

The Effect of Seating Orientation and a Spatial Barrier on Students' Experience of
Person-Centered Counseling

A Thesis

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by

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Abstract

The purpose of this study was to understand how seating orientation and the presence of a spatial boundary influences students' experience of person-centered counseling. Twenty-three students at Cornell University with ages between 18-22 were asked to speak about their career aspirations in an environment with chairs placed in one of four conditions: face-to-face with no table between, face-to-face with a table between, at a ninety-degree angle with no table between or at a ninety-degree angle with a table between. Participants were then asked to rate their perceptions of counselor empathy, counselor affect, satisfaction with the session, and to describe their experience of the session. Findings show a close to significant effect of a spatial boundary on perceptions of empathy, with no table resulting in higher perceived empathy. Findings also show that the majority of participants' responses about the counselors were based on characteristics of the counselor or the counselor-client interaction.

Biographical Sketch

Karlton Lattimore graduated with a Bachelor of Science in architectural studies and a minor in psychology from the University of Wisconsin-Milwaukee during the Spring of 2011. He also obtained a Master of Science degree in human-environments relations from Cornell University during the Fall of 2013. This degree contained a concentration in environmental psychology and a minor in communication.

To my family for all of your years of trust and support
and to my friends for all of your years of warmth and happiness.

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The Effect of Seating Orientation and a Spatial Barrier on Students' Experience of Person-Centered Counseling

The Value of Counseling

Within the last few years, the value of counseling within the collegiate setting has become very important. From the 2012 National Survey of College Counseling, it was found that of a total of 293 college counseling centers, 10.4% of students sought counseling as an individual or through a group (Gallagher, 2012). If this were to be generalized to the 2,400 four-year colleges within the United States, this estimates that around 2.2 million students are seeking professional counseling within their universities.

To further highlight the pervasiveness of the issue, in 2012, 24.4% of the students who sought counseling were on psychiatric medication (Gallagher, 2012). It was shown that this percentage has increased from 20% in 2003, 17% in 2000, and 9% in 1994. Such use of medication highlights the severity of the issues students are currently facing. Furthermore, 92% of the counseling centers surveyed feel that there has been an increase in students seeking assistance at their university. This shows a steady increase in the need for psychological assistance amongst college students.

From the perspective of university counseling center directors, there have been many increases in various counseling-related issues. From these directors, it is reported that 73% of them have noted increases in crises requiring immediate response, 67% have noted increases in psychiatric medication issues, 59% in learning disabilities, 48% in illicit drug use (other than alcohol), 40% increase in self-injury issues (e.g. cutting to relieve anxiety), 36% in alcohol abuse, 30% in problems related to earlier sexual abuse, 32% in sexual assault concerns (on campus), 26% in eating disorders, and 22% in career planning issues (Gallagher, 2012). This

description highlights the range of problems college students are currently facing. To further summarize the outcomes, it was found that “90% of [university counseling] centers hospitalized an average of 8.5 students per school (2,000 in all) for psychological reasons” (Gallagher, 2012, p. 6). It was shown that this is greater than triple the percentage of students within 1994.

In relation to specific career-related issues, a majority of collegiate counseling centers now ask previous clients whether their experience helped them stay in school and whether it helped their academic success (Gallagher, 2012). It was found that 58% stated that it helped them stay in school, whereas 63% stated that it helped their academic success. Other studies have also highlighted the effectiveness of either professional or student-to-student counseling on personal/ academic outcomes (Brown, Wehe, Zunker, & Haslam, 1971; Brown, 1965; Whiston, Brecheisen, & Stephens, 2003; Donghyuck, Olson, Locke, Michelson, & Odes, 2009; DeStefano, Mellott, & Petersen, 2001; Zunker & Brown, 1966).

From this survey, it can easily be seen that counseling is an important concern within American universities. As a way to possibly combat the negative effects of such issues, the role of counseling is and will continue to be very important in ensuring successful college matriculation and mental health of university students.

Person-Centered Therapy

To begin to combat the issues associated with psychological distress, many styles of psychotherapy exist. One such style is client-centered therapy (more recently deemed person-centered therapy) (Rogers, 1965). Person-centered therapy (PCT) is a form of psychotherapy originally developed by psychologist Carl Rogers during the mid-1950's (Watkins, 2010). The main theoretical principle of this form of therapy is summarized by identifying the ideal attitude

of the therapist, the process of implementation, and expected outcomes. Reviewing empirical studies which highlight the salience of PCT is also useful for this discussion.

Attitude

The attitude of the counselor towards the client is of critical importance to this form of psychotherapy (Rogers, 1965). The main presupposition of the counselor is the belief in the client's ability to solve his or her own issues and to come to terms with their own problems. As defined by the creator of this theoretical practice, three main mental states must also be assumed by the counselor. These states include maintaining congruence, offering empathy, and demonstrating unconditional positive regard.

Congruence

Congruence is defined as the "degree to which one person is functionally integrated in the context of his relationship with another, such that there is absence of conflict or inconsistency between his total experience, his awareness, and his overt communication" (Barrett-Lennard, 1962, p. 4). The therapist's sense of congruence determines the extent to which he or she might be able to offer empathy. It is further defined by the therapist's "consistency" between what he or she experiences and what is expressed (Barrett-Lennard, 1962, p. 4).

For the sake of a successful therapeutic process, the absence of inconsistency is desired (Barrett-Lennard, 1962). Honesty and sincerity, without a "compulsion" to convey these feelings, characterizes the congruent therapist (Barrett-Lennard, 1962, p. 4). Incongruency can objectively be seen when the therapist says one thing but implies another via nonverbal behavior (i.e., anxious expressions or gestures). The therapist's maximum level of congruence is a reflection of his/her own psychological "integration" and "security" (Barrett-Lennard, 1962, p.

4). This congruence allows the therapist to isolate his/her own feelings from those of the client.

