campus (ASCA, 2019). School counselors work from a professional foundation informed by counseling, human development, and learning theories (ASCA 2019). The school counseling program performs its duties ethically by following the ASCA Ethical Standards for School Counselors and the laws that govern the profession in that school setting (ASCA, 2019). School counseling work should result in a more equitable environment for students; this is done through collaboration and advocacy, and through critical examination of systems that exist in the school, district, and other governing bodies that impact the school (ASCA, 2019).



Navigating the systems that exist around them, school counselors must find ways to advocate for the resources they need to provide ethical services while also meeting the expectations of their supervisors (Blake, 2020). Role ambiguity resulting from these difficulties and misalignment between expectations from governing bodies and supervisors on site can lead to burnout and stress and impact the job performance of school counselors (Blake, 2020). For these reasons, the school counselor's role is vulnerable to augmentation or being rewritten entirely by leadership at the district or school level, and these administrators' understanding of the school counselor's role can run contrary to the comprehensive approach to school counseling provided by ASCA (Blake, 2020; Radford, et al. 2009).

### **Review of the Literature**

In a thorough review of peer-reviewed literature published since 1950 in Google Scholar and ERIC databases, I found that researchers have published only one article focused on the importance of the physical elements of a school counseling space (see Cook & Malloy, 2014). In this article, Cook and Malloy (2014) presented literature related to the importance of the physical environment and school counseling space. They also included an account of the transformation of one school counselor's space, which was initially described as disappointing in color, tiny, and not conducive to personal/social counseling (Cook & Malloy, 2014). The authors described how this counselor chose upgrades for the space and why those changes would better support the school counseling role (Cook & Malloy, 2014). Cook and Malloy (2014) reported on the results of the changed school counseling spaces, how others felt in the space, and how the school counselor felt in the new space.

Beyond Cook and Malloy's (2014) article, researchers have published 35 articles about research on physical spaces in mental health, hospital settings, and schools, though not

specifically school counseling spaces. Of these articles, 26 are more than 10 years old. Notably, no found research has explored physical elements of a space as a whole; the published research on physical spaces focuses on only a few elements of the space at a time.

Given the lack of research on school counseling spaces, examining the existing research on physical spaces in mental health, hospital settings, and schools may be illuminating to understand school counseling spaces, as well. Next, I review this non-school counseling literature in two sections: design and décor. Design refers to the elements of the room that are built into the space and that involve the layout of pieces of furniture. Décor refers to items that the counselor has used to decorate their space.

### **The Effects of Design**

Some elements of physical space appear to influence client perceptions of counselors (Haase & DiMattia, 1976; Lecomte et al., 1981). Other elements of a physical space can influence people's emotions and responses to others (Ching, 1996, as cited in Pressly & Heesacker, 2001; Goelitz & Stewart-Kahn, 2008; Pressly & Heesacker, 2001). Room size, room color, lighting, windows, and furniture all appear to have an impact on people (Chaikin et al., 1974; Goelitz & Stewart-Kahn, 2008; Gutheil, 1992; Haase & DiMattia, 1976; Lecomte et al., 1981; Maslow & Mintz, 1956; Miwa & Hanyu, 2006; Pressly & Heesacker, 2001).

### ***Room Size and Color***

Elements of a space can affect the perceptions of a counselor by a client. Client perceptions of counselors are affected by the size of the room in which counseling takes place (Haase & DiMattia, 1976; Lecomte et al., 1981). General perceptions of people outside of the counseling setting are also affected by room size and colors in a room (Maslow & Mintz, 1956). People also experience personal psychological responses to space; for instance, in a 1996 study,

Evans and colleagues found that people who live in crowded homes were more likely to experience higher levels of psychological distress (Evans et al., 1996). This is less true when homes have more architectural depth or places for people to retreat to where they can find more solitude (Evans et al., 1996). However, feelings involving crowding are not the same for all people, and culture and personal preference may dictate when someone feels crowded based on the amount of space they have (Freedman, 1975, as cited in Gutheil, 1992).

The color of counseling spaces and counseling facilities can also affect the perceptions of the people within those rooms (Ching, 1996, as cited in Pressly & Heesacker, 2001; Goelitz & Stewart-Kahn, 2008; Pressly & Heesacker, 2001). This reaction results in part because the perception of a room's size can be linked to a room's color (Ching, 1996, as cited in Pressly & Heesacker, 2001). Color can also create an environment more inviting to conversation, encourage relaxation or anger for those in the room, and even change feelings of space in the room, with warmer colors making a room feel larger and cool colors making the space seem smaller (Pressly & Heesacker, 2001).

In general, white and light colors can make spaces seem larger, but darker colors can make a space feel smaller, and so the actual size of a room should be taken into consideration when selecting the brightness of the colors that are selected (Pressly & Heesacker, 2001). Color preferences vary by age groups and gender with a seemingly general preference for lighter colors and shades of blue, but significance beyond preference should be considered (Pressly & Heesacker, 2001). For example, blue may be preferred because it is calming, but it also contributes to feelings of sadness (Pressly & Heesacker, 2001). In one study, researchers added light colored fabrics to the interior of an outpatient counseling facility as part of a remodel that also included reevaluating the use of space and introducing elements to make the space more feel

more like a home environment (Goelitz & Stewart-Kahn, 2008). As a result, clients at the facility reported feeling more respected and less stressed by their environment (Goelitz & Stewart-Kahn, 2008).

### ***Room Lighting and Windows***

Natural and artificial light have been examined in research related to the effects that space has on the people within it. Researchers have found that lighting and windows influenced the feelings and perceptions of others (Chaikin et al., 1974; Maslow & Mintz, 1956; Miwa & Hanyu, 2006). The first documented research that considered light as an influential feature in a space was a 1956 study conducted by Maslow and Mintz. In this study, a group of participants sat individually in a “beautiful room” with two large windows and an overhead light, and another group sat in an “ugly room” with two half-windows and an overhead light with a dirty lampshade that provided direct, powerful light on the participants (Maslow & Mintz, 1956). A third group was put in an “average room” which had an overhead light and a window with the shades drawn (Maslow & Mintz, 1956). Participants were in the rooms for 12 minutes, then were asked to give their impressions of people in negative exposure photographs (Maslow & Mintz, 1956). Participants in the ugly room reported higher levels of displeasure and fatigue in the people in the photos, whereas those in the beautiful room reported higher energy and well-being in the people in the photos (Maslow & Mintz, 1956). Moreover, when researchers showed participants in both rooms the same photographic images, participants in the ugly room had more negative impressions of people in the photographs than participants in the average or beautiful room, (Maslow & Mintz, 1956).

These findings have been supported by similar research on lighting (Chaikin et al., 1974; Miwa & Hanyu, 2006). In a study reflecting the impact of lighting, two groups of participants sat

in the same room under different lighting conditions and with varied décor elements (Chaikin et al., 1974). For example, researchers enhanced decorative room elements and made the environment more intimate for the second group (Chaikin et al., 1974). The groups were interviewed, then rated for intimacy, and researchers concluded that participants were more likely to self-disclose in the more intimate room with the improved lighting (Chaikin et al., 1974). Similar outcomes were found in a more recent research study indicating that lighting can affect a person's perception of others and their likelihood to self-disclose (Miwa & Hanyu, 2006). In a 2006 study, lighting and decoration configurations were changed in four different arrangements in a university counseling room (Miwa & Hanyu, 2006). The arrangements included with and without decorations, as well as with bright light or dim light (Miwa & Hanyu, 2006). Participants completed an interview in the room in one of the four conditions, and observing researchers rated the interviews (Miwa & Hanyu, 2006). Participants in the dim lighting seemed calmer and engaged in more self-disclosure with the interviewer than participants in the bright lighting condition (Miwa & Hanyu, 2006). The lighting changes were found to be more effective than the décor changes (Miwa & Hanyu, 2006).

Beyond the realm of counseling, researchers have shown that lighting can also affect a person's feelings of refuge inside of their space (Barazawa & Hanyu, 2013). In a 2013 study conducted by Barazawa & Hanyu, participants were seated in a room and light was changed to pool around participants in different configurations, during which time they were asked to have conversations with each other in the different lighting conditions (Barazawa & Hanyu, 2013). After the experience, researchers measured feelings of refuge in the lighting conditions (Barazawa & Hanyu, 2013). They found that the participants in the dark reported higher feelings of refuge and better impressions of the room (Barazawa & Hanyu, 2013). When both participants

were lit in identical light and were having a conversation, their impressions of the room were the most positive (Barazawa & Hanyu, 2013).

### ***Furnishing and Layout of Furniture***

Placement and choice of furniture can create a sense of ownership of a counseling space with clients and guests within that space and can make the setting feel more territorial, as if the client has entered a space that belongs solely to the counselor (Gutheil, 1992). In in-patient settings, ownership can be created by making spaces serve the people who live there by providing seating arrangements that encourage more social interaction (Gutheil, 1992). Providing spaces that are laid out like waiting rooms, with chairs against walls, close together and side-by-side, but not close face-to-face (for example, against walls facing each other in a large room), discourage interactions and are more akin to jails and hospitals than to places people call home (Gutheil, 1992). During observations, denial of these social spaces may give practitioners the wrong impression of what clients want or need and may give false impressions of how social or antisocial a person is (Gutheil, 1992).

In the aforementioned study conducted by Maslow and Mintz (1956) involving ugly and beautiful rooms, the researchers also included changes to furnishings. The beautiful room had furnishings “to give the impression of an attractive, comfortable study” (p. 247) and included a soft chair, a mahogany desk, a wooden bookcase, a large Navajo rug, and paintings and sculptures (Maslow & Mintz, 1956). The ugly room was painted gray and had furnishings to “give the impression of a janitor’s storeroom” (p. 248) which included tin cans for ashtrays, dirty windows and lamp shades, brooms, mops, “assorted refuse,” and an uncovered mattress (Maslow & Mintz, 1956). Participants in the beautiful space reported better impressions of people in

negatives of portrait photographs compared to participants in the ugly space (Maslow & Mintz, 1956).

Given that school counselors do not typically have control over the furniture they are given for their rooms (Cook & Malloy, 2014), it is important to also consider how the arrangement of the furniture in the space can affect people in a room. To see how desk placement affected an outside observer's perception of the counselor, Gass (1984) conducted a study with four experimental groups who were shown a set of slides with images of a counselor in two different forms of dress (casual and formal) and two different desk placements (a desk between the counselor and the client or no desk). These slides were played alongside the same recording of a counseling session, then participants completed the Counselor Rating Form (Barak & LaCrosse, 1975, as cited in Gass, 1984). Gass (1984) found that when in formal dress, having a desk resulted in higher scores on the Counselor Rating Form in all subscales. While in casual dress, having a desk between them lowered scores in all subscales (Gass, 1984). Men scored higher with desks and women scored higher without desks on all subscales (Gass, 1984). Though these findings suggest the importance of desk placement in counseling space, it is worth noting that this study was conducted in 1984, and sentiments about dress, gender, and other values in general may have changed since then. However, this is the only study of its kind and therefore deserves mention in this literature review.

### ***Privacy***

Privacy is an important component in delivering effective counseling (Holahan & Slaikeu, 1977; Yamuna, 2013). Counseling should take place in a location without interruptions (Yamuna, 2013). Research on lack of privacy in the field of pharmacy highlights this need. For example, patients visiting a pharmacy report that a lack of privacy is a contributing factor to not

accepting counseling from the pharmacist (Albekairy, 2014). In counseling research that has simulated a breach of privacy (in which a session is interrupted by a third-party), researchers found that interrupted sessions that had a lower rate of client self-disclosure when compared to a control group with no interruptions (Holahan & Slaiku, 1977). Adding a 3-foot high divider to mitigate this third party's intrusive presence also had no effect in encouraging self-disclosure (Holahan & Slaiku, 1977).

## **The Effect of Décor**

### ***Personal Photographs/Belongings and Credentials***

Personalization of the workplace has a positive effect on the people who do so to take ownership of their work areas (Wells, 2000). This personalization is more effective for women than men in increasing their personal perceptions of well-being (Wells, 2000). Personal belongings can include professional credentials, pictures, and other items (Devlin et al., 2009; Nasar & Devlin, 2011; Wells, 2000), and so these variables have been combined in this review.

In a 2011 study, Nasar and Devlin showed participants pictures of counseling spaces with varying levels of personalization. Elements of personalization that were increased and decreased within counseling spaces included the number of pictures of family, general photographs, books, and articles of clothing (Nasar & Devlin, 2011). They found that the spaces with increased personalization provided a greater feeling of safety in the environment for participants (Nasar & Devlin, 2011). Higher levels of personalization also contributed to the participant having a friendly impression of the counselor (Nasar & Devlin, 2011).

Displaying personal photographs, displaying credentials, and the number of credentials displayed by the counselor can influence the way the clients see their counselor (Devlin et al., 2009). For example, Devlin and colleagues (2009) conducted a study in which participants



evaluated their impressions of counselor qualifications, friendliness, and energy based on images of counseling spaces with varying numbers of credentials and personal photographs on display. When two credentials were displayed, having photos also on display increased positive impressions of the counselor in all categories (Devlin et al., 2009). When the number of credentials on display increased to four and nine, the presence of pictures had inconclusive effects on perceptions of qualification, friendliness, and energy (Devlin et al., 2009). That said, in instances when there were no pictures on display, the numbers of credentials on display positively correlated with qualifications and the client's perceptions of the counselor's energy levels (Devlin et al., 2009). When pictures were present, evaluations of counselors in these spaces were more positive than when they were not present (Devlin et al., 2009).

### ***Tidiness***

Research is sparse in the area of the tidiness of a counseling space and how it affects the perception of the person working in that space. However, some researchers have studied how tidiness may affect the counseling relationship. Morrow and McElroy (1981) conducted an experiment in which they showed images of faculty workspaces to participants and asked them to rate the work spaces by their comfort, welcome-ness, and perception of occupant busyness. They found that a messy workspace always significantly harmed the participant's perception of the person who worked in that work space (Morrow & McElroy, 1981).

In a related study, when participants were asked to rate a researcher's openness, conscientiousness, extraversion, agreeableness, and neuroticism based on their experience sitting in staged counseling spaces in an organized state and in an untidy state, researchers found that perceptions of the owner of the untidy space were consistently rated lower in conscientiousness than owners of tidy spaces (Horgan et al., 2019). In another study of the perception of a therapist

based on images of spaces, tidiness correlated with perceptions of quality of care, comfort, and qualification of the therapist (Nasar & Devlin, 2011). These results reflect those found in a third study about tidiness, in which participants observed images of workspaces with desks that were either tidy or untidy and occupied or unoccupied. Participants rated the perceived owners of the desks that were untidy higher than owners of tidy desks in the categories of warmth, kindness, creativity, sincerity, activity, and sociability (Sitton, 1984).

### ***Relating to School Counselors***

Given that school counselors are tasked with providing counseling to all their students (ASCA, 2019), creating a space that invites students to engage provides less stress and more comfort, and gives a trustworthy and accepting impression of the counselor, which could mean the difference between a student coming back to that space when support is needed or not. One way to create a therapeutic environment for students may be by creating a space most conducive to counseling. The size and color of a space (Haase & DiMattia, 1976; Lecomte et al., 1981), lighting and the presence of a window (Chaikin et al., 1974; Maslow & Mintz, 1956; Miwa & Hanyu, 2006), furnishing and the layout of furniture (Gass, 1984; Gutheil, 1992; Maslow & Mintz, 1956), privacy (Albekairy, 2014; Holahan & Slaikou, 1977; Yamuna, 2013), the presence of personal photographs and belongings (Devlin et al., 2009; Nasar & Devlin, 2011; Wells, 2000), and the tidiness of the space (Horgan et al., 2019; Morrow & McElroy, 1981; Nasar & Devlin, 2011). have been cited in literature on other counseling and professional spaces as critical. Thus, these same elements may add up to creating a school counseling space in which a student feels more comfortable self-disclosing information that school counselors may need to know to keep a student safe and healthy.

For this reason, a measure to assist school counselors in creating and maintaining a therapeutic space is needed. The lack of literature on school counseling spaces is concerning, particularly given the discovery of the effects physical characteristics can have on the therapeutic nature of counseling and other professional spaces. In this study, I created the SCOFFEE as a measure that researchers can use to evaluate school counseling spaces. This measure was based on the compiled findings of the evidence-based research included in this literature review.

### **Summary**

In this chapter, I have highlighted research that links space to the way people feel or react to spaces and others within them (Barazawa & Hanyu, 2013; Ching, 1996, as cited in Pressly & Heesacker, 2001; Devlin et al., 2009; Devlin et al., 2009; Evans et al., 1996; Goelitz & Stewart-Kahn, 2008; Gutheil, 1992; Haase & DiMattia, 1976; Horgan et al., 2019; Lecomte et al., 1981; Maslow & Mintz, 1956; Miwa & Hanyu, 2006; Morrow & McElroy, 1983; Nasar & Devlin, 2011; Pressly & Heesacker, 2001; Sitton, 1984; Wells, 2000). In some cases, these links are directly related to counseling and the impression a counseling space gives to clients about the counselor, be that an impression of their professional ability or their personality (Devlin et al., 2009; Gass, 1984; Haase & DiMattia, 1976; Horgan et al., 2019; Lecomte et al., 1981; Morrow & McElroy, 1983; Nasar & Devlin, 2011; Sitton, 1984). Providing a space that is inviting to counseling and client self-disclosure that is also non-stressful to students in design and décor can affect the comfort and stress of clients (Chaikin et al., 1974 ; Holahan & Slaiku, 1977; Miwa & Hanyu, 2006; Pressly & Hessacker, 2001). Levels of stress can lead to barriers to counseling related to client perception of counselor and client willingness to self-disclose during a session (Haase & DiMattia, 1976; Holahan & Slaikeu, 1977; Lecomte et al., 1981; Yamuna, 2013). In

Chapter Three, I will discuss the process and the instrumentation that I used in creating the SCOFFEE.