Empathy

Empathy, within the context of person-centered therapy (PCT), is defined as “the extent to which one person is conscious of the immediate awareness of another” (Barrett-Lennard, 1962, p. 3). It is an active process which involves an attempt by the therapist to understand the client and to match his/her meaning of the client’s experience to that expressed by the client (Barrett-Lennard, 1962). This involves entering the client’s frame of reference, but also being aware that the consciousness is outside oneself (Rogers, 1965; Barrett-Lennard, 1962).

Empathy, as used within the process of PCT, is also accepting the affective immediacy of the client through the context in which it is explained (Barrett-Lennard, 1962). In relation to this, the therapist must demonstrate both “empathic recognition” (the awareness of feelings that have been directly expressed by the client) and “empathic inference” (the awareness of feelings indirectly expressed by the client) (Barrett-Lennard, 1962, p. 3). Maximum understanding occurs when the therapist gives credence to all direct and indirect levels of experience conveyed by the client.

Regard

To discuss regard, one must consider both the level of regard and how it is experienced by the therapist. Within the process of PCT, regard relates to “the general tendency (at a given time) of the various affective reactions of one person in relation to another” (Barrett-Lennard, 1962, p. 4). Level of regard refers to the therapist’s experience and expression of positive and negative feelings. Positive feelings might include those such as respect and liking, whereas negative feelings might include those such as contempt and dislike. The total regard expressed at

a given moment is the composite of all these feelings from one person to another, both positive and negative.

As oppose to level of regard, unconditionality of regard is expressed as “the degree of constancy of regard felt by one person for another who communicates self-experiences to the first” (Barrett-Lennard, 1962, p. 4). The more that the therapist’s regard changes in accordance to the experiences conveyed by the client, the more conditional the regard is. Unconditional regard is advocated by the PCT approach (Olson & Hergenhahn, 2010). This coincides with Roger’s theory of personality which presents conditional regard as the cause of many psychological issues (Olson & Hergenhahn, 2010).

Process of Implementation

Although the development of PCT has undergone various changes and may be open to interpretation by those who practice it, the underlying doctrine regarding PCT may be summarized in six necessary conditions as originally defined by its originator. These conditions first require that two people be within psychological contact (Watkins, 2010). One person (the client) is in a state of incongruence defined by vulnerability or anxiousness. The second person (the therapist) is congruent or in a state free of psychological anxiety. The therapist must then feel unconditional positive regard or ‘acceptance’ for the other person (client) and experience empathy for the client’s ‘frame of reference’ (psychological state). The therapist then attempts to communicate this to the client. Finally, the client must understand and accept the communication of empathy or understanding as it is expressed by the therapist.

Expected Outcomes

The ultimate goal of PCT is to induce a sense of congruency within the client who is

experiencing psychological issues. It is posited that by allowing the client to project his/her feelings and to have these feelings objectively expressed through the eyes of the therapist, the client may be more capable of accepting such feelings him or herself. From this perspective, PCT can be seen as a sense of empowerment which allows the client to better guide his/her own behaviors and actions.

Critical to this goal is how successful the therapist is at creating a therapeutic climate for the client. By providing a reflexive context of interpersonal communication characterized by empathy and acceptance, the therapist attempts to provide an atmosphere in which the client can essentially talk to him or herself (Rogers, 1965, p.51). The provision of this atmosphere must also involve a level of respect for the client. This respect lies on the therapist's assumption that the client is capable of making their own choices.

Empirical Evidence of PCT

A few studies highlight the effectiveness of the person-centered therapy approach. In one such study, 42 clients in the Counseling Center of the University of Chicago answered questions pertaining to the four aforementioned dimensions of PCT (empathy, level of regard, unconditionally of regard, and congruence) after five therapy sessions (Barrett-Lennard, 1962). These inventories were used to predict indices of change after the fifth session taken from both therapist scores and self-report scores of the client. It was found that the four dimensions significantly predicted indices of change. In a study of therapeutic technique, it was also found that nondirective therapeutic behavior is perceived by college students as being more understanding, reflecting higher levels of regard, and less conditional than that of directive therapeutic behavior (Snelbecker, 1967) This highlights the effectiveness of the PCT approach

and its value in producing change within psychotherapy.

Other studies less oriented to the PCT approach, also highlight the value of this style of psychotherapy. In one such study, students listened to tape recordings of initial counseling sessions and later assessed the personalities of these counselors (Price & Iverson, 1969). It was found that impression ratings were lower when counselors “displayed low commitment, irrelevant task centering, and client devaluation” (Price & Iverson, 1969, p. 474). Also, in a study which asked therapists from different theoretical orientations what they thought defined the ideal therapeutic relationship, all of them positively correlated on a set of characteristics which stress items such as “An empathic relationship,” “The therapist accepts all feelings which the patient expresses as completely normal and understandable,” and “An atmosphere of mutual trust and confidence exists” (Fielder, 1950, p. 241). If taken as necessary principles of the PCT approach, the resonance through which various therapists agree on these characteristics highlights the value of PCT and the importance of maintaining a congruent, empathic therapeutic stance.

Theoretical Framework and Literature Review

As stated from above, person-centered therapy is very concerned with the social nature of the counseling process. Through its processes and specifications, it provides a framework for how to create the appropriate social environment through a demonstration of empathy and respect. Although this is a very reasonable aspect in its own right, it does not define the totality of the counseling experience. In relation to this, the author’s point of departure was to identify how the counseling relationship is both a product of the social relationship and the context in which it is held. More specifically, the aim of this investigation is to identify how the social environment might interact with the physical environment to create a product of meaning for the

client.

The Physical Environment and Counseling

The physical environment has been thought to interact with the counseling process in various ways. From one perspective, the physical environment can be thought of as a therapeugenic factor (Bloom, Weigel, & Trautt, 1977). Therapeugenic factors have been defined as “those factors independent of specific therapeutic techniques that potentiate psychotherapeutic effects” (Bloom, Weigel, & Trautt, 1977, p. 867). These factors have been thought to “increase or decrease the likelihood that therapy will be effective” (Bloom, Weigel, & Trautt, 1977, p. 867). Such factors can be identified as those from the client, those from the therapist, those from their relationship, and those from the physical environment. The physical environment includes any characteristic of the therapeutic setting such as office style, furnishings, and layout. This factor is what is of importance to this study.

The physical environment within counseling has also been thought of as the degree to which the context discourages interaction. Such a perspective suggests that the physical environment for counseling should be non-alienating and make the counselor’s task less difficult (Chaikin, Derlega, & Miller, 1976). This necessitates an investigation of what factors within the counseling environment might be potentially detrimental to the counseling relationship.

Within their review of the physical environment and counseling, Pressly & Heesacker (2001) make reference to many elements of the physical environment that might affect the counseling interaction. These elements include accessories (artwork, objects, and plants), color, furniture and room design, lighting, smell, sound, texture, and thermal conditions. Other studies have also investigated the effect of such elements on outcomes including client impressions,

mood, stress, and self-disclosure (Rashid & Zimring, 2008; Kweon, Ulrich, Walker, & Tassinary, 2008; Chaikin, Derlega, & Miller, 1976; Devlin & Nasar, 2011; Devlin, Donovan, Nicolov, Nold, Packard, & Zandan, 2009; Morrow & McElroy, 1981; McElroy, Morrow, & Ackerman, 1983; Miwa & Hanyu, 2006; Lecomte, Bernstein, & Dumont, 1981; Nanda, Eisen, Zadeh, & Owen, 2011; Heppner & Pew, 1977; Widgery & Stackpole, 1972; Kasmar, Griffin, & Mauritzen, 1968; Backhaus, 2008; Elsbach, 2004; Gifford, 1988; Dazkir & Read, 2012; Becker, Gield, & Froggatt, 1983; Siegel, 1980; Gosling, Ko, Mannarelli, & Morris, 2002; Mintz, 1956; Adams & Zuckerman, 1991). Of interest to the researcher is furniture and room design, specifically seating orientation and the presence of a spatial boundary (a desk or a table).

The choice to use seating orientation and the presence of a spatial boundary was made for a few reasons. First, ever since its conception by anthropologist Edward T. Hall, the notion of “proxemics” has been thought to be a useful way to analyze human-environment relations within the micro-environment (Hall, 1966). Proxemics might be defined as how one utilizes his/her social and personal space. In relation to the counseling context, this might refer to one’s use of semi-fixed elements (elements of the physical environment which might be altered occasionally) such as chairs and tables.

Secondly, the choice of seating orientation and the presence of a spatial boundary was made in relation to what function they serve and what control the therapist has over them. A counseling office might be defined by an area for formal interactions, casual interactions, an area for working and an area for storage (Davis, 1984). As oppose to the physical design of the entire building, seating orientation and the presence of a spatial boundary might be more in the control of the counselor and more facilitative for social interaction.

Finally, the choice of seating orientation and the presence of a spatial boundary was made due to their potential effect on interpersonal communication. The seating arrangement might influence both the presence and the nature of social interaction (Davis, 1984). In relation to management, one's desk position might signify specific relational styles (Preston, 2005). Chairs placed in front of the desk might signify more formal interaction compared to chairs placed at either side of a desk. During disciplinary interactions, two people might sit opposite each other, as oppose to adjacent to each other during coaching or collaborative tasks. Within the counseling context, such variations might influence how the client perceives and interprets certain aspects of the counselor's behavior.

The following section will review the literature and theoretical perspectives related to both seating orientation and the presence of a spatial boundary. This includes the social meaning model, which will be discussed below.

Seating Orientation

In relation to how seating orientation might affect interpersonal communication, there are two perspectives. The first perspective views the relationship as a function of the meanings assigned to various nonverbal cues given off during the interaction. These cues include any characteristics of the physical environment or physical behaviors that might be used to interpret another person's motives or feelings. This is called the Nonverbal Communication Perspective. The second perspective views the relationship as a function of social interaction and how the seating orientation might be conducive for such an activity. This is described as the Verbal Communication Perspective.

Seating Orientation: The Nonverbal Communication Perspective

Nonverbal communication is defined as a process in which messages are sent from a sender to a receiver to convey meaning with no verbal influence (Burgoon, Buller, & Woodall, 1989; Richmond & McCroskey, 1995; Mehrabian A., 1972; Haase & Tepper, 1972; Argyle, Alkema, & Gilmour, 1971; Tepper & Haase, 1978; Finset & Piccolo, 2011). These messages might be explicit (the sender is aware of the message they give) or implicit (the sender is not aware of the message they give) and might be communicated through gestures, touch, posture, facial expressions, eye behavior, clothing and hairstyles (Finset & Piccolo, 2011). These constitute nonverbal cues. Cues can be encoded (sent by the sender) and decoded (interpreted by the other). Of importance to this investigation is how the posture cue might be affected through seating orientation and convey certain meanings to clients of counseling. According to Hall (1963), posture can be defined as a function of one's shoulder orientation in relation to another. These orientations can be positioned along an 8-point axis from bodies being face to face, bodies being side to side, and bodies being back to back.

Nonverbal Cues and Relational Messages

Within the realm of counseling, how engaged the therapist is with the client is another area of importance. With nonverbal cues, this engagement or involvement might be explained by the social meaning model. As stated by Burgoon & Le Poire (1999, p. 106), "Implicit messages signifying how communicators feel about their partner, about themselves in the relationship, and about the relationship in general all constitute relational communication. Put differently, relational messages are the communicative means by which people define their interpersonal relationships."