## CHAPTER 3: METHODOLOGY

In this chapter, I outline the methods used to construct and validate the School Counseling Office Environment Evaluation (SCOFFEE). In it, I describe all steps and analyses used in the validation process. This chapter also includes descriptions of the participant recruitment strategies and participants that took part in the study.

### **Research Questions**

The purpose of this dissertation was to answer three questions related to the construction of a measure, the SCOFFEE. These questions were:

1. Based on previous literature, what are elements of space that can affect the counseling environment?
2. What is the factor structure of the SCOFFEE?
3. What is the evidence for validity for the SCOFFEE?

To answer these research questions, I conducted a measure development survey research study.

### **Steps of Development**

This measurement development survey research study entails nine steps. In the first step, I defined the constructs that would be measured. To do so, I conducted a review of literature about the elements of design and décor to discover those elements that have been found to have an effect on counselors or clients in a counseling setting. I then used the theory of Supportive Design (Ulrich, 1999) to conceptualize these items and the constructs of design and décor as possible stressors or stress relivers in the environment. In this process, I established clarity on what is being measured and why it is included in the SCOFFEE (DeVellis, 2016; Pett et al., 2003).

In step two, I created items for the measure based on the determined definitions and considerations discovered in the literature review. I created more than one item for each construct examined with the intention of increasing the reliability of the measure (DeVellis, 2016). This strategy involves creating useful, or “relevant” redundancy, which uses questions written to express the same idea but with varying verbiage while avoiding “irrelevant redundancies” between questions so similar that they yield the same information (DeVellis, 2016; Pett et al., 2003). Items were written to be succinct and reflect the construct they are addressing and were carefully checked for grammar (DeVellis, 2016).

In step three, I constructed the initial format of the measure (Appendix A). This task included constructing the items themselves, as well as goals for each question and the grouping of items by their construct (DeVellis, 2016). In this step, I considered response options for each item, while also considering the experience and test-taking stamina of the measure-takers (DeVellis, 2016; Pett et al., 2003). Binary response options (i.e., yes/no) were used to indicate what elements are present in the counseling space (DeVellis, 2016). After each item, participants were also asked to provide a response to the following question: “I believe (the element in question) has a positive impact on the therapeutic nature of my counseling space.” Participants responded to the question using a seven-point Likert scale of agreeability. Providing a seven-point scale gave participants better opportunities to give responses that are most accurate to their beliefs (DeVellis, 2016).

The measure also included a demographic survey (Appendix B). These demographic questions gathered information about the school counselors taking the survey, including the nature of their work, such as the size of their caseloads and the setting of their schools. It also collected information regarding the school counselor’s race, gender, and age.

A pool of content experts reviewed the initial items created for the measure in step four (DeVellis, 2016). This group of five content experts comprised practicing school counselors with at least five years of experience and school counselor researchers with at least five years of experience in school counseling (Grant & Davis, 1997). A researcher was identified who had studied the effects of the environment (or elements of the environment) on school counselors, and was invited as an expert to participate, but I did not receive a response from my request before the expert review ended. After I gave the experts working definitions of the constructs and the initial items, they provided written feedback for each item regarding its representation of the item's target construct (DeVellis, 2016). During this review, experts were requested to give feedback regarding the clarity and effectiveness of each item and for the measure as whole. They also provided any feedback they found appropriate for consideration in the future development of the measure and each item (DeVellis, 2016).

In step five, I conducted a pilot study. The purpose of the pilot study was to examine trends in responses, discover where items may need to be clearer, or identify where some items may be written to solicit unwanted redundancy (Pett et al., 2003). Participants for this pilot study included practicing school counselors recruited through convenience and snowball sampling and through Facebook groups. After conducting the pilot study, I examined responses and participant feedback to improve the measure.

In step six, I combined rewritten items and pilot study participant feedback to create a refined version of the SCOFFEE. I then conducted the primary data collection for this study by distributing the refined iteration of the SCOFFEE to a development sample. This sample included 264 participants belonging to the target population (licensed or certified professional school counselors practicing in the United States) (DeVellis, 2016). I recruited participants for

the primary data collection through state school counseling organization member email lists and through state school counseling organization websites. The survey was also advertised online through school counseling groups on Facebook, Reddit, and through Instagram using school counseling hashtags.

After conducting the primary data collection, I evaluated items in step seven using a content analysis. In this process, the content analysis determined internal validity, item correlation, and item variances (DeVellis, 2016). I then organized the measure into categories based on this evaluation of relationships. I determined reliability by assessing the resulting alpha values and a confirmatory factor analysis (CFA) to compare items with one another to see if there is reasonable continuity between them (DeVellis, 2016). With this evaluation, I was able to finalize the items and the organization of the SCOFFEE.

For item analysis, I used Item Response Theory (IRT) to evaluate items further. I used this evaluation to examine each item's quality based on item difficulty and its ability to identify the target constructs (Reise et al., 2005). This process utilized item response functions (IRFs), which describe relationships between test-taker responses and the presence of measured constructs (Reise et al., 2005). Using the Rasch model, the IRT analysis inspected test-taker responses to the questions regarding their beliefs related to the effects of each element of a counseling space. IRT models offer a prediction of scores based on ability levels and provide the relationship between test-taker performance and ability for each item (Hambleton & Jones, 1993). IRT analysis also offers researchers information that can determine item difficulty and performance based on the ability levels of participants (Hambleton & Jones, 1993). This item level information separates IRT from classical item analysis methods (Hambleton & Jones, 1993). Given the nature of SCOFFEE, and the construction of its items based on multiple studies



that investigated individual elements of space, being able to understand each item individually is especially appropriate.

IRT is new to the field of measurement development in school counseling. In a review of the literature, I found only one published article that used IRT in measurement development for school counselors (Poynton et al., 2019). The inclusion of IRT in the development of the SCOFFEE will demonstrate the effectiveness of the theory in validating items and measures in the field of school counseling.

I finalized the items and structure of the SCOFFEE in the eighth step. I removed weak items and assessed the length of the measure based on the factor loadings revealed in the content analysis. During this process, I monitored changes to the alpha levels of the measure to maintain reliability (DeVellis, 2016). Maintaining reliability serves as evidence for validity in the model (American Educational Research Association, American Psychological Association, & National Council on Measurement in Education, 2014).

### **Analyses**

As described in the aforementioned steps, I conducted several types of analyses in this instrument development process. First, I utilized content experts for a content analysis. These experts reviewed the SCOFFEE items in the judgement-quantification stage of the measure's construction (Armstrong et al., 2005; Grant & Davis, 1996). Experts were asked to give their feedback related to the validity of each question and the overall measure (Grant & Davis, 1996).

I also conducted a reliability analysis through a content analysis and a pilot study. Through this analysis, I assessed internal validity between dichotomous items and continuous/belief items separately utilizing Cronbach's alpha (DeVellis, 2016). I used IRT to

analyze each item. By using a Rasch model for the IRT analysis, I was able to understand item difficulty and use that information to remove weak items or to make items more reliable.

In addition, I completed a construct analysis. With this analysis, I was able to assess how well items are representing the expected latent factors of the SCOFFEE (DeVellis, 2016). To do this I used a CFA to examine correlations between latent and observed variables on the SCOFFEE (DeVellis, 2016).

### **Participants**

There were two instances in this instrument development process that required participants. The first sample participated in the pilot study to refine the measure, and the second sample participated in the primary data analysis to provide data to analyze the effectiveness of the SCOFFEE. I recruited these samples at different points in the process of the development of the measure. The SCOFFEE was designed for school counselors to use in their offices, therefore these participants included school counselors themselves.

I conducted a pilot study with 167 practicing school counselors. Participating school counselors were over 18 years old and were practicing school counselors in the U.S. They indicated that they met all licensure or certification requirements to practice school counseling in the state in which they are employed. I recruited this group of practitioners through social media, emails to acquaintances, and snowball sampling. I assessed data from the pilot study to find areas in which questions could be made clearer or where questions may be contributing unwanted redundancy. I analyzed this data to assess if additional changes to the measure were needed before distributing the measure for primary data collection.

Upon reviewing any redundancy issues, I only removed one item after the pilot test after reviewing the questions and finding a similarity that had gone unnoticed. The items “I have

personal photographs displayed in my space” and “I have personal photographs displayed in my space” were combined. They were replaced with the item “I have personal items and photographs that indicate my interests and hobbies on display in my space.”

The primary data collection required participants with the same qualifications as the pilot study participants: practicing school counselors over the age of 18 that meet the licensure or certification requirements to practice school counseling in their state of employment. Participants were asked to complete the SCOFFEE to assess their school counseling spaces. To recruit participants for the primary data collection, I used a compiled database of state and national school counseling associations to contact leaders of these organizations, requesting they forward my survey to members. I also utilized social media in the recruitment process, specifically by posting information about the study to school counseling-related Facebook groups, a school counseling subreddit, and on Instagram by utilizing hashtags related to school counseling. To conduct the CFA, the desired size of this sample was 200-300 participants (DeVellis, 2016).

To encourage participation, I offered \$500 in incentives to entice participation in the CFA. I offered these funds to participants in the form of Amazon gift cards. The first 100 participants were entered into a random drawing to win one of ten \$25 gift cards. Once the survey closed, all who participated were entered into an additional drawing for ten more \$25 gift cards. To enter the drawing, participants were presented with a link after completing the survey to access an additional optional survey requesting their email address. Participants were informed that this information was being collected in a separate survey, and that the information would not be combined with the information collected by the SCOFFEE, including demographic information.

### **Data Collection Procedures and Design**

Following my successful proposal of this study to my dissertation committee, I submitted the study for IRB approval. While waiting for approval, I contacted content experts, and those who agreed to participate received the initial items of the SCOFFEE for their review. I requested that content experts respond within two weeks after the items were sent. To encourage promptness, I sent a follow-up email to content experts one week after they received the items with a reminder of the requested deadline to submit their responses.

Following the expert review, I recruited participants for the pilot study. Participating pilot study participants signed an electronic informed consent agreement approved through the IRB before accessing the measure online via Qualtrics, a survey design software program. After posting an initial call for participation to social media outlets, I posted a follow-up call for participation one week later. I then ceased data collection for the pilot study the following week.

Pilot participants were part of a convenience sample and were encouraged to take part via email and school counseling groups on Facebook. I did not ask participants for identifying information beyond the general information collected through the demographic survey. They were informed through the informed consent document on the first page of the survey that this is an anonymous survey. The survey was advertised twice, once per week during the two weeks it is available.

In the primary data collection phase, participants again signed an electronic informed consent agreement approved through the IRB. They were informed that the survey is anonymous, and that identifying information is not required. Participants were also informed that they need to provide an email address to enter the optional drawing for gift cards. It was clearly stated in the informed consent page that this information will be collected separately from demographic information and survey responses. They accessed the survey via Qualtrics. I sent

and posted follow-up calls for participation four to six business days after the initial calls for participation until the preferred number of participants was reached.

### **Summary**

In this chapter, I described the steps I took to construct and validate the SCOFFEE. I provided descriptions of the participants and the experts used for each step of the process. This chapter also provided an explanation of how I recruited participants. I also described how I ensured the finalized version of the SCOFFEE accurately represented school counseling offices and school counselor beliefs about their counseling spaces.

## CHAPTER 4: RESULTS

The intention of this study is to create an instrument that can be used to measure the therapeutic nature of a counseling space, as well as school counselor beliefs regarding the effect their space has on the therapeutic environment. There were three phases in the development and validation of this instrument, the School Counseling Office Evaluation (SCOFFE) during this study. The first of these phases was a review of preliminary SCOFFEE items by content experts. Following the evaluation of those responses and subsequent changes to the SCOFFEE, I conducted a pilot test with the revised measure. An evaluation of descriptive statistics from this pilot study led to minor revisions to the measure before entering the third phase of the process, the primary data collection phase. In this phase, I used descriptive statistics, item response theory (IRT), and a confirmatory factor analysis (CFA) to evaluate this third version of the SCOFFEE. In this chapter, I present each of these phases individually, including the preparation and delivery of the content to participants, the resulting data, and the changes that were made to the SCOFFEE based on those outcomes.

### **Expert Review**

#### **Procedure**

After creating items based on the literature review, I sought expert opinions on the construction and content of my initial instrument. Experts considered for the content review were both researchers and practicing school counselors. I identified three practicing school counselors for this review from my past professional experiences and based on their willingness to participate. Three researchers were identified based on their work in instrument development for the school counseling field, and one was identified through their research into school counseling

spaces. I invited six experts to take part in the review, and five submitted a completed review of the preliminary SCOFFEE items. Three of these experts were practicing school counselors and two were school counseling researchers.

Experts reviewed the 72 items developed based on the literature review included in chapter two of this dissertation. The items included inquiries about the elements that are present in a school counselor office and school counselor beliefs about the importance of these elements. Each item also included answer response options. Experts provided feedback on each item by typing comments about each one into a space provided next to each item and response option pair. Experts were asked to give positive and negative feedback to help assess the strength of items and find ways to improve the measure.

### **Results and Changes**

Experts expressed two common concerns related to the presentation of response options and related to the wording of items. Experts felt the wording of belief items were leading, and in some cases, biased. Experts expressed these concerns commonly throughout their review, which prompted a reevaluation of the items and response options throughout the measure. Based on this feedback, all belief items and responses received a rewrite to be less leading. The item phrasing changed from “I believe...” to “To what extent do you believe...” In addition, I revised response options for all items from a 1 to 7 Likert scale ranging from Strongly Disagree to Strongly Agree, to a 0 to 6 Likert scale. The new scale included “0: Not at all”, “3: Somewhat”, and “6: To a very great extent.” The intention in revising this scale was to give an option (0: Not at all) to allow respondents to clearly elect that they do not believe the element in question has any effect on the counseling space.

Experts also commented that some items asked two questions at once, which would not lead to reliable outcomes. One example of this was the item “I believe the evenness/unevenness of my lighting has a positive impact on the therapeutic nature of my counseling space.” Experts noted that inclusion of both the even and unevenness of lighting in this item indicated that it was asking about two distinct things, and not one clear element of a space. In response to this feedback, I edited belief items to exclude one of the phrases or words that kept the item from being specific to one subject.

A third issue addressed in expert feedback were the items regarding school counselors’ spaces. Experts pointed out that items asking about a particular counselor’s space could result in some bias in responses if that counselor did not like their space. For example, if an item asked a school counselor about *their* window and not windows in general, a school counselor’s response may be biased if they did not like their particular window. Thus, I rewrote items to ask school counselors about their beliefs regarding elements of any space, not specifically their own.

Lastly, the expert feedback contributed to changes regarding item clarity. For example, one item asked school counselors to rate their comfort with the size of their space. But this item lacked any reference to what comfortable meant. Another item asked school counselors to describe their space and offered responses such as “Large Office” or “Small Office,” but these response options were subjective to the perception of person responding. Therefore, I edited items for clarity and included definitions of terms, as well as better descriptions to assist the reader in understanding more subjective elements of the items. For example, in the item regarding the size of school counselors’ space, I added square footage guidelines to possible responses and a diagram that depicted an office with the dimensions of common items in an



office space (i.e., desk, standard doorway, standard floor tiles) to assist school counselors in estimating the size of their space.

### **Pilot Test**

#### **Procedure**

I resubmitted the measure, revised as indicated above, for IRB approval for pilot testing. Once approved, the pilot test began. I prepared the revised version of the SCOFFEE in Qualtrics, an electronic survey platform. The revised version included 75 primary items and an additional 10 demographic items. To recruit pilot study participants, I advertised the study using an IRB-approved invitation on Facebook in three private school counseling groups (Elementary School Counselor Exchange, High School Counselor Connection, and School Counselors Connect). I received approval to post the study call from each group's moderator prior to posting. I kept the pilot study data collection open for one week, during which time 167 practicing school counselors participated in the pilot study.

#### **Descriptive Analysis**

As anticipated, the number of responses during the pilot study ( $N = 167$ ) was not enough to conduct an accurate preliminary CFA or IRT analysis. Instead, I conducted a review of the descriptive statistics (Table 1) from this data to identify any abnormalities that may need to be addressed before primary data collection. I also took into consideration participants' comments when reevaluating the SCOFFEE before the primary data collection phase.

There were no concerns with the SCOFFEE based on the evaluation of pilot study data descriptive statistics. This evaluation included a review of frequency tables for each item, as well as kurtosis, skewness, means and standard deviations for all items. I did not anticipate normal distribution for the data, given the factual nature of the items about elements of space, which

asked if something is or is not present. I did not expect a normal distribution with belief items, because it was assumed that many school counselors share beliefs with the research regarding what elements of the counseling space are impactful to their work. These assumptions were confirmed; however, many belief items responses were relatively normal but positively skewed.