The process of identifying relational messages involves several steps according to the social meaning model. First nonverbal indicators (or distal cues) representing behaviors such as eye contact, body orientation and smiling are encoded by senders (Burgoon & Le Poire, 1999). Decoders then create subjective judgements (or proximal percepts) to help create inferences of the encoders relational message.

The proximal percepts of importance to the discussion of counseling include conversational involvement and pleasantness. Conversational involvement might be defined as “the degree to which participants are enmeshed in the topic, interpersonal relationship, and situation” (Coker & Burgoon, 1987, p. 463; also Brunner, Cegala, & Conrad, 1981; Burgoon & Hale, 1984; Burgoon & Hale, 1987; Cegala, 1981; Cegala & Savage, 1981; Cegala, Savage, Brunner, & Conrad, 1982). The proximal percepts of involvement and pleasantness can be explained in dimensions of immediacy and positivity. The positivity dimension involves distal cues of positive regard. These can include behaviors such as smiling, nodding and positive facial expressions (Burgoon & Le Poire, 1999). Although these behaviors are not necessarily explained by one’s seating orientation, they are still relevant to the process of counseling.

Of more importance to this investigation is the dimension of immediacy and its relationship to the physical environment. Immediacy is defined as “communication behaviors that enhance closeness to, and nonverbal interaction with another, as the degree of sensory involvement in an encounter; and as implicit indicators of liking for those persons and things that are approached” (Coker & Burgoon, 1987, p. 468). Distal cues of immediacy include touching, spatial distance, leaning, eye contact, and body orientation (Coker & Burgoon, 1987; Mehrabian, 1969). To relate this more to seating orientation, Argyle & Kendon (1967) define two

components of social performance: standing features and dynamic features. Standing features include components such as posture and orientation. Dynamic features include components such as gestures, movements and eye contact. In relation to interpersonal communication, seating orientation might function as a standing feature that potentially influences the social performance of two individuals.

Mehrabian (1971) has also suggested various ways that the environment might influence the immediacy of social interaction. He asserts that furniture arrangement might suggest status differentials through the use of non-immediacy, and that a non-immediate arrangement might misconstrue the intentions of someone seeking to create a relationship of trust. Within the counseling setting, it is posited that sitting across a desk may create uneasiness within a client, and said client might attribute some of this uneasiness to the therapist. Such inconsistent messages might have a negative impact when the expression of the therapist is inconsistent with the message conveyed by the spatial arrangement. Furthermore, a side-by-side arrangement is considered less immediate than face-to-face, and it is posited that the relationship between immediacy and liking is cyclical as “liking encourages greater immediacy and immediacy produces more liking (Mehrabian, 1971, p. 77).” Such theories serve as a framework for analyzing the relationship between the physical environment and interpersonal communication. Taken as a component of the social meaning model, seating orientation might convey more immediacy, which is reflective of more conversational involvement, which might ultimately translate into a relational message of empathy (Figure 1).

Figure 1. The Effect of Therapeugenic Factors on Empathy and Regard

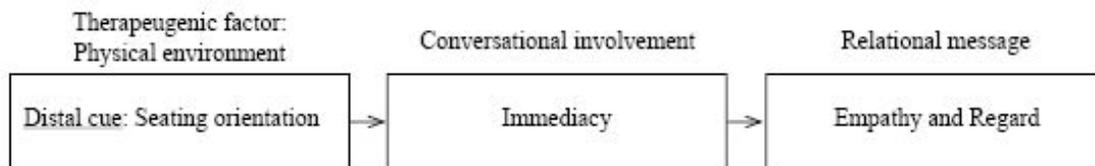


Figure 1. The effect of therapeugenic factors on empathy and regard based on the seating orientation cue of immediacy. Terms adapted from Bloom, L., Weigel, R., & Trautt, G. (1977). "Therapeugenic" Factors in Psychotherapy: Effects of Office Decor and Subject-Therapist Sex Pairing on the Perception of Credibility. *Journal of Consulting and Clinical Psychology*, 867-873, and Coker, D., & Burgoon, J. (1987). The Nature of Conversational Involvement and Nonverbal Encoding Patterns. *Human Communication Research*, 463-494.

Empirical Evidence Related to the Nonverbal Communication Perspective

There are various empirical studies related to the nonverbal communication perspective of seating orientation. These studies can be identified in terms of whether they support or do not support the evaluative effect of seating orientation.

Research in support of the evaluative effect of seating orientation highlight the effect of orientation and posture on perceptions and attitudes. In a study investigating how proxemic cues affect clients perception of therapist liking, it was found that a face-to-face orientation was preferred to that of a rotated orientation (Kelly, 1972). In another study, attitude is defined as “the degree of liking, positive evaluation, and/or preference of one individual toward another” (Mehrabian, 1968a, p. 26). For neutral interactants, it was found that shoulder orientation is more direct, least direct for intensely disliked interactants, and moderately direct for those who are intensely liked.

In a study investigating nonverbal behaviors during high and low rapport, physicians were videotaped during interactions with new and return-patients and were coded by other residents in terms of nonverbal behavior (Harrigan, Oxman, & Rosenthal, 1985). Nurses then rated the videos in terms of levels of rapport using bipolar adjective scales. It was found that there were significant differences between high and low rapport physicians. Physicians were rated as demonstrating more rapport when directly facing the patient. In another cross-cultural study, university teachers were rated by students on their level of immediacy, and then students rated their own self-report of cognitive learning (McCroskey, Sallinen, Fayer, Richmond, & Barraclough, 1996). It was found that greater teacher immediacy correlated with greater perceived learning and less learning loss. The two cultures which reported the highest levels of

teacher immediacy also reported the highest levels of perceived learning.

All of these studies highlight the extent to which seating orientation and the construct of immediacy might affect interpersonal communication. However, other studies also exist which might refute this assumption. In one study highlighting the effect of proxemics during approval-seeking or approval avoiding behavior, it was found that significant differences existed between measures of distance, but not between orientations (Rosenfeld, 1965). In another study investigating the effect of posture, orientation, and distance on decoding attitudes, more direct orientation was not found to be indicative of a more positive attitude (Mehrabian, 1968b). Furthermore, in a study investigating the effect of head and body orientation on the communication of attitudes, similar results were found as the hypothesis that a more direct orientation represents a more positive attitude was not supported (Mehrabian, 1967). A possible explanation for this inconsistency might be the variation of methodologies used within different contexts. This necessitates further research investigating the effect of seating orientation on clients' inference of attitude.

Seating Orientation: The Verbal Communication Perspective

Seating orientation, from the perspective of verbal communication, is viewed in terms of how well specific arrangements encourage or are conducive to social interaction. Osmond (1957) describes certain spaces as sociofugal and sociopetal. Sociofugal design is design which discourages human interaction. An example might include a seating arrangement that places two people side by side which makes conversation spatially difficult. Sociopetal design, on the other hand, encourages interpersonal interaction. An example of this might include a seating arrangement that places two people face to face which makes conversation relatively easy.

Studies have been done verifying the use of sociopetal arrangements for conversation (Holahan, 1972). If used to describe certain seating orientations, sociopetal arrangements are most naturally used for verbal interaction.

Empirical Evidence Related to the Verbal Communication Perspective

Many experimental studies have investigated the use of seating arrangements for conversation. In one study, participants were brought to a room and were told to sit in seats with various orientations to each other while the experimenter went elsewhere to prepare the study (Mehrabian & Diamond, 1971a). It was found that more direct seating orientations involved greater immediacy, and that immediacy correlated with the amount of conversation between participants in the waiting area. In another set of studies in which participants were brought to a room and asked to wait for the experimenter, affiliative behavior maintained a linear relationship, with less direct orientation (180-degrees, side-by-side) being worst for conversation (Mehrabian & Diamond, 1971b). Sommer (1959) brought groups of heterogeneous employees to a cafeteria to discuss proverbs and observed which seats they took for conversation at a rectangular table (three chairs at each side and one chair at the ends) and at a square table (one chair at each side). Significant results were found for those sitting at the rectangular table (most chose the corner-to-corner positions). The majority of participants at the square tables chose corner-to-corner position as well.

Questionnaire studies have also been done investigating participants' preferences for different seating positions during conversation. In one study, students were asked to imagine where they would sit when interacting for different reasons with a friend at a rectangular table (Sommer, 1965). When conversing, 42% of pairs chose to sit corner-to-corner (at a 90-degree

angle) whereas 46% chose to sit opposite of each other (face-to-face). Cross-culturally, seating arrangement might also have an effect on conversation. In a questionnaire study asking United Kingdom participants about conversation in a public house, it was found that with same sex and casual pairs the corner-to-corner position was most preferred, whereas with intimate friends, the most preferred seat was side-by-side (Cook, 1970). During conversation in a restaurant, it was found that with same sex, casual pairs, and intimate friends the face-to-face position was most preferred. A possible explanation for this difference might be etiquette expectations, since a restaurant might be perceived as more formal than a public house. This might necessitate a more formal conversational layout. Furthermore, when asked where they would sit when chatting with a friend before a class at a rectangular table, most United Kingdom students chose to sit corner-to-corner, with the face-to-face position being the second most preferred choice.

Observational studies have also investigated the use of seating arrangements for social interaction. Mixed results from an American study found an overwhelming desire for participants to sit corner-to-corner or face-to-face when seated at square or rectangular tables (Sommer, 1959; Sommer, 1965). However, a cross-cultural observational study within the United Kingdom found that most participants preferred to sit either side-by-side or face-to-face when at either a public house or a restaurant (Cook, 1970).

From these studies, seating orientation might be thought of as a function of task or type of interaction (Sommer, 1969). A majority of the findings highlight the value of corner-to-corner (or 90-degree angle) seating for conversation. Suggestions have been made as to why this might be. Sommer (1965) suggests that the corner-to-corner orientation allows people to avoid eye contact that might be inherent in a face-to-face orientation. Although eye contact is associated

with orientation and immediacy (Mehrabian, 1969), sitting face-to-face might be perceived as “too forward” during initial interactions (Mehrabian, 1971).

Spatial Boundaries

Few studies have investigated the effect of spatial boundaries (tables or desks) on social interaction. The few studies that have done so, however, mostly investigate the effect of these settings within the counseling context. In one study, a male-female dyad was shown in a photograph seated either with “two chairs placed side-by-side at a 45-degree angle,” “two chairs placed directly opposite each other with a table alongside of the chairs,” “two chairs placed at a 45-degree angle with only the corner of a table intervening,” and “two chairs placed opposite each other with a table intervening” (Haase & Dimattia, 1970, p. 321). Three groups of respondents (counselors, administrators, and clients) were shown these photographs and were asked to indicate their preference for these seating conditions using a semantic differential scale. It was found that the most preferred condition was the photograph in which the dyad interacted across the corner of a desk. The client group in particular also preferred the photograph which depicted counseling across the corner of a desk. The authors of this article referred to this position as the “protected sociopetal space,” and suggested that it “might serve the purpose of inviting a limited negotiation toward interaction and yet offer the necessary security and safety required by most humans in a new and ambiguous experience” (Haase & Dimattia, 1970, p. 324).

In another study investigating the effect of a physical barrier on participants’ perceptions of the therapist, it was found that self-disclosure by the confederate therapist had a greater effect on participants’ ratings of their attractiveness when a spatial barrier (a metal desk) was present

than when there wasn't (the seating orientation for this study was face-to-face) (Lundeen & Schuldt, 1989). Another study of interpersonal perceptions also found that faculty at a college who interact from behind a desk within their office received less positive evaluations by students in terms of interaction, and were evaluated as less positive overall (Zweigenhaft, 1976). In a study of anecdotal observation, it was also found that when a physician sat behind a desk during an interview, 55.4% of patients sat "at ease" compared to 10.8% of patients when a desk was not present (White, 1953). This study, in comparison to the study involving college faculty, highlights the various constructs that the presence of a desk might affect (evaluation and ease).