**Table 1**

*Descriptive Statistics (Pilot Test)*

Item	N	Range	Minimum	Maximum	Mean	Std. Deviation	Variance	Skewness		Kurtosis	
	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Statistic	Std. Error	Statistic	Std. Error
Q87	166	0	1	1	1.00	.000	.000	.	.	.	.
Q1.1.0	164	1	1	2	1.04	.203	.041	4.567	.190	19.086	.377
Q1.1.1	133	5	1	6	3.20	1.186	1.405	.069	.210	.016	.417
Q88	133	1	1	2	1.82	.386	.149	-1.681	.210	.838	.417
BQ1.2.0	133	6	1	7	2.88	1.966	3.864	.790	.210	-.710	.417
BQ1.2.2	133	6	1	7	4.38	1.945	3.784	-.285	.210	-1.008	.417
Q1.3.0	133	1	1	2	1.21	.409	.167	1.436	.210	.064	.417
BQ1.3.2	132	6	1	7	4.40	1.786	3.189	-.167	.211	-.797	.419
BQ85	140	6	1	7	5.59	2.074	4.301	-1.400	.205	.456	.407
BQ84	140	6	1	7	5.42	1.800	3.238	-1.201	.205	.517	.407
Q2.1.0	128	6	1	7	2.80	1.801	3.245	.396	.214	-.968	.425
BQ2.1.1	133	6	1	7	5.97	1.456	2.120	-1.845	.210	3.423	.417
Q2.2.1	128	1	1	2	1.45	.499	.249	.223	.214	-1.982	.425
BQ2.2.2	135	6	1	7	5.96	1.486	2.207	-1.753	.209	2.914	.414
Q2.2.3	70	1	1	2	1.29	.455	.207	.970	.287	-1.092	.566
BQ2.2.4	131	6	1	7	5.34	1.374	1.889	-.552	.212	-.114	.420
Q2.2.5	70	1	1	2	1.47	.503	.253	.117	.287	-2.046	.566
BQ2.2.6	131	6	1	7	5.56	1.331	1.771	-.808	.212	.405	.420
Q2.3.1	125	1	1	2	1.28	.451	.203	.992	.217	-1.033	.430
BQ2.3.2	131	5	2	7	5.07	1.248	1.557	.351	.212	-1.059	.420
Q2.4.1	125	6	1	7	4.92	1.899	3.606	-.494	.217	-.826	.430
BQ2.4.2	130	6	1	7	5.12	1.251	1.566	-.044	.212	-.452	.422
BQ2.4.3	124	6	1	7	5.17	1.576	2.483	-.829	.217	.124	.431
Q3.1.1	124	1	1	2	1.45	.500	.250	.197	.217	-1.994	.431
BQ3.1.2	129	6	1	7	6.26	1.168	1.364	-2.427	.213	7.866	.423
Q3.2.1	123	1	1	2	1.06	.233	.054	3.873	.218	13.211	.433
BQ3.2.2	129	6	1	7	4.88	1.524	2.322	-.029	.213	-.459	.423
Q3.3.1	127	2	1	3	1.45	.573	.329	.845	.215	-.274	.427
BQ3.3.2	129	6	1	7	5.88	1.352	1.828	-1.273	.213	1.204	.423

Q3.4.1	73	1	1	2	1.47	.502	.252	.140	.281	-2.037	.555
BQ3.4.2	126	5	2	7	5.26	1.310	1.715	-.129	.216	-.837	.428
Q3.5.1	121	2	1	3	1.78	.677	.458	.305	.220	-.813	.437
BQ3.5.2	127	6	1	7	5.77	1.128	1.273	-.919	.215	1.752	.427
Q4.1.1	118	6	1	7	3.50	1.990	3.962	.281	.223	-1.131	.442
Q4.2.1	118	6	1	7	4.72	2.063	4.254	-.526	.223	-1.085	.442
BQ4.2.2	122	2	5	7	6.82	.464	.215	-2.627	.219	6.359	.435
Q4.3.1	118	6	1	7	4.51	2.260	5.107	-.386	.223	-1.338	.442
BQ4.3.2	122	4	3	7	6.66	.665	.442	-2.390	.219	7.433	.435
Q4.4.1	118	6	1	7	4.48	2.163	4.679	-.293	.223	-1.370	.442
BQ4.4.2	122	6	1	7	4.98	1.898	3.603	-.610	.219	-.687	.435
Q4.5.1	118	6	1	7	6.33	1.308	1.710	-2.735	.223	7.928	.442
BQ4.5.2	121	3	4	7	6.55	.775	.600	-1.740	.220	2.400	.437
Q4.6.1	65	6	1	7	5.15	1.978	3.913	-.820	.297	-.615	.586
BQ4.6.2	122	3	4	7	6.34	.959	.919	-1.237	.219	.321	.435
Q5.1.1	111	3	1	4	1.21	.488	.238	2.838	.229	10.157	.455
BQ5.1.2	118	6	1	7	3.96	1.619	2.622	-.139	.223	.083	.442
Q5.2.1	114	1	1	2	1.25	.432	.187	1.198	.226	-.576	.449
BQ5.2.2	118	6	1	7	5.10	1.386	1.921	-.381	.223	.011	.442
Q5.3.1	114	1	1	2	1.32	.470	.221	.759	.226	-1.449	.449
BQ5.3.2	118	5	2	7	5.31	1.237	1.530	-.272	.223	-.430	.442
BQ5.3.3	118	5	2	7	5.42	1.201	1.443	-.510	.223	.070	.442
Q5.4.1	114	1	1	2	1.39	.489	.239	.475	.226	-1.807	.449
BQ5.4.2	117	6	1	7	6.04	1.241	1.541	-1.347	.224	1.733	.444
Q5.5.1	114	1	1	2	1.54	.500	.250	-.178	.226	-2.004	.449
BQ5.5.2	118	6	1	7	5.97	1.247	1.554	-1.039	.223	.650	.442
Q5.6.1_A	114	6	1	7	5.77	1.212	1.470	-1.037	.226	1.450	.449
BQ5.6.2_A	118	2	5	7	6.64	.634	.402	-1.583	.223	1.273	.442
BQ5.6.3_A	118	6	1	7	6.03	1.219	1.486	-1.506	.223	2.492	.442
BQ5.6.3	118	3	4	7	6.39	.806	.650	-1.127	.223	.409	.442
Q5.6.1	114	5	2	7	6.35	1.004	1.009	-1.929	.226	4.061	.449
BQ5.6.2	118	3	4	7	6.42	.851	.725	-1.279	.223	.563	.442
Q6.1.1	110	6	1	7	4.03	1.927	3.715	-.008	.230	-1.182	.457
BQ6.1.2	114	6	1	7	5.55	1.227	1.506	-.723	.226	.698	.449
Q6.2.1	110	1	1	2	1.18	.387	.150	1.673	.230	.813	.457
BQ6.2.2	114	5	2	7	5.68	1.156	1.336	-.525	.226	-.335	.449
Q6.3.1	110	1	1	2	1.41	.494	.244	.375	.230	-1.894	.457
BQ6.3.2	114	6	1	7	4.99	1.353	1.832	-.202	.226	-.375	.449
Q6.4.1	110	1	1	2	1.09	.289	.083	2.886	.230	6.443	.457
BQ6.4.2	114	5	2	7	5.63	1.169	1.367	-.392	.226	-.508	.449

Participant comments during the pilot study led to minor item revisions. I corrected misspellings and minor errors that participants identified. These issues were mostly related to leftover edits that were not fully addressed, leading to response options that did not fit the wording of the items they were associated with. For example, open-ended feedback participants were invited to share was overwhelmingly positive and included sincere interest in the outcomes from this study, as well as a new awareness for the elements that existed in their offices.

### **Primary Data Collection**

I submitted the revised version of the SCOFFEE (Appendix F) to the IRB for approval after changes were made based on the pilot study. I then initiated the primary data collection phase once IRB approval was granted. To recruit participants for the primary data collection, I used a three-pronged approach. First, I again posted the call for participation on Facebook in the same groups where it was originally posted (Elementary School Counselor Exchange, High School Counselor Connection, and School Counselors Connect). Second, I sought to send the SCOFFEE to practicing school counselors through state school counseling organizations that agreed to distribute the survey to their members. I emailed leaders of every state's school counseling association with an IRB-approved invitation to distribute the survey to its members. I was also able to share access to my survey through a presentation at the North Carolina School Counselor Association by sharing the approved QR code. Finally, I invited school counselors to take part in this phase through the bulletin board system as part of the American School Counselor Association website and on the subreddit r/schoolcounseling. Reddit is a bulletin board-like website where people can post in groups called subreddits, which are related to common interests. The subreddit r/schoolcounseling allows IRB approved research to be shared

with members of the group. The survey remained open for three weeks before it was closed, and the data were downloaded for analysis.

### **Descriptive Statistics**

During the three weeks that the survey was available in the primary data collection, 264 participants completed responses. Females made up 79.9% ( $n = 211$ ) of the sample. The average age of participants was 40.77 years old ( $s.d. = 10.80$ ). Of the sample, 79.9% ( $n = 211$ ) participants identified as Caucasian, 6.8% ( $n = 18$ ) identified as Hispanic/Latinx, and 4.9% ( $n = 13$ ) identified as African American. School counselors working in rural (27.7%,  $n = 73$ ), suburban (41.7%,  $n = 110$ ), and urban (27.7%,  $n = 73$ ) areas were all represented in the sample.

The most commonly indicated caseload size among participants was 250-500 (43.9%,  $n = 116$ ), followed by “less than 250” (28%,  $n = 74$ ), and 501-750 (18.6%,  $n = 49$ ). High school counselors (42.8%,  $n = 113$ ) were the best represented in the sample. Elementary (23.9%,  $n = 63$ ) and middle school (22.7%,  $n = 60$ ) counselors were also represented, along with 8% ( $n = 21$ ) of participants who indicated their caseload was some other level. These participants included counselors for just one grade level or multiple levels (e.g., K-8 or 6-12). School counselors early in their careers were best represented in the sample with counselors in their first 5 years representing the largest group of participants (31.8%,  $n = 84$ ). School counselors in the professions for 6-10 years were the next largest group (26.9%,  $n = 71$ ), and those in their 11-20<sup>th</sup> years were third-most represented (23.1%,  $n = 61$ ).

### **Data Screening**

The process I used for screening data is outlined below. Due to the nature of the survey items, in particular the items regarding what is and is not in the physical space, the resulting data from this study was not expected to result in a normal distribution. However, the screening

process is still vital to understanding the collected data and why some results may have been skewed in the data analysis. During the screening process, when data was uploaded into R or into SPSS, it was reviewed for accuracy. In R, the first rows of data were reviewed with the command head (data). In SPSS, the data was reviewed in the data view window, and the designation of each item as scale, ordinal, or nominal. Headings for columns were checked for accuracy in both programs.

### ***Missing Values***

When I reviewed initial primary data collection data, I found that 8.10% ( $n=1,702$ ) of data were missing. This was, in part, because the SCOFFEE skipped some items for test takers that did not have a counseling space. These items ask school counselors to identify if physical elements are present in their counseling space, and therefore would not be appropriate to ask those who indicated that they did not have a counseling space. These participants were only asked 47 of the 89 items on the SCOFFEE. When those responses were not included in the count of missing data, the percentage of missing data improved to 5.20% ( $n=1,034$ ). Little's MCAR test found significant patterns in missing data in five items. These items were contingent upon the participant indicating that they have a window or a desk. These items are skipped automatically when the participant indicates they do not have a window or a desk. Therefore, I concluded that most missing data was due to the item structure of the survey, and not due to participant responses.

### ***Normality and Outliers***

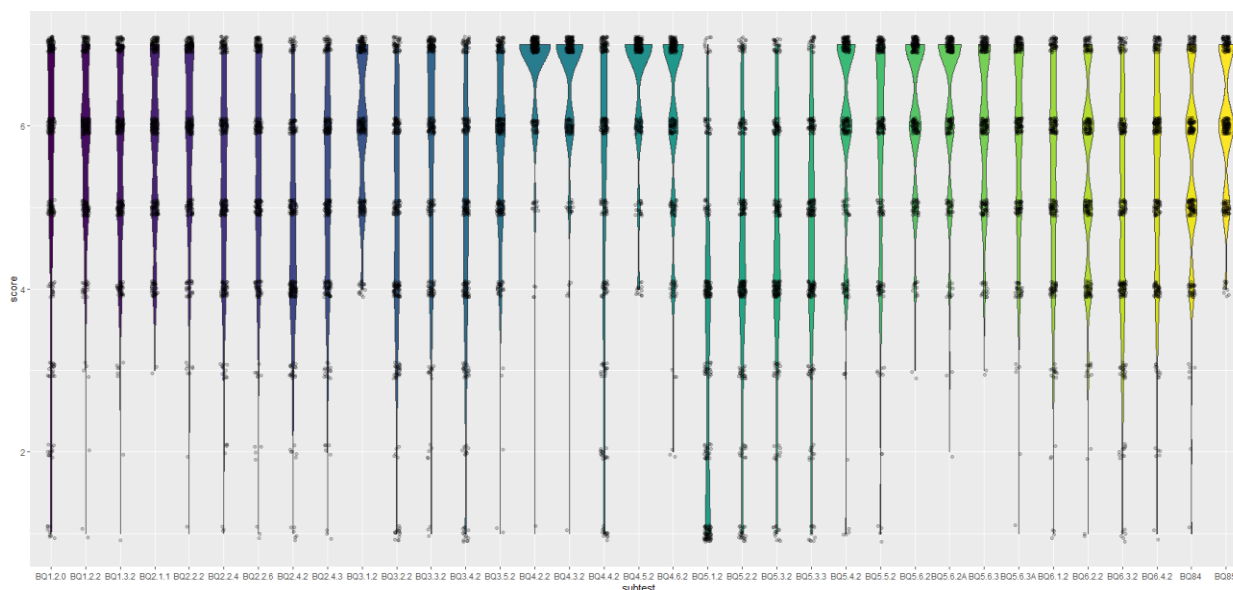
The performed normality tests I conducted included an examination of score distribution, skewness, and kurtosis in each item. I conducted these tests in SPSS Statistics 7. I conducted these analyses to check the distribution of my data and to help understand any future results from

my data analysis more fully. This review of data adds context to any errors or any scores that may seem inappropriate. An examination of this data and histograms revealed that scores did not fall on a normal distribution, with most items skewing negatively. This is also clearly displayed through a scatterplot generated in R Studio, which shows the distribution of responses by item. Normality is an important assumption for many analyses that compare scores. Such is the case when conducting a CFA.

Kurtosis was acceptable in items focused on beliefs with only one item (Q1.2.2) scoring above 2, beyond the acceptable threshold for kurtosis (Hahs-Vaughn, 2017). This item asked school counselors “To what extent do you believe the size of a counseling space has a positive impact on the therapeutic nature of a counseling space?” This item scored a kurtosis value of 2.248 and a skewness of -1.162. Other items with high kurtosis were inventory items that asked school counselors if an element was present in their office. Non-normal data was expected with these items due to their concrete and factual nature.

**Figure 1**

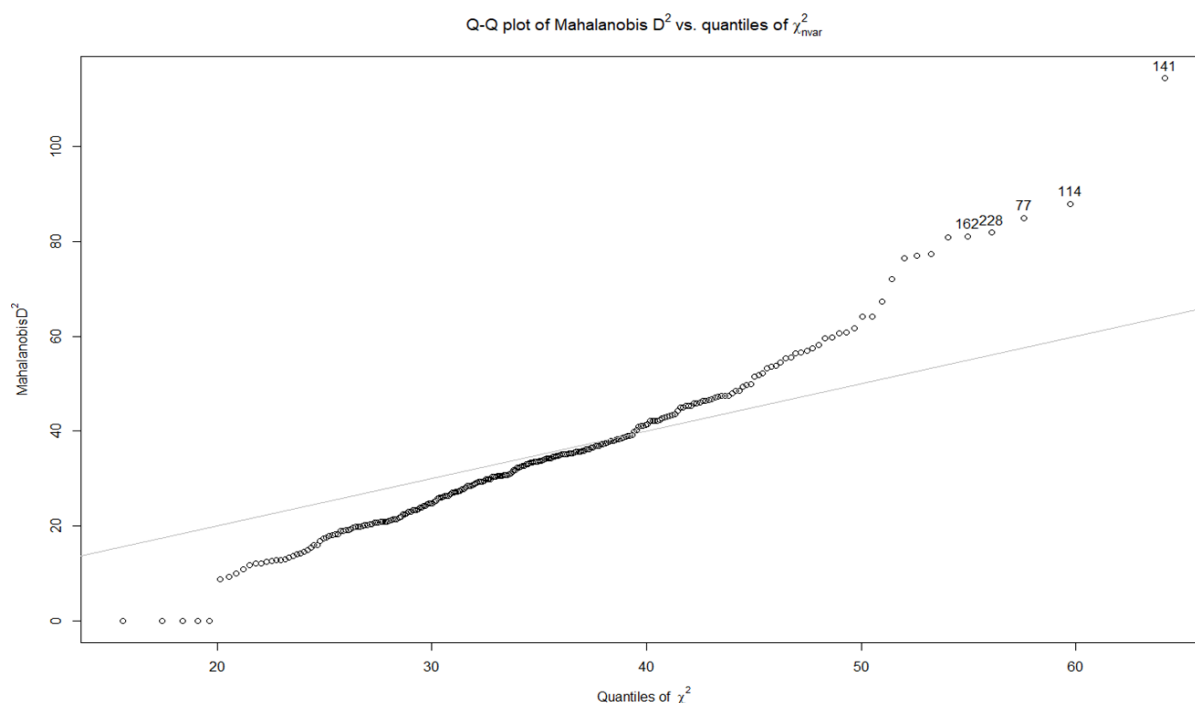
*Scatterplot by Item*



I identified outlier participants using the above data and generated a QQ plot (Figure 2) in R Studio. I found five outliers and removed them from further analysis. Though some items had a skewed distribution. Due to the lack of normalcy in expected results, removing these items was not considered necessary during the data screening process.

**Figure 2**

*QQ Plot*



### ***Linearity and Multicollinearity***

I conducted an assessment of linearity and multicollinearity by inspecting scatterplots for each item and a correlation matrix. Due to the nature of items about the physical environment not necessarily relating to the participant's beliefs or agency over their space, only items about counselor beliefs were assessed in the correlation matrix. There were significant correlations between many variables at the .01 level. Correlation coefficients ranged from less than -.230 to .783, with a mean correlation value of .168.