Other studies have also assessed the effect of a spatial barrier on interpersonal interaction. In one such study, participants were asked to interview with a confederate in either a "desk-between" or "no desk-between" condition, and then complete measures of individual anxiety and interviewer credibility (Widgery & Stackpole, 1972). It was found that interviewer credibility was highest for the low-anxiety group when a desk was present between the participant and the interviewer. It was also found that interviewer credibility was highest for the high-anxiety group when no desk was present.

Research Question and Hypothesis

The aim of this research project is to study the effects of seating orientation and the presence of a spatial barrier on clients' perception of therapist empathy and clients' psychological well-being. This is being done in order to find out which proxemic and spatial compositions are most conducive to the therapist-client relationship during the process of person-centered therapy, what effect certain spatial arrangements might have on perceptions of empathy/regard, and whether participants associate positive/ negative aspects of the physical environment

to the counselor. This is important to further understand how proxemics and spatial organization might facilitate or inhibit various aspects of interpersonal communication and psychological distance. This is also important to help person-centered therapists create environments that are more conducive to the client-therapist relationship.

This investigation differs from previous research in various ways. First, a specific counseling approach (person-centered therapy) is identified as to its effect on outcomes related to this form of therapy (empathy and level of regard). Secondly, as opposed to the many survey and observational studies done with these issues, this study seeks to study the effect of these elements within an actual counseling room, as advocated by Gladstein (1974). This might give further perspective to the actual processes associated with live interactions. Furthermore, unlike most previous studies, the current study attempts to investigate the effect of seating orientation and a spatial boundary on client's perception of therapist empathy and regard by assigning them to specific seating arrangements and measuring client perceptions as oppose to preferences.

In relation to previous literature, it is the author's hypothesis that angle seating conditions (90-degrees) will result in greater perceptions of empathy, level of regard, satisfaction with the session, and subjective experiences of satisfaction (H1) because corner-to-corner seating is the preferred arrangement for most levels of interpersonal conversation. It is also hypothesized that seating arrangements with a spatial barrier between a counselor and participant will result in greater perceptions of empathy, level of regard, satisfaction with the session, and subjective experiences of satisfaction (H2). This is being hypothesized on the basis that the presence of a spatial barrier might offer the participant a sense of psychological comfort and protection during an initial interaction with an unfamiliar person.

Method

Design

The design of this experiment includes two independent variables and four dependent variables. The first independent variable is seating orientation. This variable was manipulated by the researcher and has two levels: chairs within the office environment were placed either face-to-face or at a ninety-degree angle to each other. This first independent variable was a between groups variable.

The second independent variable is the presence of a spatial boundary. This variable was also manipulated and has two levels: an office environment with a coffee table in between the two chairs or an office environment with no coffee table in between the two chairs. This second variable was also a between groups variable.

The dependent variables within this experiment included perception of empathy, perception of level of regard, satisfaction with the session, and subjective experience of the session. The first three variables were measured quantitatively; the fourth was a qualitative variable. These measures will be described in more detail below.

The current study was a 2x2 between groups factorial investigation, as each participant took part in only one of the four experimental conditions (face-to-face with a table, face-to-face without a table, at an angle with a table, or at an angle without a table). Upon arriving to the setting, each participant was randomly assigned to either condition. This was done by placing the participants in a rotating sequence of the conditions (for example, participant one received the 1st condition, participant two received the 2nd condition, participant three received the 3rd condition, and so on until the sequence was repeated for all four conditions).

Counselors

The counselors in this study were four trained students from Cornell's Empathy Assistance and Referral Services (EARS) group. These students are taught to effectively communicate with troubled students using methods derived from the person-centered therapy approach. Their certification is developed through a series of beginning, advanced, and intensive training programs. Upon completion of various training and practice sessions, the students must then face a formal evaluation from the current EARS staff. This evaluation is entitled the "long role play" and consists of an extended, hour-long counseling session, as well as a written evaluation. The methods used within this training can be described through an elaboration of the EARS counseling model.

The EARS counseling model outlines a three-stage process counselors must adhere to when interacting with a student. The first stage involves establishing rapport, clarifying the student's situation, and ultimately, their feelings (EARS Intensive Level Training Handouts). The second stage involves identifying common themes and issues. The third and final stage involves setting goals to help "plan a course of action" (EARS Intensive Level Training Handouts). Such a model is very consistent with the principles of person-centered therapy (empathy, positive regard, and congruency), and is thus appropriate for the current study.

In terms of specific characteristics of the counselors, only females were used to control for any gender affects. Furthermore, the ages of the four counselors were between 20-22.

Participants and Sampling

The participants in the study were 23 students currently attending Cornell University. Students were recruited through an online, university research resource entitled SUSAN. This

program allows students to sign-up for various experiments within the university for either financial payment or extra-credit. Students were also recruited through the use of flyers placed throughout the campus, and through announcements at the beginning of various university courses. The participants were told that they would be speaking about issues related to their career development (i.e., choosing a major, graduation, finding a job) with an EARS counselor in order to study interpersonal communication within the counseling context. The final sample included 20 females (87%) and 2 males (8.7%), with ages 18 (4.3%), 19 (39.1%), 20 (34.8%), 21 (8.7%), and 23 (8.7%). Missing age (4.3%) and sex information (4.3%) occurred for one participant.