### ***Factorability of R***



As required for a factor analysis, I investigated the factorability of the SCOFFEE and its items. A review of Kaiser-Meyer-Olkin statistics (KMO) on belief items revealed overall satisfactory results for the SCOFFEE. The overall test score was 0.81, and all but one item fell between 0.92 and 0.68, with 21 of the 35 items scoring at or above 0.80. The one item that did not score in this range was the first item: “I believe my space is a comfortable size to conduct individual counseling or counseling with a student and their parents/guardians.” This item scored a 0.45. With scores of 0.60 or higher being acceptable, and scores of 0.80 or higher considered strong (Hahs-Vaughn, 2017), this analysis indicated the variables in the SCOFFEE were factorable.

### **Instrument Reliability**

The primary data collection responses for the SCOFFEE displayed strong internal consistency. The Cronbach’s alpha for the sample was 0.874 based on standardized behavior items. Inventory items about the physical environment were not included in this analysis due to their factual nature. The factual nature of these items means there is no latent trait being examined in these items, which is a requirement for most psychometric analysis, including CFA and IRT analysis (Pett et al., 2003). A review of alpha levels if any single item was removed revealed that the removal of any one item would not increase the alpha level of the SCOFFEE. Therefore, I did not remove any items for reliability reasons.

### **Analysis**

#### **Item Response Theory Analyses**

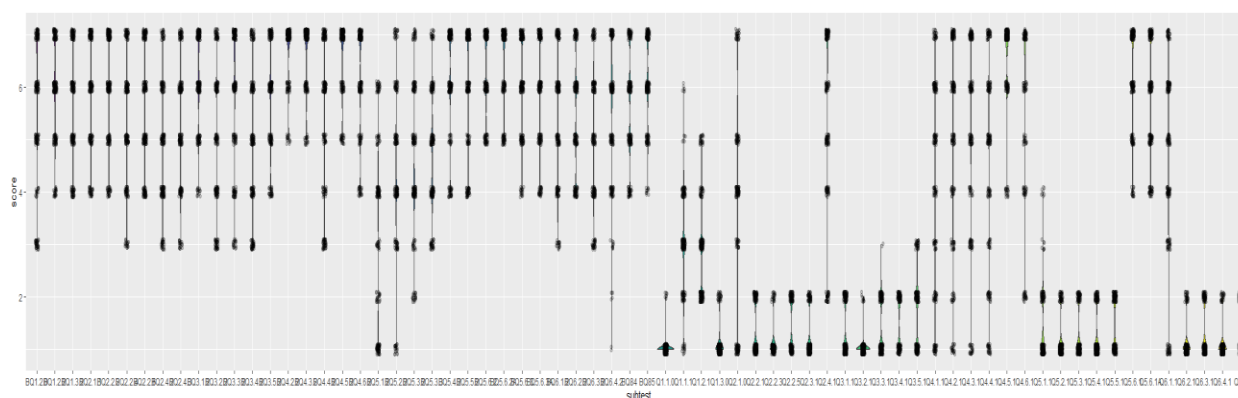
An initial attempt at IRT analysis revealed that the lack of valid responses to particular item response categories caused errors during the analysis. For this reason, the IRT analyses were not executable. To remedy this, I decided to collapse response categories when their

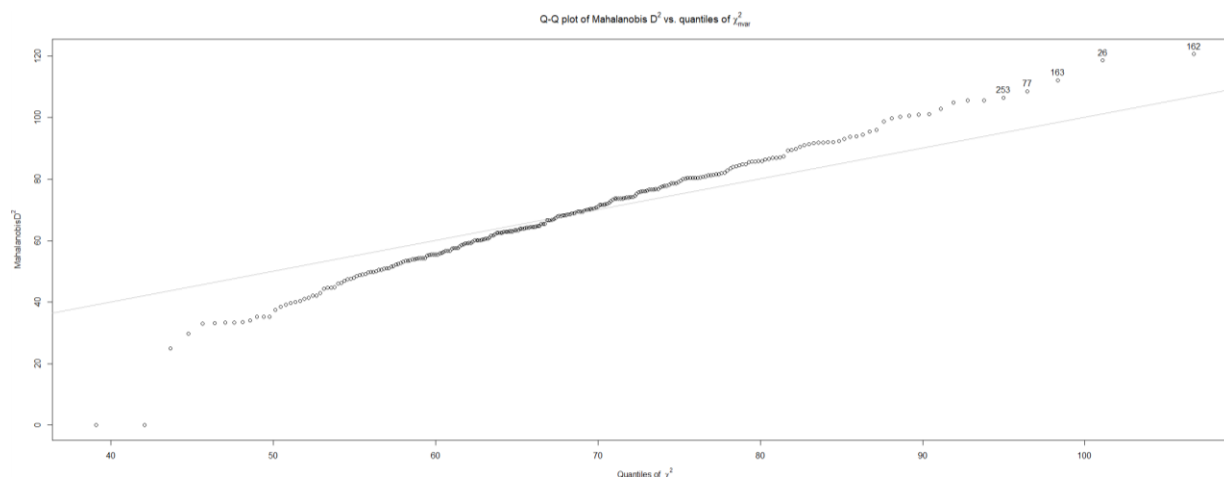
frequency of selection was below 20. I examined frequency tables for each item and collapsed responses before running the IRT analysis again. Thirty-three of the belief items had a least one category collapsed.

A new test for normalcy with the collapsed response categories revealed that skewness was still present, though less severe. A new QQ plot (Figure 4) analysis discovered five multivariate outliers at the high end of our sample. I removed those five outliers before conducting the IRT analysis.

**Figure 3**

*Scatterplot by Item (Merged Data)*



**Figure 4***QQ Plot (Merged Data)**Item Fit*

I used a Rasch graded partial credit model (GPCM) to analyze the data considering the nature of the belief items. A Rasch model focuses on the B parameter, or difficulty of the question based on the participant's ability level (de Ayala, 2009). The Rasch model is also better at assessing smaller datasets (de Ayala, 2009), like the sample I was analyzing. These items are polytomous and utilize ordered responses, which GPCM is well suited for (de Ayala, 2009). A GPCM does not assume one correct answer, which suits the Likert style questions best (de Ayala, 2009). Using GPCM and the collapsed data, IRT results were improved.

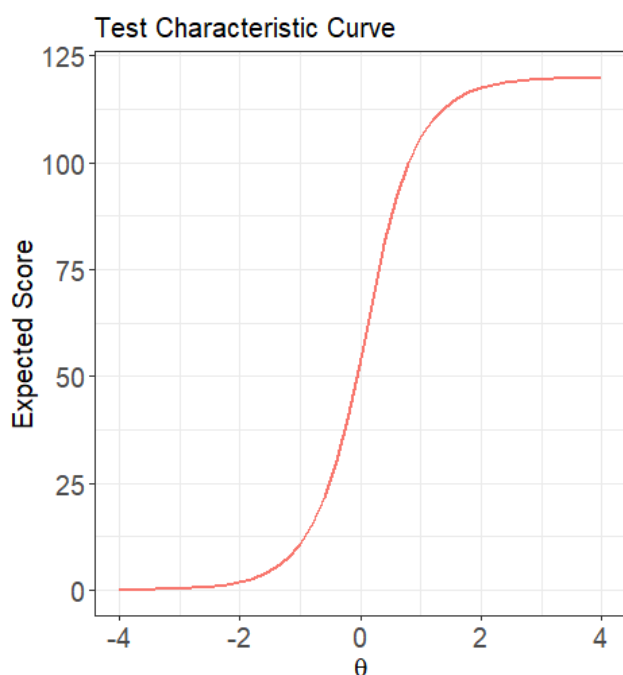
An initial review of Item Characteristic Curves (ICCs) showed items were discriminating well between participants. The ICC is a visual representation of the item's probabilities, displaying outcomes based on the ability level of the test taker (de Ayala, 2009). The curve displayed can show the difficulty of an item, the item's ability to discriminate between test takers based on their ability, and a guessing parameter, which can indicate the likelihood of guessing the correct answer. Using a Rasch model, these ICCs indicate only the B parameter; for the SCOFFEE this represents the discrimination ability of the item based on the strength of the

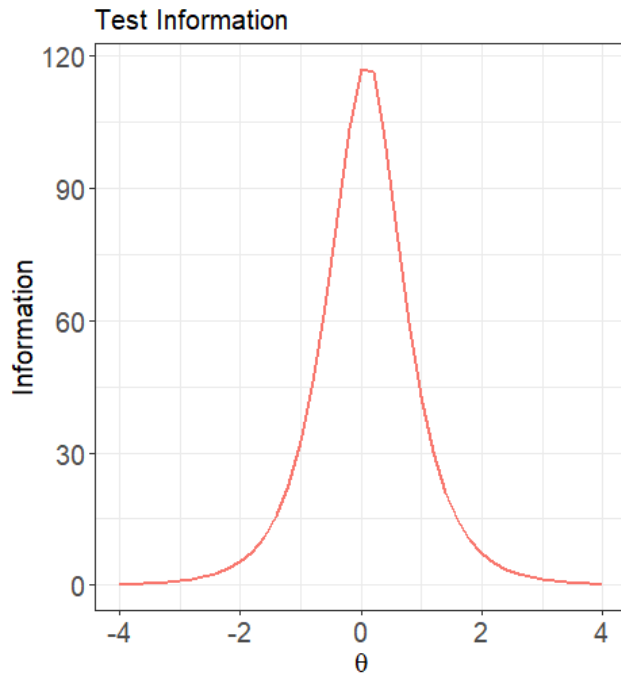
school counselor's beliefs. The ICCs that were generated from the SCOFFEE dataset displayed curves that were prominent for each item, indicating a stronger ability to predict scores based on the participant's ability level (de Ayala, 2009). Observing more detailed statistics from the IRT analysis, items showed healthy standard error. All error scores were at or below 1.12, which suggests good fit. The standard error ranged from -.84 to 1.12, which is acceptable (de Ayala, 2009).

Further evidence of the effectiveness of the SCOFFEE was seen in an evaluation of the Test Information Function (TIF) and the Test Characteristic Curve (TCC). The TIF (Figure 5) and the TCC (Figure 6) demonstrates the discrimination and difficulty of the overall measure. A higher curve represents a higher difficulty for participants based on their ability, or in this case, the strength of their beliefs (Yang & Kao, 2014).

**Figure 5**

*Test Characteristic Curve*



**Figure 6***Test Information Function*

Differential item functioning (DIF) is conducted as part of validation in IRT analysis. DIF analysis examines demographic groups in the dataset to see if performance on any items change based on who is responding to those items. The ideal DIF analysis for this data would be logistic regression, however this data does not meet the assumptions required for such an analysis. The results of a logistic regression with this data would not yield results that can be trusted to explain bias in the SCOFFEE (Hahs-Vaughn, 2017). With this in mind, I attempted to assess the data using logistic binomial regression for demographic variables with sufficient variability. The three demographic variables investigated were caseload size, race, and age. When comparing school counselors working with caseload sizes of 250 or lower and school counselors working with caseload above 251, no items displayed any significant bias ( $p < .05$ ).

Race was examined though there was a small sample size of non-White participants ( $n=27$ ) compared to White participants ( $n=209$ ). Again, no items showed any significant bias ( $p<.05$ ). It should be noted that the small number of non-White respondents may make these results invalid. The age demographic responses were divided into two groups, those below the age of 40 ( $n=120$ ) and those 40 years old or older ( $n=113$ ). This cutoff was selected because it represented the middle of the dataset for those who indicated their age. No items in this analysis showed any significant bias regarding age ( $p<.05$ ).

### **Internal Consistency of the SCOFFEE**

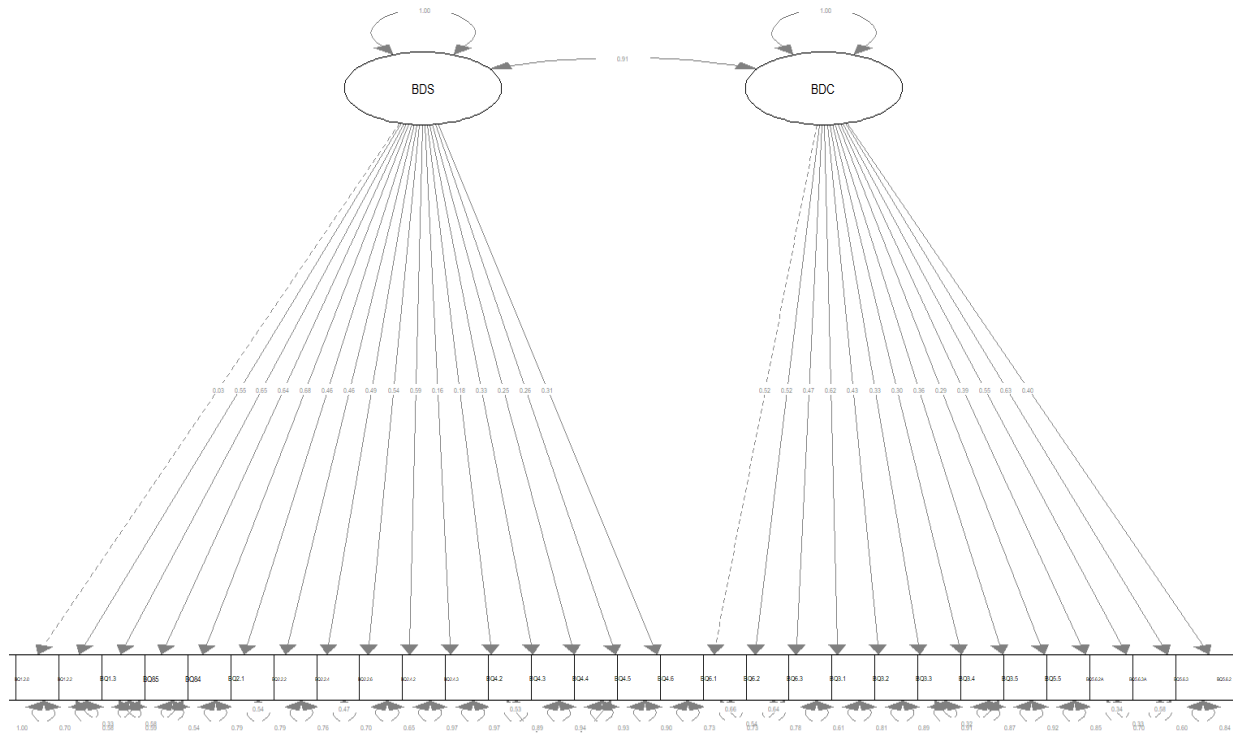
#### ***Confirmatory Factor Analysis***

The first model tested contained only the belief items and did not contain items about the physical spaces in which participants work. It was assumed that the belief items and the physical items were so unrelated that it was hurting the model. This model was a two-factor model; the belief items were broken up into belief items that inquired about décor and belief items that inquired about design. This split was made due to the representation of design and décor in the research; design elements were often researched with other design elements and décor elements were often researched with other décor elements. Results were stronger, but weak. The robust CFI was 0.439 and the robust TLI was 0.402. The robust RMSEA was 0.120 and the SRMR was 0.120.

After weak results in this model using the data sample from primary data collection, I decided to re-run the above model with the data used in the IRT analysis that contained collapsed responses to address the lack of varied responses in the sample. I ran the model again with this new data. I conducted a comparison of the results and found that the fit indices indicated a stronger fit with this collapsed data.

The two-factor model that contained only belief items split the responses between belief items related to design and belief items related to décor. The robust CFI was 0.512 and the robust TLI was 0.473. The robust RMSEA was 0.112 and the SRMR was 0.113. A review of ten modification indices offered possible modifications with scores above a value of 35. A review of the data found that all but one of the possible modifications were between items inquiring about similar elements. For example, the highest rated pair of items with a score of 97.77 was “To what extent do you believe that the décor in your space relieves the stress students feel when talking to a counselor?” and “To what extent do you believe that the décor of a space has a positive impact on the therapeutic nature of a counseling space?” Other pairs were similarly themed closely around a particular element of the counseling space. These modifications were accepted and executed, and the resulting scores of the modified model were much stronger.

I concluded that this analysis was the final, preferred model for the SCOFFEE (Figure 5). The robust CFI was 0.820 and the robust TLI was 0.798. The CFI falls short of the .95 value that is commonly accepted, however the other values meet the accepted benchmarks, with the exception of the SRMR, which misses the benchmark by .001 (Hahs-Vaughn, 2017). The SRMR for the model was 0.081; SRMR scores of .8 or lower suggest good model fit (Hahs-Vaughn, 2017). The TLI score is acceptable, as scores closest to 1.0 are considered appropriate (Hahs-Vaughn, 2017). The robust RMSEA was 0.069, which is also acceptable, as RMSEA scores of 0.5 to .08 are considered a close model fit.

**Figure 7***Final SCOFFEE Model (Belief Questions)*

As mentioned previously, I also found a second model that scored well. This model was related to the presence of elements in a physical space. Though encouraging, I abandoned further exploration of this model due to the lack of any latent variable to be measured. Exploration of the significance of a model fit with this data is out of the scope of this project but may be considered for future research.

### Open-Ended Questions

The SCOFFEE included 3 additional open-ended insight questions. These included “If there was one thing about your space that you would change, what would it be?”, “What is preventing you from making that change or finding a place where that change is not needed?” and “Is there a feature in your room that you cannot change that you feel is detrimental to the



work you do as a school counselor? If so, what is that thing?” Though I did not analyze responses using formal qualitative analysis, a cursory review of responses indicated that the results to these questions varied. The thing participants most commonly indicated they would like to change in their offices was related to windows (i.e., getting a window, changing the view, increasing natural light, removing a window) ( $n= 53$ ) or a change related to the size of the space (i.e., making the room bigger, having space for groups, changing the shape of the space, adding storage) ( $n= 48$ ). Similarly, the element of the office most commonly mentioned as detrimental to school counseling work was windows ( $n= 39$ ) and space ( $n= 24$ ). When asked what is preventing the change, the most common response participants shared was related to the physical logistics of the school (i.e., having no other options on campus, being located in a space where a window is not possible, having furniture bolted down and being unable to move it) ( $n= 115$ ). The second most common response was related to funding ( $n=48$ ). Another common response to this question ( $n=28$ ) was related to the choice being made by someone in a place of power above the school counselor (i.e., administration, district leadership, building maintenance supervisor).

### **Chapter Summary**

In this chapter, I explained the results from the expert review and pilot study of the initial SCOFEE drafts. Both phases of data collection were helpful in building a stronger survey before the primary data collection phase. I made changes to the wording of belief items and to the response options in an attempt to address bias. Other changes included rewording unclear items and adding more descriptive items to garner responses that more accurately reflect the intended spirit of the question.

The analysis of the primary data collection was impacted by the skewed data collected. The IRT analysis was most affected by this issue, and I was unable to complete the analysis. The

analysis was helpful in identifying the skewed data as an issue, which led to the modification of some data by collapsing response options with 20 or less responses. This data was used in the CFA process, which strengthened outcomes and led the development of a model with a fit that is acceptable.

The best models for the data broke apart the SCOFFEE. Therefore, I concluded that the data in this sample is best represented in two separate models, in which beliefs stand alone, apart from a second model that contains only items about the physical counseling space. Next, I discuss further interpretation and possible implications related to this analysis in Chapter Five.

## CHAPTER 5: DISCUSSION

The goal of this study was to generate the final items of the School Counselor Office Environment Evaluation (SCOFFEE), discover the final factor structure of the SCOFFEE, and validate the SCOFFEE. Utilizing the model of Supportive Design, I developed, tested, and analyzed the SCOFFEE. In this chapter, I discuss these results. I first include an overview of the study and a discussion of the primary data collection results. From there, I explain the contribution of the study to the field, limitations of the study, and discuss implications of the research. Finally, I address recommendations for future research related to the SCOFFEE and the results of the study.

### **Overview of Study**

The counseling relationship is a paramount component of productive professional counseling (Cochran & Cochran, 2015; Hansen, 2014; Hatchett, 2017; Rayle, 2006). Therefore, counseling space, as a contributing factor to establishing a productive counseling relationship (Gass, 1984; Miwa & Hanyu, 2006; Pressly & Hessacker, 2001), deserves the attention of counseling researchers and practitioners. In this study, I sought to establish the first measure to assist school counselors in assessing their counseling space. Using the theory of Supportive Design, which prioritizes the elimination of stress-educing elements in a space and the addition of stress reducing elements (Ulrich, 1991), I identified possible items for the instrument through established literature on the effect of space on clients. This literature review addresses research question one, in which I asked what elements of space have an impact on the therapeutic nature of the space, according to published research. This literature was used to construct my initial items for the SCOFFEE.

I developed an initial set of 72 items for the instrument after conducting a literature review of research on topics related to the effects of counseling spaces on clients. I then sent these items to a group of five experts for review. Their comments resulted in changes to the items that included rewording and changes to answer choice options. After making these changes, I conducted a pilot study on the revised version of the SCOFFEE. One-hundred-sixty-seven school counselors took part in the pilot study and provided descriptive data that I analyzed. Based on pilot feedback, I made minor changes to spelling and answer choices based on this feedback.

Primary data collection took place after the pilot study. Two-hundred-sixty-four school counselors took part in this phase of the study. I checked for normality and assumptions using descriptive data and correlation data. As assumed, due to the nature of the questions asked, the data was skewed. I used Confirmatory Factor Analysis (CFA) and Item Response Theory (IRT) analysis to evaluate the internal and external reliability of the SCOFFEE and to measure the effectiveness of each item and the overall model. I tested seven models using CFA. The models had weak fit due to the skew of the data. The discovered factor structure from this analysis addresses my second research question (What is the factor structure of the SCOFFEE?).

The IRT analysis was also unsuccessful in my first analysis, thus, I decided to address the skew of the data by collapsing response categories in each item with 20 or fewer responses. The CFA and IRT analysis with this collapsed data had fewer errors and provided the most effective results. The results from the CFA analysis with this data, as well as the resulting Cronbach's alpha's and correlation data, indicated stronger validity of the SCOFFEE if broken apart into two separate measures. These two measures were an assessment of school counselor beliefs about elements in the school counseling office (the SCOFFEE Beliefs Questionnaire)(Appendix H),

and an inventory of items that have been identified as contributing to the therapeutic value of a space (the SCOFFEE Inventory)(Appendix I). This analysis answered my final research question regarding the validity of the SCOFFEE.

### **Discussion of Results**

The analysis did not produce acceptable results when the IRT analysis and CFA were completed using belief items and the inventory items about space together. The data was separated so that analysis could be conducted again on just belief items. The inventory items were not included due to the lack of a latent variable to investigate due to the items being specifically about what is and is not present in the counseling space. The analysis with only belief items produced more appropriate results. After testing multiple CFA models, a two-factor model was accepted as providing the best fit for the data. The two factors of this model are Design Beliefs and Décor Beliefs. The IRT analysis indicated that in general, items were functioning appropriately and providing appropriate information regarding school counselor beliefs. Based on these results, the SCOFFEE has become two separate measures, the SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire. It was unexpected that the data analysis would reveal two separate tools, but it was clear that taking this path was best for the psychometric properties of each and their utility. A benefit of this split was that brevity and test-taker fatigue will be less of a concern.

The results in this study and the development of the SCOFFEE is not meant to excuse poor performance or lackluster delivery of school counseling services. School counselors have been productive in schools throughout the United States despite disparities in working conditions. The SCOFFEE was developed with the intention to address those cases in which school counselors are in more difficult situations, such as those working in closets or in spaces

that lack privacy. School counselors in those situations may need to commit valuable resources and time attempting to make the space more therapeutic based on their own understanding of what elements of the space they can augment or introduce. Using the SCOFFEE Inventory to place a school counselor in an appropriate place, to assess what elements may be added or changed in a space, or to advocate for a better space allows school counselors to deliver their counseling services and focus on building relationships with students more easily. Space influences the relationships counselors can build with students and clients. The SCOFFEE tools are available now to help ensure this contributing factor to counseling success is no longer a hurdle for some.

### **Discussion of Demographic Data**

The participants in the primary data collection phase represented a similar sample of school counselors when compared to the 2020 national State-of-the-Profession survey conducted by ASCA (2021) with 7,000 school counselors from across the country. The latter survey of the profession represents the largest and most recent sample of American school counselors that was found, and thus provides the most accurate and recent profile of practicing school counselors. The ASCA survey had a 9.4% response rate. Due to the snowball sampling done in this study, there is no reportable response rate.

ASCA's (2021) survey yielded a sample that was 87% female, 12% male, and less than 1% non-binary/third gender. The SCOFFEE sample was similar, with 82% ( $n = 211$ ) of participants identifying as female and 1.1 % identifying as non-binary/third gender ( $n = 3$ ). The age of ASCA's (2021) sample was 38% 40 or younger, 31% between 41 and 50 years old, 24% between 51 and 60, and 6% was above the age of 60. In comparison, the SCOFFEE sample's average age was 40.77 years old, similar to the ASCA sample. Respondents to ASCA's (2021)

survey were majority White (77%). Ten percent identified as Black or African American, 5% identified as Latinx, and 3% identified as two or more races. In the SCOFFEE sample also had a high response rate from White school counselors at 78.8% ( $n = 211$ ). Minority group responses were also small: 4.9% ( $n = 13$ ) identified as African American, 6.8% ( $n = 18$ ) identified as Hispanic/Latinx, and 1.5% ( $n = 4$ ) identified as multi-racial. ASCA's (2021) survey reported 24.1% of participants were in urban school settings, 41.5% were in suburban schools, and 31.2% were in rural school settings. The SCOFFEE sample had similar representation with 27.7% ( $n = 73$ ) working in urban settings, 41.7% ( $n = 110$ ) working in suburban settings, and 27.7% ( $n = 73$ ) working in rural settings.

The majority of respondents (43%,  $n = 116$ ) to the SCOFFEE survey had 250-500 students on their caseload. Twenty-eight percent ( $n = 74$ ) indicated they had less than 250 students on their caseload. This is also similar to the national average for school counselors according to the ASCA survey, which is 430. The ASCA (2021) sample contained 32% elementary school counselors, 21% middle school counselors, and 32% high school counselors. The SCOFFEE sample included 23.9% ( $n = 63$ ) elementary school counselors, 22.7% ( $n = 60$ ) middle school counselors, and 42.8% ( $n = 113$ ) high school counselors. The SCOFFEE also had 8% ( $n = 27$ ) that selected "other" which included school counselors that only served one grade level, or school counselors that served a combination of elementary, middle, and high school.

In the SCOFFEE sample, 31.8% ( $n = 84$ ) of participants were in their first 5 years of the profession. The number of responses shrank as the number of years increased, with 26.9% ( $n = 71$ ) selected 6-10 years, 23.1% ( $n = 61$ ) selecting 11-20 years, 12.9% ( $n = 34$ ) selecting 21-30 years, and 2.7% ( $n = 7$ ) selecting 31-40 years in the profession. Though it was an option, there

were no school counselors that indicated they were in the profession for more than 40 years. In addition, 51.9% ( $n = 137$ ) indicated that they work in a Title 1 school.

In summary, the SCOFFEE sample was very similar to the most recent national ASCA survey of school counselors, suggesting that the SCOFFEE sample is similar to the overall demographics of school counselors in the U.S. This generalizability contributes to the validity of this study, suggesting that results may be generalizable to the national population of school counselors. The SCOFFEE sample included a similar distribution of gender, race/ethnicity, age, and setting. The 264 responding school counselors in the SCOFFEE sample appear to approximate the overall profile of the school counseling field. While it would be desirable to have higher participation by males and underrepresented racial groups in the profession, the resulting participant demographics in the study may be a symptom of the field being predominantly White and female. Due to its high number of participants and its accurate representation of school counselor demographics, this research can provide a comparison point for further research on spaces which may focus on the experiences of underrepresented racial groups or male school counselors.

### **Item Analysis and Factor Structure**

The initial dataset used to conduct analysis contained both belief items and inventory items. The data for all items were skewed by higher scores throughout the sample. To find the factor structure of the SCOFFEE, I had to address these issues with the data and use several models to conduct a CFA with interpretable outcomes. These changes included collapsing item responses with less than twenty selections to address skewed data, and eliminating two items from the analysis. These two items were item 2.2.1 (“My counseling space has a window” [yes/no]) and item 3.3.1 (“While counseling students, my desk is not between the student and



me.” [yes/no]). Each of these items conflicted with other items in the SCOFFEE. Conflicting items were only presented to participants that selected yes for either item 2.2.1 or item 3.3.1. Deleting the pair of items was the best way to preserve the most data for the analysis. Collapsed item response options included those with less than 20 responses. Research supports this approach to addressing sparse data to maintain integrity in Likert scale data and to achieve more meaningful results from data analysis (DiStefano et al., 2021, Grimbeek et al., 2005).

The predicted model for the SCOFFEE hypothesized a two factor model that included beliefs about design and beliefs about décor. . A CFA and IRT analysis revealed that this model was the best fit when compared to other models, including a single-factor model. One reason this model may have displayed the best fit and also theoretically makes the most sense due to its focus on one latent trait: school counselor beliefs about counseling spaces. As previously mentioned, the inventory items are unrelated to the belief items, and so keeping them in the model is not beneficial to assessing school counselor beliefs about spaces. This instrument, the SCOFFEE Beliefs Questionnaire, represents the latent trait more effectively when not combined with the SCOFFEE Inventory, which does nothing to support gathering information on school counselor beliefs.

While results on both CFA models were better when belief items and inventory items were put into separate models, comparing descriptive data from both sets of items provides context to the data and indicates how analysis of both sets of items together can help understand school counseling spaces and school counselors. The table in Appendix G explores these items, placing the average indication of an item being present next to the average beliefs about that item. In this table, lower scores in the inventory items indicate a higher occurrence of that item in

counseling spaces. This allows us to see if the spaces that school counselors are working in align with their beliefs.

When I compared average responses to both inventory items and belief items, two things became clear. First, belief items remained high throughout the SCOFFEE (ranging from 4.30 to 6.64 on a scale of 0-7), whereas the presence of the items themselves varied (with dichotomous items ranging from 1.19 to 1.78 on a scale of 1-2). And second, if you compare these two items for a single element of the space, you can observe the severity of these discrepancies.

Some elements of design, including windows and privacy, are out of the school counselor's control, and therefore we can expect some discrepancy between what is in the office and what a school counselor believes is important. Discrepancies still exist in areas related to décor, however. For example, results show that, on average, school counselors in this study believed that safe space signage for LGBTQ+ groups and for racial and/or religious groups have a positive impact on their counseling space with average scores of 5.96 and 5.76 respectively. However, a large percentage of school counselors in the study reported not having them on display; 28.4% indicated they do not have LGBTQ+ signage on display, and 50.38% indicated that they do not have racial and/or religious signage on display. This discrepancy may be helpful for future school counseling training programs and school counseling departments in assessing what trainings or resources school counselors may need to allow their spaces to better reflect their beliefs as a counselor. It may also be beneficial for school counselors to review these two sets of data together, so that they can discover how they may improve their space so that it better matches their beliefs about their space.

It is important to note that typically in this process the measure being developed is compared to similar measures. Correlations with measures that focus on the same variables can

be used to see if the new measure is measuring what is intended (DeVellis, 2016). There are no instruments that examine school counselor beliefs regarding counseling spaces. Unfortunately, this means that adding validity to the SCOFFEE Beliefs Questionnaire in this way would be impossible. The SCOFFEE Beliefs Questionnaire will supply this for future measures, and will continue to benefit from future research into similar constructs that provide comparison information.

The IRT model delivered encouraging results. All items in the SCOFFEE Beliefs Questionnaire tested well and showed that the items were providing meaningful results. The DIF analysis revealed no significant bias in results based on the gender, age, or size of the caseloads of our participants.

### **Open-Ended Questions**

The SCOFFEE included three open-ended questions that revealed more about school counselor's spaces: *If there was one thing about your space you would change, what would it be?*, *What is preventing you from making that change or finding a place where that change is not needed?*, and *Is there a feature about your room that you feel is detrimental to the work you do as a school counselor? If so, what is that feature?* Responses to these questions revealed that the most desired changes for the school counselors in this study are the things they cannot control. Participants indicated that if they can change one thing about their space it would be either related to a window ( $n = 53$ ) or the size of the space ( $n = 48$ ). Just how much space a counselor needs has not been investigated in research, but researchers have found that space size can affect people within those spaces (Freedman, 1975, as cited in Gutheil, 1992; Haase & DiMattia, 1976; Lecomte et al., 1981). Researchers have also found that windows have an effect on people in spaces (Chaikin et al., 1974; Maslow & Mintz, 1956). When asked what prevents wanted

changes, the school counselors in this study indicated that physical logistics (such as a lack of space or a lack of options) ( $n = 115$ ), funding ( $n = 48$ ), and school leadership ( $n = 28$ ) limit them. Due to the insight these items provide, they were included in the SCOFFEE Beliefs Questionnaire and the SCOFFEE Inventory.

### **Contribution of the Study**

In this study, I applied the theory of Supportive Design to the school counseling office and developed a tool to measure the therapeutic nature of a space. In doing so, this study contributed to the field of school counseling and school counseling research by giving professionals two tools with which they can collect data related to the school counseling space for the first time. The SCOFFEE was found to be two separate measures, with independent validity demonstrated for both the inventory and the beliefs measure. It contributes to the field in two distinct ways. The SCOFFEE supports school counseling research in the fundamental issue of counseling space on school campuses both by providing an inventory for elements of a space, and by providing a measure for school counselor's beliefs about elements of counseling spaces.

As mentioned previously, spaces can affect people (Barazawa & Hanyu, 2013; Delprato & Jackson, 1975; Devlin, et al., 2009; Goelitz & Kahn, 2008; Hearn, 2006; Maslow & Mintz, 1956; McElroy, et al., 1983; Miwa & Hanyu, 2006; Sanders & Lehmann, 2018; Ulrich, 1991; Widgery & Stackpole, 1972), and while research into the effects of space has been conducted since the 1950s (Maslow & Mintz, 1956), there has been no consistent inventory to rate spaces being investigated. Research includes only the descriptions of the spaces and occasional photographs of the spaces investigated. The SCOFFEE Inventory provides a common point of reference, with evidence-based elements of importance for researcher to use when describing spaces in research related to counseling spaces.

Aside from providing a reference point for future research, the SCOFFEE Inventory also provides a reference point when comparing results from other measures as well. Used in conjunction with measures related to school counselors or students, the SCOFFEE Inventory can provide insight into the effects of space on either group. Mirroring a study about counseling spaces and its effects on self-disclosure (Miwa & Hanyu, 2006), a school counseling office can be rated with the SCOFFEE Inventory and sessions can be assessed for instances of self-disclosure. The SCOFFEE Inventory can be used to then improve that space, and instances of self-disclosure can be measured again with a second sample of students. Comparing those results would find what, if any, effects those changes to the space had on those samples of students. Using the SCOFFEE Inventory in this way to track changes to spaces can add a level of credibility to research into changes in spaces on clients and students. This could also assist in recreating experiments, allowing a more accurate reproduction by future researchers, using the SCOFFEE Inventory results from the original study to recreate the setting and run the experiment again.