Measures

The scales used for this study were three quantitative measures and one set of open-ended questions. The first quantitative measure was an adjusted Barrett-Lennard empathy subscale. This scale utilizes 8 positively valenced and 8 negatively valenced items to assess the participant's perception of counselor empathy (Appendix 1). The reliability of the empathy subscale shows a Cronbach alpha of 0.722. The scale was presented via Cornell's online qualtrics system. Participants were asked to slide their response to each item on a scale from -3 ("I strongly feel that it is not true") to 3 ("I feel that it is probably true, or more true than untrue"). The scale was adjusted to make any reference to the counselor gender-neutral. This was done by omitting any references to the counselor as "he," and replacing them with the phrase "he/she." Sample items include "The counselor tried to see things through my eyes" and "The counselor understood my words but not the way I felt."

The second quantitative measure was an adjusted Barrett-Lennard level of regard

subscale. This scale contains 8 positively valenced and 10 negatively valenced items to assess the participant's perception of counselor regard (Appendix 1). The reliability of the regard subscale shows a Cronbach alpha of 0.873. The scale was presented via Cornell's online qualtrics system. Participants were also asked to slide their response to each item on a scale from -3 ("I strongly feel that it is not true") to 3 ("I feel that it is probably true, or more true than untrue"). The scale was also adjusted to make any reference to the counselor gender-neutral. This was done by omitting any references to the counselor as "he," and replacing them with the phrase "he/she." Sample items include "The counselor respected me" and "The counselor disapproved of me."

The third quantitative measure used was an adjusted satisfaction with therapist and therapy subscale. This scale utilizes 6 items to assess the participant's satisfaction with the counseling session (Appendix 1). The reliability of the satisfaction subscale shows a Cronbach alpha of 0.895. The scale was presented via Cornell's online qualtrics system. Participants were asked to mark their response to each item on a five-anchor scale from "Strongly disagree" to "Strongly agree." The scale was adjusted to reflect an individual counseling session, as oppose to a group therapy session. This was done by omitting any references to the interaction as a "program," and replacing them with the term "session." Sample items include "I am satisfied with the quality of counseling I received" and "My needs were met by the session."

The set of open-ended questions was used to assess how participants felt about the counseling session. Specifically, these questions were used to assess participants' perceptions of the counselors' interest, feelings of comfort, and feelings of capability in either condition. To address these issues, the researcher developed three questions each asking the participant to

provide a 2-5 sentence statement commenting on these aspects of the interaction (Appendix 1). Thematic analysis was used to assess the content of each statement across the four conditions (see results section). Sample items include “Please provide a 2-5 sentence statement commenting on how interested the counselor appeared to be in you as a person, and what characteristics of the interaction gave you this impression” and “Please provide a 2-5 sentence statement commenting on how comfortable you were with exploring your interests with the counselor and what characteristics of the interaction gave you this feeling.”

The counseling session was held within a research room in Cornell’s Human Ecology Building. Furnishings included two identical chairs and a wooden coffee table (Figures 2-5). The dimensions of the chairs were 34” width x 35” depth x 39” height. The cushions were foam wrapped in fiber material. The chairs were brown and firmly cushioned. Within the face-to-face/ no table condition, the chairs were placed 6.5’ apart (center-to-center) at a 180-degree angle to each other (Figure 2). For the face-to-face/ table condition, the same distance was maintained with the 3’ 11.5” x 2’ 3.5” table placed in between the chairs (Figure 3). Within the angle/ no table condition, the chairs were also placed 6.5’ apart (center-to-center), but were rotated so their edges met at a 90-degree angle (Figure 4). The same was also true for the angle/ table condition, with the exception that the 3’ 11.5” x 2’ 3.5” table was placed in between the chairs (Figure 5).

Figure 2. Face-to-Face, No-Table Condition

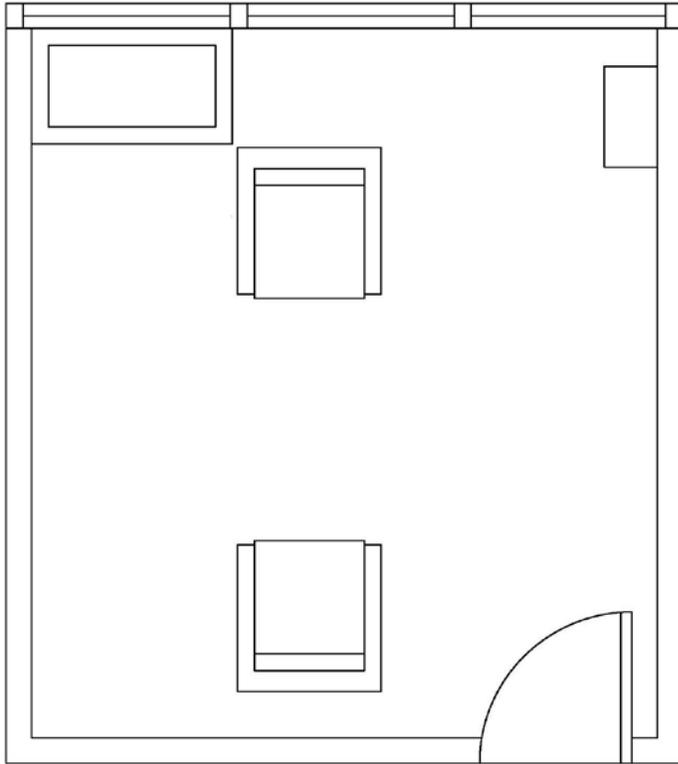


Figure 2. Image of the face-to-face, no-table condition.