The SCOFFEE Beliefs Questionnaire can be used alone or in conjunction with the SCOFFEE Inventory to add additional insight. Until now, there has been no measure that focuses on school counselor beliefs about their counseling spaces. Some research may benefit from this measure on its own. For example, researchers studying burnout may be interested in how beliefs about space change in relation to levels of burnout. Studies on counselor identity may benefit from understanding how assigned counseling spaces may have an influence on outcomes. In addition, perception of staff support may also be correlated to the elements that school counselors believe are important but are missing from their assigned space.

A further example based on feedback in the SCOFFEE open-ended questions is related to the inability to make changes. As previously mentioned, some of the most popular responses involved wanting a change to the design of the physical space, like having a window or having better lighting, however, some of the most common barriers to making those changes involve costs or not having supervisor support. It might be that the SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire can be used together to see what effects wanting change and not being able to enact those changes has on school counselor self-efficacy or professional identity.

In the present study, participants' beliefs about school counseling spaces gives insight into the effect space has school counselors. The participants in this study shared similar beliefs, highly rating the importance of the elements in the SCOFFEE Beliefs Questionnaire, despite the differences in their spaces. Those levels of beliefs remained high even as the SCOFFEE Inventory scores changed. Many school counselors in this study may not have had a window, for example, but that did not change their belief that a window has a positive effect on the therapeutic environment. Further research into beliefs about space may show that over time, beliefs change if elements are or are not present. It may show that student engagement with counselors that do not have windows, for example, are lower. The SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire could help shed light on the long-term effects of having or not having de-stressing elements in a school counseling space.

### **Limitations of the Study**

Though the SCOFFEE does contribute to the field, there were limitations in its development. The skewed nature of the data used in this study is a concern and a limitation of this study. That said, another limitation is that since this is the first study of its kind, it is unclear

if this skew is to be expected or if it is symptom of the school counseling field, or if there is something else at work. If the SCOFFEE is used outside of schools, for example, if it is adapted for use in in-patient settings, there is a possibility that these levels could change. It is also possible that the SCOFFEE could be used with PK-12 students to discover their beliefs about counseling spaces, and it is possible that those results will be less skewed as well. This is entirely speculative, since the SCOFFEE provides the first opportunity to measure beliefs about counseling spaces.

An additional limitation is the effects of the COVID-19 pandemic on results. I conducted this research during the 2021-2022 school year, which for many schools was the first school year of in-person instruction following the virtual learning that took place during the height of the pandemic in the 2020-2021 school year. Though primary data collection took place in the spring semester of 2022, impressions of space may still be impacted by time away from in-person learning and counseling. In addition, coming back to in-person learning and returning to normalcy while the state of COVID-19 continued to fluctuate may have impacted results. For example, data collection for the present study specifically took place during the Omicron variant peak of the pandemic, which may have increased stress among participants.

The methods used for online data collection may have also been a limitation. It may be that the only people who engaged with this survey were those who had the time. This would leave out groups of school counselors who potentially have higher caseloads or who are the only school counselor at their site. The number of participants with larger caseloads much smaller than other groups with lower caseloads, and this may be a reason why. Furthermore, I reached out to state school counselor organizations to distribute my survey to their members (Appendix C). Some states responded and said they would send it out, others said they would not, and even

more organizations never returned a message. There is a lot left unknown in that process regarding who received the survey through their state organization. While the call for participation was posted on the ASCA website and through various public social media groups using the IRB approved flyer (Appendix D), school counselors in some states had an additional opportunity to come across the invitation to take the SCOFFEE. This lack of random sampling should be considered when generalizing results to other groups and to the national population of school counselors. The result of gathering a sample from the previously named sources may overrepresent school counselors on social media, those in states in which organizations shared the survey with their school counseling members, and school counselors that have the time to engage with survey research. Conversely, it likely underrepresented school counselors not in these populations.

One school counselor expressed distain for the SCOFFEE, which may have served as a study limitation. Unfortunately, the post to which she was replying was deleted by the Facebook group moderator, so I do not have access to quote it. Her response, however, was in response to the lack of support she received at her site from her supervisors when it comes to finding a better place to work at her school site and in terms of general support for the counseling team. She felt the SCOFFEE put blame on the counselor for not having a space. I believe this was a misunderstanding for two reasons. First, no one else brought this up to me or left any kind of similar comment; this was the only negative feedback I received. Second, she did not take the SCOFFEE when asked to do so in the pilot study. Unfortunately, the pilot study call for participation did not contain any support after the survey was done, because the purpose was to refine the measure. In the primary data collection, school counselors were able to review their responses and read about why each element may be important to consider based on my literature



review. Still, this misunderstanding may have led to other school counselors ignoring the invitation if they shared this school counselor's sentiment about the SCOFFEE.

A final limitation of this study is that it is the first of its kind. There was limited literature to rely on when creating the SCOFFEE and no other measures to compare it to. For this reason, changes may need to be made in the future to the SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire as researchers use this version of the measure to learn more about school counseling spaces and discover missed elements or misunderstood elements that are not properly represented in the SCOFFEE Inventory.

## **Implications of the Results**

### **Implications for Practitioners**

The SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire first and foremost acknowledge that space is an important element of the counseling relationship. Both measures provide an opportunity to validate school counselors that may have concerns after being given a space that they struggle with or have doubts about. The SCOFFEE may assist them in finding ways they can improve their space, but at the very least, they provide an opportunity for school counselors to reflect on their spaces and their therapeutic value.

School counselors can use the SCOFFEE Inventory to advocate for better spaces. This can mean using the SCOFFEE Inventory to examine alternative spaces on campus or to examine their own space for ways to make improvements. Presenting the SCOFFEE Inventory and even the SCOFFEE Beliefs Questionnaire results with suggestions to an administrator gives requests evidence-based support and more credibility. Both parts of the SCOFFEE may also be used when attempting to get more funding to improve their current space, or in advocating for reasonable changes to their current space. School counselors can also use the SCOFFEE

Inventory throughout the district to present district-wide results to leadership, asking for changes throughout the district if on-site administration is resistant.

The SCOFFEE Inventory may also help to proactively address some of the issues identified by the responses participants provided to the open-ended questions. The most wanted changes by school counselors in this study were changes that they could not make to situations regarding windows and size of space. To proactively address these concerns, the SCOFFEE can be used by school leadership when locating an appropriate space for school counselors. School leaders could use the SCOFFEE to evaluate a proposed space before assigning it to school counselors or to compare available spaces they are considering assigning to school counselors. District planning committees that oversee renovation, building updates, or the construction of a new building could also use the SCOFFEE. The SCOFFEE could be used in these situations to be sure that a space is being created or preserved that maintains a positive therapeutic environment for school counselors to work within.

### **Implications for Counselor Educators and Researchers**

For educators training future school counselors, the SCOFFEE can be used to assist in expressing the importance of securing a space appropriate for school counseling. Counselor educators can instruct or encourage students to evaluate the spaces they see school counselors using in their practicum or internship experiences using the SCOFFEE. These experiences of evaluating spaces may help school counselors identify the best spaces for their work when they secure jobs as school counselors.

For counselor educators conducting research in schools, the SCOFFEE can be used to provide a clear picture of the spaces in which research is taking place. Based on results from this study alone, school counseling spaces can look very different from school to school (Appendix

G), and researchers would benefit from using the SCOFFEE Inventory to be sure important elements of the school counseling space are communicated to readers to give appropriate context to their work. This level of transparency has not been a part of previous research into spaces in which researchers were left to describe spaces on their own and could only do their best to provide the most important information they could find about the counseling space (for examples, see Cook and Malloy, 2014, Miwa and Hanyu, 2016, and Nasar and Devlin, 2011).

The SCOFFEE can also help researchers isolate variables. While space can be a difficult thing to control, the SCOFFEE provides an inventory of elements found to have an impact on the people within those spaces. Therefore, a researcher that would like to focus on the effects of lighting in a space, for example, may use the SCOFFEE Inventory to be sure that as lighting changes, other significant elements of the space remain beneficial. An example of this would be changing the lighting by closing a window to remove natural light. This change would also alter the view a client has out of the window. Both the view out of the window and natural light are identified as stress-reducing elements, and therefore the resulting changes in this experiment could be due to either. The SCOFFEE Inventory could identify this issue before the experiment is conducted and assist in isolating variables. Another example could be decluttering a desk to see if that effects student self-disclosure, but without the SCOFFEE Inventory to help isolate variables, the researcher removes pictures of the counselor and their family from the desk when decluttering. Again, inadvertently, two variables exist that may account for any changes in student self-disclosure- the decluttered desk or the lack of pictures.

### **Recommendations for Future Research**

Both the SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire could be used with other measures to better understand how space effects school counselors and students. Such

research would also help learn more about the effectiveness of the SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire. Using one or both parts of the SCOFFEE with a measure for school counselor burnout or self-efficacy may yield results that show the effects of space on school counselors in meaningful ways. Examining the space in conjunction with student likelihood to self-disclose or likelihood to engage in social/emotional counseling could also yield meaningful data on how space effects student engagement with their school counselor. These topics have yet to be researched, but with the SCOFFEE this research is possible.

In addition, examining student beliefs about space may uncover a new line of research when looking at counseling spaces. In the present study, I only examined school counselor beliefs about school counseling spaces. However, studying student beliefs about the same spaces may provide illuminating findings and implications for school counselors. Such findings could influence engagement or likelihood to return to a space for counseling services, for example. This has not been examined in counseling research.

Future researchers may also benefit from examining resources available in school counselor settings. For example, as indicated by some of the participants in this study ( $n = 48$ ), budget played a role in the school counselor's ability to make changes to their space. There may also be a significant disparity between affluent and less affluent schools related to certain aspects included in the SCOFFEE Inventory, such as having a pleasant view outside of their window or having privacy. The physical size of the school may be an issue as well since that could impact the ability to find another place on campus to work. Other resources, such as access to diversity and multicultural trainings, may also impact the presence of elements in the space, such as labels related to LGBTQ+ safe spaces.

Now that the SCOFFEE tools are available, research involving leadership and administration could also be conducted related to space. It would be beneficial to examine if administrators' perceptions of a school counselor's role influences the resources and the spaces that school counselors are granted. Research into the relationship between the school counselor and school leadership, or a school counselor's perception of professional support may provide valuable information related to the deciding factors leading to where a school counselor works.

The SCOFFEE Inventory and the SCOFFEE Beliefs Questionnaire focus on the space between the walls of the school counseling space. The world outside of the school counseling space may also have an impact on the school counseling environment and relationship. This could include proximity to administration offices or dean's offices. It could also be related to ease of access to the school counseling space. Due to my focus on the interior of the counseling space, I did not include these elements in the literature review, and these elements were not found as variables or considerations in any previous research. This may be a future element of space that is researched and eventually included in the SCOFFEE tools.

Although I focused on school counseling spaces in the development of the SCOFFEE, using the measure in other counseling fields appears beneficial. I utilized a literature review of research into therapy and counseling spaces when drafting the SCOFFEE. Only one article was based on school counseling spaces, in particular, and other research was based on clinical mental health and other counseling spaces. It would benefit the other counseling specialties for researchers to conduct similar studies to the present one in an in-patient addictions facility or a mental health counseling office.

Using the Beliefs Questionnaire in other counseling fields would also be helpful in understanding the skewed data in this sample. It would be advantageous to this work if there

were other groups that took the SCOFFEE Beliefs Questionnaire so that we could begin to understand the differences, if there are any, in beliefs between school counselors, clinical mental health counselors, addiction counselors, and any others.

### **Conclusion**

In this chapter, I discussed the process for the creation of and validation of the SCOFFEE. Though some of the data was augmented to be properly analyzed, this study has for the first time gathered school counselor beliefs about space, and for the first time, provided the field with a set of measures to address school counseling spaces. The SCOFFEE is two measures in one. First, the SCOFFEE Inventory can identify elements that provide a de-stressing and supportive environment. Second, the SCOFFEE Beliefs Questionnaire is a measure of school counselor beliefs regarding school counseling spaces. These two can be used together to show discrepancies between what school counselors have and what they believe is important, or they can be used separately. When used separately, I suggest that they be used intentionally to explore the effects of space on school counselors or on students. This can be done in conjunction with other measures, such as those involving burnout or self-efficacy.

In addition, researchers may use the inventory to support their work when investigating spaces. When conducting research, the SCOFFEE Inventory can provide a detailed description of the space which would include the elements of the space that research has indicated is most important to people within those spaces. The SCOFFEE Inventory could also be used to isolate variables and be sure that the space is not changing outside of those which the researcher intends to change. Furthermore, the detailed descriptions provided by the SCOFFEE Inventory can be used to recreate and revisit prior experiments.

School counselors can use both parts of the SCOFFEE to advocate for themselves. It can be used to find possible change to their space or to assess other spaces as potential alternatives to their current space. The SCOFFEE can also be used to advocate for funds or help guide school leadership in assigning or building new spaces for school counselors.

The SCOFFEE is currently the only measure available to investigate space in this way. As the first measure to investigate space, if research continues into school counseling spaces, it is likely that the SCOFFEE will need to be updated to address some of the new findings in the field. I am hopeful that this research into space will continue, and that the SCOFFEE will be revisited and will continue to grow and evolve as we learn more about the effects space has on the people who conduct and take part in counseling.

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## Appendix A

### Initial SCOFFEE Questionnaire

#### School Counseling Office Environment Evaluation Potential Items

#### Section 1: Room Size and Color

(Evans et al., 1996 ; Goelitz & Stewart-Kahn, 2008; Haase & DiMattia, 1976; Lecomte et al., 1981, Maslow & Mintz, 1956; Pressly & Heesacker, 2001)

1: I have a counseling space on campus	Yes/No
If yes, select an option that best describes your space (select more than one only if you have multiple spaces)	1: Classroom 2: Large Office 3: Average Office 4: Small Office 5: Designated Space within a room (Nook style area) 6: Not listed above, please specify:
2: My room is a comfortable size to conduct individual counseling or counseling with a student and their parents/guardians	Yes/No
How many people can your counseling space comfortably host?	# Answer
I believe the size of my space has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
3: The color of my counseling space is conducive to relieving the stress of my students.	Yes/No
The color of my space is:	Open ended
I believe the color of my space has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

#### Section 2: Lighting and Windows

(Barazawa & Hanyu, 2013; Chaikin et al., 1974; Maslow & Mintz, 1956; Miwa & Hanyu, 2006)

1: The lighting in my room is	7-point Likert scale 1: Mostly artificial 7: Mostly natural
I believe that the lighting in my space has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
2: My counseling space has a window	Yes/No
I believe that having/not having a window has a positive impact on the	7-point Likert scale: 1: Strongly Disagree

therapeutic nature of my counseling space.	7: Strongly Agree
If yes: While counseling students, they have a view of my window and can look out of it.	Yes/No
I believe that allowing students to see out of my window while counseling them has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
The view outside of my window is picturesque (offers a pleasant view, for example, of nature/plant life)	Yes/No
I believe that the view out of my window has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
3: While counseling students, the lighting is even throughout my room without one side or section of the room being significantly brighter than the rest.	Yes/No
I believe the evenness/unevenness of my lighting has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
4: The lighting in my room is:	7-point Likert scale: 1: Extremely Dim 7: Extremely Bright
I believe the level of lighting has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
5: I believe the level of lighting in my room is appropriate for counseling students.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

### Section 3: Furnishing and Layout of Furniture

(Gass, 1984; Gutheil, 1992; Maslow & Mintz, 1956)

1: My space is furnished with hard-backed school chairs for my students and guests.	Yes/No
I believe that my furnishings have a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
2: My space is furnished with an office chair for me.	Yes/No
I believe that having an office chair for myself has a positive	7-point Likert scale: 1: Strongly Disagree

impact on the therapeutic nature of my counseling space.	7: Strongly Agree
3: While counseling students, my desk is not between the student and me.	Yes/No/I have no desk
I believe that having nothing between the student and me has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
4: I must get up and sit away from my desk if I want to counsel a student without anything between us.	Yes/No/I have no desk
I believe that getting up and moving to counsel students has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
5: Most often when counseling more than one person, chairs in my office are organized:	1: With all chairs facing me 2: With chairs facing each other 3: Other (specify: )
I believe that this has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

#### Section 4: Privacy

(Albekairy, 2014; Holahan & Slaikou, 1977; Yamuna, 2013)

1: In my counseling space, it is unlikely that I will be interrupted while with a student or in a private meeting.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
2: In my counseling space, it is unlikely that I will be overheard during a counseling session.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that having privacy has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
3: My counseling space is designed and built with privacy in mind.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe having a space that was built for privacy has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
4: I can often hear what is going on in rooms around me with my door shut.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that a low level of sound from other spaces has a positive	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

impact on the therapeutic nature of my counseling space.	
5: I am always able to close my door when counseling a student.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that being able to close my door has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
6: I am always able to counsel a student without worry that someone is looking through my window	7-point Likert scale: 0: I don't have a window 1: Strongly Disagree 7: Strongly Agree
I believe that not having to worry about passers-by looking into my window has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 0: I don't have a window 1: Strongly Disagree 7: Strongly Agree

### Section 5: Personal Photographs/Belongings and Credentials

(Devlin et al., 2009; Nasar & Devlin, 2011; Wells, 2000)

1: How many credentials do you have on display in your counseling space.	# Answer
I believe having credentials on display has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
2: I have personal photographs displayed in my space.	Yes/No
I believe displaying personal photographs has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
3: I have personal effects and photographs that indicate my interests and hobbies on display in my space.	Yes/No
I believe that displaying evidence of my interests and hobbies has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
4: I have personal effects and photographs that disclose information about me to people who see them.	Yes/No
I believe that passively disclosing information about myself to students has a positive impact on the	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

therapeutic nature of my counseling space.	
5: I have safe space indicators on display in my counseling space in relation to the LGBTQ+ community.	Yes/No
I believe that identifying myself as a safe person and identifying my space as a safe space for the LGBTQ+ community has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
6: I have safe space indicators on display in my counseling space in relation to racial groups and/or religious groups.	Yes/No
I believe that identifying myself as a safe person and identifying my space as a safe space for various racial and/or religious groups has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
7: I considered my students and their likely impressions of me when I was decorating my space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that the décor in my space makes it a welcoming place for students.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that the décor in my space relieves the stress students feel when talking to a counselor.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that the décor of my space has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
8: I decorated my space so that I could feel comfortable working there.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
I believe that maintaining my comfort has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

### Section 6: Tidiness

(Horgan et al., 2019; Morrow & McElroy, 1981; Nasar & Devlin, 2011; Sitton, 1984)

1: My desk is always clean and organized.	Yes/No
I believe that a clean and organized office has a positive impact on the	7-point Likert scale: 1: Strongly Disagree

therapeutic nature of my counseling space.	7: Strongly Agree
2: I organize my work into neat piles on my desk when things are messy, and I am meeting with students.	Yes/No
I believe maintaining an organized appearance has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
3: I try to hide away my clutter when I am meeting with students.	Yes/No
I believe hiding my clutter has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree
4: The tidiness of my office makes it a comfortable place to be.	Yes/No
I believe that tidiness has a positive impact on the therapeutic nature of my counseling space.	7-point Likert scale: 1: Strongly Disagree 7: Strongly Agree

### Section 7: Additional Insight

1. If there was one thing about your office that you could change, what would it be?	
2. What is preventing you from making that change or finding a place where this change is not needed?	
3. Is there a feature about your room that you cannot change that you feel is detrimental to the work you do as a school counselor? If so, what is that feature?	

**Appendix B**  
**Demographic Questionnaire**

**1. Gender**

(Multiple Choice)

Female
Male
Non-Binary

**2. Age**

(Short answer)

**3. Race**

African American
Asian/Pacific Islander
Caucasian
Multi-Racial
Hispanic/Latinx
Other

**4. Location**

(Dropdown menu to select state)

### 5. School Setting

(Multiple Choice)

Rural
Suburban
Urban

### 6. Caseload

(Multiple Choice)

Less than 250
250-500
501-750
751-1000
More than 1000

### 7. Caseload Grade Level

(Multiple Choice/Select all that apply)

PreK
Kindergarten
1
2



3
4
5
6
7
8
9
10
11
12

**8. Select the option the best represents your counseling space**

(Multiple Choice/Select all that apply)

Counseling Office
Classroom
No designated space
Shared Office
Shared Classroom
Space within a larger room

## Appendix C

### Email to School Counselor Organizations

Hello, my name is J. Anthony Elizondo, and I am a doctoral candidate in Counselor Education and Supervision at the University of North Carolina at Charlotte. School counselors are assigned their counseling spaces, often by school administrators. The lack of choice regarding the spaces that they are given can lead to school counselors performing their duties in a space that is not therapeutic in nature. No measure currently exists rate the therapeutic nature of a space in school counseling or in mental health careers. **The goal of this study is to create a measure that examines school counseling spaces to ultimately provide a resource that school counselors can use to find ways to improve their spaces or to advocate for a more appropriate space for themselves by using results from this evidence-based measure.** This measure can also be used in conjunction with other tools that measure burnout or self-efficacy to see how spaces may impact school counselors and their students.

*The survey is available online and you can access it with this link (click here to take the survey)*

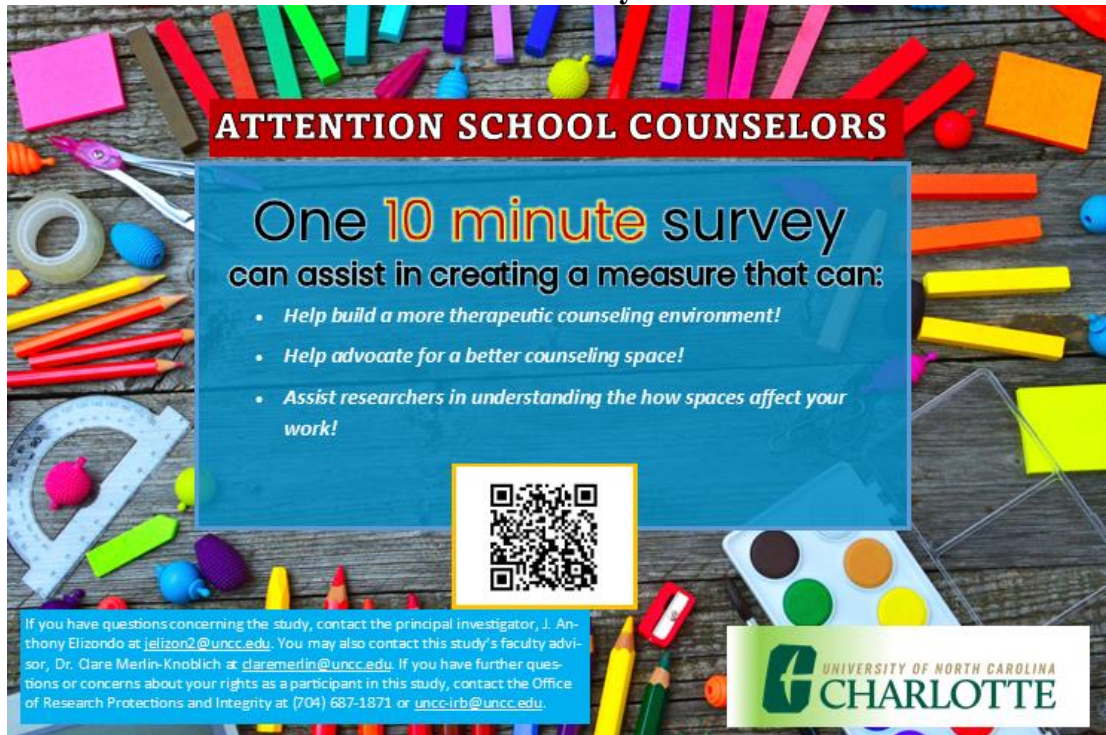
The survey includes a demographic questionnaire and the current version of the School Counseling Office Environment Evaluation (SCOFFEE). This survey should take roughly ten minutes to complete. **The first 100 people who submit a completed SCOFFEE will be entered to win one of ten \$25 Amazon gift cards. When the survey is closed, another drawing (ten additional \$25 Amazon gift cards) will be conducted for all participants, including those who were considered for the first drawing.** This means if you participate early you could win **\$50 in Amazon gift cards**. Participation is voluntary and to ensure responses remain confidential we are not collecting personal or identifying information. If you

would like to enter the drawing for a gift card you may submit your email address through an additional survey after completing the SCOFFEE. As a former school counselor, I know your time is valuable and I want to sincerely thank you for investing your time in my research. There will be no success without your support. Thank you.

If you have questions concerning the study, contact the principal investigator, J. Anthony Elizondo at (828) 641-8638 or by email at [jelizon2@uncc.edu](mailto:jelizon2@uncc.edu). You may also contact the faculty advisor for this study, Dr. Clare Merlin-Knoblich by email at [claremerlin@uncc.edu](mailto:claremerlin@uncc.edu).

## Appendix D

## Social Media Flyer


A social media flyer for school counselors. The background is a wooden surface covered with various colorful school supplies like pencils, pens, erasers, and a ruler. A red banner at the top reads "ATTENTION SCHOOL COUNSELORS". Below it, a blue box contains the text "One 10 minute survey can assist in creating a measure that can:" followed by three bullet points. A QR code is in the center. At the bottom left, a blue box contains contact information. At the bottom right is the University of North Carolina Charlotte logo.

**ATTENTION SCHOOL COUNSELORS**

One 10 minute survey  
can assist in creating a measure that can:

- *Help build a more therapeutic counseling environment!*
- *Help advocate for a better counseling space!*
- *Assist researchers in understanding the how spaces affect your work!*

If you have questions concerning the study, contact the principal investigator, J. Anthony Elizondo at [jelizon2@uncc.edu](mailto:jelizondo2@uncc.edu). You may also contact this study's faculty advisor, Dr. Clare Merlin-Knoblich at [claremerlin@uncc.edu](mailto:claremerlin@uncc.edu). If you have further questions or concerns about your rights as a participant in this study, contact the Office of Research Protections and Integrity at (704) 687-1871 or [uncc-irb@uncc.edu](mailto:uncc-irb@uncc.edu).

 UNIVERSITY OF NORTH CAROLINA  
**CHARLOTTE**

## Appendix E

### SCOFFEE Drawing Survey

Survey

#### Default Question Block

**This is a separate survey, used for the optional raffle. This data is being collected and stored separately from the information provided in the School Counselor Office Environment Evaluation.**

To enter the drawing for a \$50 Amazon gift card, please enter your email address below. This is optional and is only required if you are interested in entering the raffle. The first 100 responses will be entered into a raffle for ten \$25 gift cards. The other ten \$25 gift cards will be raffled once the survey is closed and will include all who entered, including the first 100 respondents.

NOTE: Multiple submissions to this form by the same respondent will be deleted.

To enter the optional drawing, please enter your email address below.

Powered by Qualtrics

## Appendix F

### SCOFFEE: Primary Data Collection

Please answer the following questions. *If you have multiple locations in which you work as a school counselor, consider your primary space (where you spend most of your time).*

#### Section 1: Room Size and Color

(Evans et al., 1996 ; Goelitz & Stewart-Kahn, 2008; Haase & DiMattia, 1976; Lecomte et al., 1981, Maslow & Mintz, 1956; Pressly & Heesacker, 2001)

<p><b>1: I have a counseling space on campus</b></p> <p>If yes, select an option that best describes your space (select more than one only if you have multiple spaces)</p>	<p><b>Yes/No</b></p> <p>1: Classroom  2: Large Office (more than 120 sq. feet)  3: Average Office (about 100-120 sq. feet)  4: Small Office (less than 100 sq. feet)  5: Designated Space within a room  6: Not listed above, please specify:</p> <p>For scale <span style="float: right;">10 feet</span></p> <div style="border: 1px solid black; padding: 10px; position: relative;"> <div style="position: absolute; top: 5px; left: 5px; border: 1px solid black; padding: 2px;">Average desk: 4 feet by 2 feet</div> <div style="position: absolute; top: 5px; right: 5px; border: 1px solid black; padding: 2px;">Average Doorway: 3 feet</div> <div style="position: absolute; bottom: 5px; right: 5px; border: 1px solid black; padding: 2px;"> Average linoleum tile size:  one foot long, one foot wide <div style="display: inline-block; border: 1px solid black; width: 40px; height: 40px; text-align: center; line-height: 40px;"> <div style="display: flex; flex-wrap: wrap;"> <div style="width: 50%; height: 50%;"></div> <div style="width: 50%; height: 50%;"></div> </div> </div> </div> <p style="text-align: center;">(100 sq feet)</p> <p style="text-align: right;">10 feet</p> </div>
<p><b>2. I share my counseling space with another employee of the school, or my space is used dually with another program on campus.</b></p>	<p><b>Yes/No</b></p>
<p>I believe my space is a comfortable size to conduct individual counseling or counseling with a student and their parents/guardians.</p>	<p>7-point Likert scale: 1: Strongly Disagree-7: Strongly Agree</p>
<p>How many people can your counseling space comfortably host, including yourself?</p>	

To what extent do you believe the size of a counseling space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
3: The color of my counseling space is conducive to relieving the stress of my students.	Yes/No
The color of my space is:	Open ended
To what extent do you believe the color of a space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe having a space that is a comfortable size to conduct counseling with a student and their parents/guardians has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe the color of a space can have a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent

## Section 2: Lighting and Windows

(Barazawa & Hanyu, 2013; Chaikin et al., 1974; Maslow & Mintz, 1956; Miwa & Hanyu, 2006)

1: The lighting in my space is	7-point Likert scale 1: Mostly artificial 7: Mostly natural
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To what extent do you believe that natural lighting has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
2: My counseling space has a window	Yes/No
To what extent do you believe that the presence of a window has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
While counseling students, they have a view of my window and can look out of it.	Yes/No
To what extent do you believe that if students have the option to look out of a window while in a counseling session, it has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
The view outside of my window is picturesque (offers a pleasant view, for example, of nature/plant life)	Yes/No
To what extent do you believe that windows which offer a picturesque view (for example, of nature/plant life) does more to improve the therapeutic nature of a counseling space than views that do not?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
3: While counseling students, the lighting is even throughout my room without one side or section of the room being significantly brighter than the rest.	Yes/No



To what extent do you believe an even distribution of lighting has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
4: The lighting in my room is:	1: Extremely Dim or Extremely Bright  4: Very Dim or Very Bright  7: Moderately Dim or Moderately Bright
To what extent do you believe an even distribution of lighting has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe the level of lighting in your space is appropriate for counseling students?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent

### Section 3: Furnishing and Layout of Furniture

(Gass, 1984; Gutheil, 1992; Maslow & Mintz, 1956)

1: My space is furnished with hard-backed school chairs for my students and guests.	Yes/No
To what extent do you believe that comfortable furnishings have a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
2: My space is furnished with an office chair for me.	Yes/No
To what extent do you believe that having an office chair for the counselor has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat

	6. To a very great extent
3: While counseling students, my desk is not between the student and me.	Yes/No/I have no desk
To what extent do you believe that having nothing between the student and counselor has a positive impact on the therapeutic nature of the counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
4: I must get up and sit away from my desk if I want to counsel a student without anything between us.	Yes/No/I have no desk
To what extent do you believe that getting up and moving to a new seat to counsel students has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
5: Most often when counseling more than one person, chairs in my office are organized:	1: With all chairs facing me 2: With chairs facing each other 3: Other (specify: )
If you selected other above, please specify how your chairs are organized when counseling more than one person:	
To what extent do you believe that organizing chairs so everyone is facing each other has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent

#### Section 4: Privacy

(Albekairy, 2014; Holahan & Slaikeu, 1977; Yamuna, 2013)

1: In my counseling space, it is unlikely that I will be interrupted while with a student or in a private meeting.	Yes/No
2: In my counseling space, it is unlikely that I will be overheard during a counseling session.	Yes/No

To what extent do you believe that having privacy has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
3: My counseling space is designed and built for privacy (for example, my walls reach the ceiling, and/or my walls are thick enough that I cannot hear through them).	Yes/No
To what extent do you believe that having a space that was built for privacy has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
4: I can often hear what is going on in rooms around me with my door shut.	Yes/No
To what extent do you believe that a low level of sound from other spaces has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
5: I am always able to close my door when counseling a student.	Yes/No
To what extent do you believe that the ability to close a door in a space has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>
6: I am always able to counsel a student without worry that someone is looking through my window	Yes/No
To what extent do you believe that not having to worry about passers-by looking in through a window has a positive impact on the therapeutic nature of a counseling space?	<p>7-point Likert scale:</p> <p>0:Not at all</p> <p>3. Somewhat</p> <p>6. To a very great extent</p>

### Section 5: Personal Photographs/Belongings and Credentials

(Devlin et al., 2009; Nasar & Devlin, 2011; Wells, 2000)

1: How many credentials do you have on display in your counseling space.	# Answer
To what extent do you believe that having credentials on display has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
2: I have personal photographs displayed in my space.	Yes/No
To what extent do you believe that displaying personal photographs has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
3: I have personal items and photographs that indicate my interests and hobbies on display in my space.	Yes/No
To what extent do you believe that displaying evidence of interests and hobbies has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that disclosing personal information to students by displaying photos and decoration has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
4: I have safe space indicators on display in my counseling space in relation to the LGBTQ+ community.	Yes/No
To what extent do you believe that when a counselor identifies as a safe person and identifies their space as a safe space for the LGBTQ+	7-point Likert scale:  0:Not at all

community, it has a positive impact on the therapeutic nature of a counseling space?	3. Somewhat 6. To a very great extent
5: I have safe space indicators on display in my counseling space in relation to racial groups and/or religious groups.	Yes/No
To what extent do you believe that when a counselor identifies as a safe person and identifies their space as a safe space for the racial groups and/or religious groups, it has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
6: I considered my students and their likely impressions of me when I was decorating my space.	Yes/No
To what extent do you believe that the décor in a counseling space can make it a welcoming place for students?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that the décor in your space relieves the stress students feel when talking to a counselor?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that the decor of a space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
7: I decorated my space so that I could feel comfortable working there.	Yes/No
To what extent do you believe that maintaining a counselor's comfort has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent

### Section 6: Tidiness

(Horgan et al., 2019; Morrow & McElroy, 1981; Nasar & Devlin, 2011; Sitton, 1984)

1: My desk is always clean and organized.	Yes/No
To what extent do you believe that a clean and organized office has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
2: I organize my work into neat piles on my desk when things are messy and I am meeting with students.	Yes/No
To what extent do you believe maintaining an organized appearance has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
3: I try to hide away my clutter when I am meeting with students.	Yes/No
To what extent do you believe hiding clutter has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
4: The tidiness of my office makes it a comfortable place to be.	Yes/No
To what extent do you believe that tidiness has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent

### Section 7: Additional Insight

1. If there was one thing about your office that you could change, what would it be?	
2. What is preventing you from making that change or finding a place where this change is not needed?	
3. Is there a feature about your room that you cannot change that you feel is detrimental to the work you do as a school counselor? If so, what is that feature?	
4. Over an average week, what percentage of time do you estimate you spend providing the following services:	___% Social/Emotional Counseling ___% Academic Counseling ___% College and Career Counseling ___% Other (Non-counseling duties)

## Appendix G

### Comparison of Means: Inventory and Belief Items

**Table 2**

*Inventory and Belief Item Means*

Item Number	Question	Mean
Q2.1.0	The lighting in my space is ( <i>1: Not at all from natural sources, 7: mostly Natural</i> )	3.60
BQ2.1.1	To what extent do you believe that natural lighting has a positive impact on the therapeutic nature of a counseling space?	5.79
Q2.2.1	My counseling space has a window.*	1.39
BQ2.2.2	To what extent do you believe that the presence of a window has a positive impact on the therapeutic nature of a counseling space?	5.84
Q2.2.3	While counseling students, they have a view of my window and can look out of it*	1.24
BQ2.2.4	To what extent do you believe that if students have the option to look out of a window while in a counseling session, it has a positive impact on the therapeutic nature of a counseling space?	5.29
Q2.2.5	The view outside of my window is picturesque (offers a pleasant view, for example, of nature/plant life)*	1.53
BQ2.2.6	To what extent do you believe that windows which offer a picturesque view (for example, of nature/plant life) does	5.47

	more to improve the therapeutic nature of a counseling space than views that do not?	
Q2.3.1	While counseling students, the lighting is even throughout my room without one side or section of the room being significantly brighter than the rest.*	1.27
Q2.4.1	The lighting in my room is: (1: <i>Extremely Dim or Extremely Bright</i> , 7: <i>Moderately Dim/Bright</i> )	5.16
BQ2.4.2	To what extent do you believe an even distribution of lighting has a positive impact on the therapeutic nature of a counseling space?	4.80
BQ2.4.3	To what extent do you believe the level of lighting in your space is appropriate for counseling students?	5.22
Q3.1.1	My space is furnished with hard-backed school chairs for my students and guests.*	1.40
BQ3.1.2	To what extent do you believe that comfortable furnishings have a positive impact on the therapeutic nature of a counseling space?	6.00
Q3.2.1	My space is furnished with an office chair for me.*	1.10
BQ3.2.2	To what extent do you believe that having an office chair for the counselor has a positive impact on the therapeutic nature of a counseling space?	4.89
Q3.3.1	While counseling students, my desk is not between the student and me.*	1.37



BQ3.3.2	To what extent do you believe that having nothing between the student and counselor has a positive impact on the therapeutic nature of the counseling space?	5.56
Q3.4.1	<hr/> I must get up and sit away from my desk if I want to counsel a student without anything between us.*	1.57
BQ3.4.2	To what extent do you believe that getting up and moving to a new seat to counsel students has a positive impact on the therapeutic nature of a counseling space?	4.83
Q3.5.1	<hr/> Most often when counseling more than one person, chairs in my space (including mine) are organized. *	1.78
BQ3.5.2	To what extent do you believe that organizing chairs so everyone is facing each other has a positive impact on the therapeutic nature of a counseling space?	5.70
Q4.1.1	<hr/> In my counseling space, it is unlikely that I will be interrupted while with a student or in a private meeting.	4.15
Q4.2.1	In my counseling space, it is unlikely that I will be overheard during a counseling session.	4.84
BQ4.2.2	To what extent do you believe that having privacy has a positive impact on the therapeutic nature of a counseling space?	6.64
Q4.3.1	<hr/> My counseling space is designed and built for privacy (for example, my walls reach the ceiling, and/or my walls are thick enough that I cannot hear through them).	4.87

BQ4.3.2	To what extent do you believe that having a space that was built for privacy has a positive impact on the therapeutic nature of a counseling space?	6.56
Q4.4.1	I can often hear what is going on in rooms around me with my door shut.	4.42
BQ4.4.2	To what extent do you believe that a low level of sound from other spaces has a positive impact on the therapeutic nature of a counseling space?	5.28
Q4.5.1	I am always able to close my door when counseling a student.	6.31
BQ4.5.2	To what extent do you believe that the ability to close a door in a space has a positive impact on the therapeutic nature of a counseling space?	6.46
Q4.6.1	I am always able to counsel a student without worrying that someone is looking through my window	5.01
BQ4.6.2	To what extent do you believe that not having to worry about passers-by looking in through a window has a positive impact on the therapeutic nature of a counseling space?	6.10
Q5.1.1	How many credentials (degrees and certifications) do you have on display in your counseling space? (1: 1-2, 2: 3-4, 3: 5-6, 4: 6 or more)	1.48
BQ5.1.2	To what extent do you believe that having credentials on display has a positive impact on the therapeutic nature of a counseling space?	3.34

Q5.2.1	I have personal photographs displayed in my space.*	1.32
BQ5.2.2	To what extent do you believe that displaying personal photographs has a positive impact on the therapeutic nature of a counseling space?	4.30
Q5.3.1	I have personal items and photographs that indicate my interests and hobbies on display in my space.*	1.31
BQ5.3.2	To what extent do you believe that displaying evidence of interests and hobbies has a positive impact on the therapeutic nature of a counseling space?	4.64
BQ5.3.3	To what extent do you believe that disclosing personal information to students by displaying photos and decoration has a positive impact on the therapeutic nature of a counseling space?	4.66
Q5.4.1	I have safe space indicators on display in my counseling space in relation to the LGBTQ+ community.*	1.31
BQ5.4.2	To what extent do you believe that when a counselor identifies as a safe person and identifies their space as a safe space for the LGBTQ+ community, it has a positive impact on the therapeutic nature of a counseling space?	5.96
Q5.5.1	I have safe space indicators on display in my counseling space in relation to racial groups and/or religious groups.*	1.53
BQ5.5.2	To what extent do you believe that when a counselor identifies as a safe person and identifies their space as a safe	5.76

space for the racial groups and/or religious groups, it has a positive impact on the therapeutic nature of a counseling space?

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Q5.6.1_A	I considered my students and their likely impressions of me when I was decorating my space. ( <i>1: Strongly Disagree, 7: Strongly Agree</i> )	5.69
BQ5.6.2A	To what extent do you believe that the décor in a counseling space can make it a welcoming place for students?	6.29
BQ5.6.3A	To what extent do you believe that the décor in your space relieves the stress students feel when talking to a counselor?	5.86
BQ5.6.3	To what extent do you believe that the décor of a space has a positive impact on the therapeutic nature of a counseling space?	6.03
Q5.6.1	I decorated my space so that I could feel comfortable working there.	6.05
BQ5.6.2	To what extent do you believe that maintaining a counselor's comfort has a positive impact on the therapeutic nature of a counseling space?	6.21
Q6.1.1	My desk is always clean and organized. ( <i>1: Strongly Disagree, 7: Strongly Agree</i> )	4.52
BQ6.1.2	To what extent do you believe that a clean and organized office has a positive impact on the therapeutic nature of a counseling space?	5.35

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Q6.2.1	I organize my work into neat piles on my desk when things are messy and I am meeting with students.*	1.21
BQ6.2.2	To what extent do you believe maintaining an organized appearance has a positive impact on the therapeutic nature of a counseling space?	5.40
Q6.3.1	I try to hide away my clutter when I am meeting with students.*	1.40
BQ6.3.2	To what extent do you believe hiding clutter has a positive impact on the therapeutic nature of a counseling space?	4.91
Q6.4.1	The tidiness of my space makes it a comfortable place to be.*	1.19
BQ6.4.2	To what extent do you believe that tidiness has a positive impact on the therapeutic nature of a counseling space?	5.36

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\*Indicates an inventory item; dichotomous yes/no response (yes=1, no=2)

## Appendix H

### SCOFFEE Beliefs Questionnaire

Please answer the following questions. *If you have multiple locations in which you work as a school counselor, consider your primary space (where you spend most of your time).*

#### Section 1: Room Size and Color

(Evans et al., 1996 ; Goelitz & Stewart-Kahn, 2008; Haase & DiMattia, 1976; Lecomte et al., 1981, Maslow & Mintz, 1956; Pressly & Heesacker, 2001)

I believe my space is a comfortable size to conduct individual counseling or counseling with a student and their parents/guardians.	7-point Likert scale: 1: Strongly Disagree-7: Strongly Agree
To what extent do you believe the size of a counseling space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe the color of a space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe having a space that is a comfortable size to conduct counseling with a student and their parents/guardians has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent

To what extent do you believe  the color of a space can have a positive  impact on the therapeutic nature of a  counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
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## Section 2: Lighting and Windows

(Barazawa & Hanyu, 2013; Chaikin et al., 1974; Maslow & Mintz, 1956; Miwa & Hanyu, 2006)

To what extent do you believe  that natural lighting has a positive impact  on the therapeutic nature of a counseling  space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that the presence of a window has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that if students have the option to look out of a window while in a counseling session, it has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that windows which offer a picturesque view (for example, of nature/plant life) does more to improve the therapeutic nature of a counseling space than views that do not?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe an even distribution of lighting has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all

	3. Somewhat 6. To a very great extent
To what extent do you believe an even distribution of lighting has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe the level of lighting in your space is appropriate for counseling students?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent

### Section 3: Furnishing and Layout of Furniture

(Gass, 1984; Gutheil, 1992; Maslow & Mintz, 1956)

To what extent do you believe that comfortable furnishings have a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe that having an office chair for the counselor has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe that having nothing between the student and counselor has a positive impact on the therapeutic nature of the counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe that getting up and moving to a new seat to counsel students has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all



	3. Somewhat 6. To a very great extent
To what extent do you believe that organizing chairs so everyone is facing each other has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent

#### Section 4: Privacy

(Albekairy, 2014; Holahan & Slaikeu, 1977; Yamuna, 2013)

To what extent do you believe that having privacy has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that having a space that was built for privacy has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that a low level of sound from other spaces has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that the ability to close a door in a space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that not having to worry about passers-by looking in through a window has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all

	3. Somewhat
	6. To a very great extent

### Section 5: Personal Photographs/Belongings and Credentials

(Devlin et al., 2009; Nasar & Devlin, 2011; Wells, 2000)

To what extent do you believe that having credentials on display has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that displaying personal photographs has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that displaying evidence of interests and hobbies has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that disclosing personal information to students by displaying photos and decoration has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that when a counselor identifies as a safe person and identifies their space as a safe space for the LGBTQ+ community, it has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale:  0:Not at all  3. Somewhat  6. To a very great extent
To what extent do you believe that when a counselor identifies as a safe person and identifies their space as a safe space for the racial groups and/or	7-point Likert scale:  0:Not at all

religious groups, it has a positive impact on the therapeutic nature of a counseling space?	3. Somewhat 6. To a very great extent
To what extent do you believe that the décor in a counseling space can make it a welcoming place for students?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe that the décor in your space relieves the stress students feel when talking to a counselor?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe that the decor of a space has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe that maintaining a counselor's comfort has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent

### Section 6: Tidiness

(Horgan et al., 2019; Morrow & McElroy, 1981; Nasar & Devlin, 2011; Sitton, 1984)

To what extent do you believe that a clean and organized office has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe maintaining an organized appearance has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent
To what extent do you believe hiding clutter has a positive impact on the	7-point Likert scale: 0:Not at all 3. Somewhat

therapeutic nature of a counseling space?	6. To a very great extent
To what extent do you believe that tidiness has a positive impact on the therapeutic nature of a counseling space?	7-point Likert scale: 0:Not at all 3. Somewhat 6. To a very great extent

### Section 7: Additional Insight

1. If there was one thing about your office that you could change, what would it be?	
2. What is preventing you from making that change or finding a place where this change is not needed?	
3. Is there a feature about your room that you cannot change that you feel is detrimental to the work you do as a school counselor? If so, what is that feature?	
4. Over an average week, what percentage of time do you estimate you spend providing the following services:	___% Social/Emotional Counseling ___% Academic Counseling ___% College and Career Counseling ___% Other (Non-counseling duties)

## Appendix I

### SCOFFEE Inventory

Please answer the following questions. *If you have multiple locations in which you work as a school counselor, consider your primary space (where you spend most of your time).*

#### Section 1: Room Size and Color

(Evans et al., 1996 ; Goelitz & Stewart-Kahn, 2008; Haase & DiMattia, 1976; Lecomte et al., 1981, Maslow & Mintz, 1956; Pressly & Heesacker, 2001)

1: I have a counseling space on campus	Yes/No
<p>If yes, select an option that best describes your space (select more than one only if you have multiple spaces)</p>	<p>1: Classroom  2: Large Office (more than 120 sq. feet)  3: Average Office (about 100-120 sq. feet)  4: Small Office (less than 100 sq. feet)  5: Designated Space within a room  6: Not listed above, please specify:</p> <p>For scale <span style="float: right;">10 feet</span></p> <div style="border: 1px solid black; padding: 10px; width: 300px; margin: 10px auto;"> <div style="display: flex; justify-content: space-between;"> <div style="border: 1px solid black; padding: 5px; width: 150px;">Average desk: 4 feet by 2 feet</div> <div style="text-align: right;">Average Doorway: 3 feet</div> </div> <div style="text-align: center; margin-top: 50px;">(100 sq feet)</div> <div style="display: flex; justify-content: flex-end; margin-top: 20px;"> <div style="text-align: left; padding-right: 10px;">Average linoleum tile size: one foot long, one foot wide</div> <div style="border: 1px solid black; padding: 5px;"> <div style="display: grid; grid-template-columns: 1fr 1fr; gap: 5px;"> <div style="width: 40px; height: 40px;"></div> <div style="width: 40px; height: 40px;"></div> <div style="width: 40px; height: 40px;"></div> <div style="width: 40px; height: 40px;"></div> </div> </div> </div> </div> <p style="text-align: right; margin-top: 10px;">10 feet</p>
2. I share my counseling space with another employee of the school, or my space is used dually with another program on campus.	Yes/No
How many people can your counseling space comfortably host, including yourself?	
3: The color of my counseling space is conducive to relieving the stress of my students.	Yes/No
The color of my space is:	Open ended

## Section 2: Lighting and Windows

(Barazawa & Hanyu, 2013; Chaikin et al., 1974; Maslow & Mintz, 1956; Miwa & Hanyu, 2006)

1: The lighting in my space is	7-point Likert scale 1: Mostly artificial 7: Mostly natural
2: My counseling space has a window	Yes/No
While counseling students, they  have a view of my window and can look  out of it.	Yes/No
The view outside of my window is picturesque (offers a pleasant view, for example, of nature/plant life)	Yes/No
3: While counseling students, the lighting is even throughout my room without one side or section of the room being significantly brighter than the rest.	Yes/No
4: The lighting in my room is:	1: Extremely Dim or Extremely Bright  4: Very Dim or Very Bright  7: Moderately Dim or Moderately Bright

## Section 3: Furnishing and Layout of Furniture

(Gass, 1984; Gutheil, 1992; Maslow & Mintz, 1956)

1: My space is furnished with hard-backed school chairs for my students and guests.	Yes/No
2: My space is furnished with an office chair for me.	Yes/No
3: While counseling students, my desk is not between the student and me.	Yes/No/I have no desk
4: I must get up and sit away from my desk if I want to counsel a student without anything between us.	Yes/No/I have no desk
5: Most often when counseling more than one person, chairs in my office are organized:	1: With all chairs facing me 2: With chairs facing each other 3: Other (specify: )

If you selected other above, please specify how your chairs are organized when counseling more than one person:	
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#### Section 4: Privacy

(Albekairy, 2014; Holahan & Slaikeu, 1977; Yamuna, 2013)

1: In my counseling space, it is unlikely that I will be interrupted while with a student or in a private meeting.	Yes/No
2: In my counseling space, it is unlikely that I will be overheard during a counseling session.	Yes/No
3: My counseling space is designed and built for privacy (for example, my walls reach the ceiling, and/or my walls are thick enough that I cannot hear through them).	Yes/No
4: I can often hear what is going on in rooms around me with my door shut.	Yes/No
5: I am always able to close my door when counseling a student.	Yes/No
6: I am always able to counsel a student without worry that someone is looking through my window	Yes/No

#### Section 5: Personal Photographs/Belongings and Credentials

(Devlin et al., 2009; Nasar & Devlin, 2011; Wells, 2000)

1: How many credentials do you have on display in your counseling space.	# Answer
2: I have personal photographs displayed in my space.	Yes/No
3: I have personal items and photographs that indicate my interests and hobbies on display in my space.	Yes/No
4: I have safe space indicators on display in my counseling space in relation to the LGBTQ+ community.	Yes/No
5: I have safe space indicators on display in my counseling space in relation to racial groups and/or religious groups.	Yes/No
6: I considered my students and their likely impressions of me when I was decorating my space.	Yes/No

7: I decorated my space so that I could feel comfortable working there.	Yes/No
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### Section 6: Tidiness

(Horgan et al., 2019; Morrow & McElroy, 1981; Nasar & Devlin, 2011; Sitton, 1984)

1: My desk is always clean and organized.	Yes/No
2: I organize my work into neat piles on my desk when things are messy and I am meeting with students.	Yes/No
3: I try to hide away my clutter when I am meeting with students.	Yes/No
4: The tidiness of my office makes it a comfortable place to be.	Yes/No

### Section 7: Additional Insight

1. If there was one thing about your office that you could change, what would it be?	
2. What is preventing you from making that change or finding a place where this change is not needed?	
3. Is there a feature about your room that you cannot change that you feel is detrimental to the work you do as a school counselor? If so, what is that feature?	
4. Over an average week, what percentage of time do you estimate you spend providing the following services:	__% Social/Emotional Counseling __% Academic Counseling __% College and Career Counseling __% Other (Non-counseling duties)