Figure 3. Face-to-Face, Table Condition

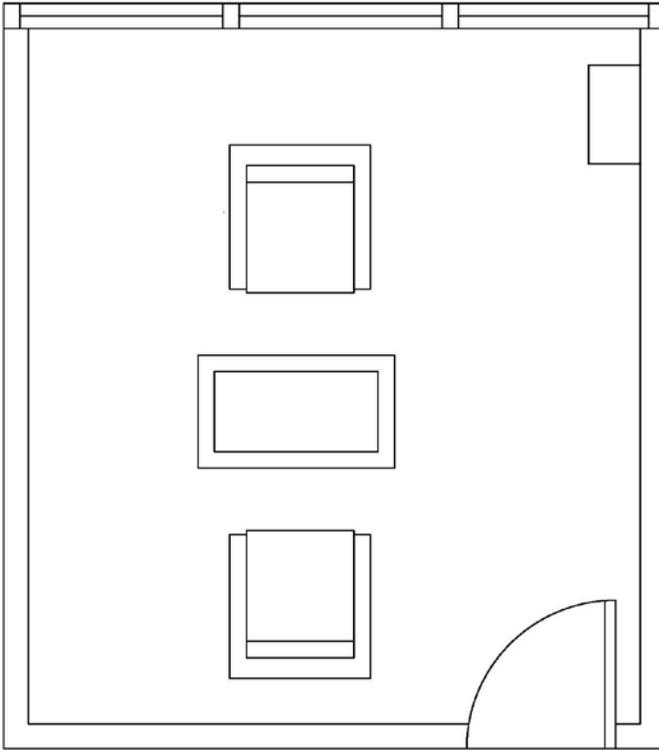


Figure 3. Image of the face-to-face, table condition.

Figure 4. Angle, No-Table Condition

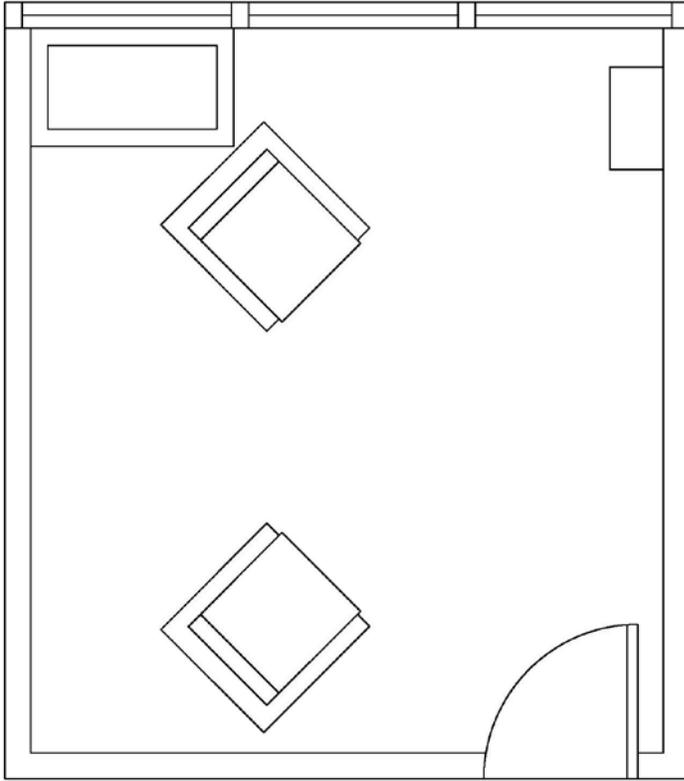


Figure 4. Image of the angle, no-table condition.

Figure 5. Angle, Table Condition

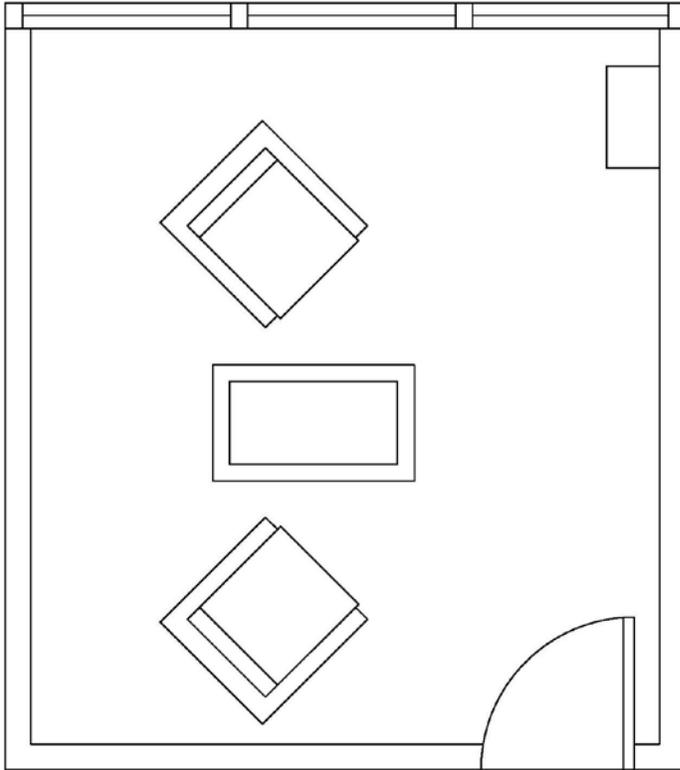


Figure 5. Image of the angle, table condition.

The room in which the measures were administered contained a desk with a computer. This room was adjacent to the counseling room and was accessible by a door. The questionnaire containing all of the scale measures was sent to the participants' emails upon arrival to the session. White noise was projected from the computer screen in order to mask the counseling sessions of others in the adjacent room when completing the questionnaire. The use of white noise might have also helped the participant focus on the questionnaire, as a study has shown that certain levels of ambient noise cause people to focus little attention to peripheral stimuli and more on central tasks (Matthews & Canon, 1975).

Procedure

Participants were first brought to the research location on the first level of the Human Ecology Building. They were met by either the researcher or the research assistant. They were then told about the study and given the consent form. After signing the consent form, the participant entered the room with the counselor always sitting in the chair closest to the door. The participant then sat in the opposite seat, which was already placed in one of the four arrangements. The counselor then spoke with the participant for 20-minutes about any career-related issues the participant might have presented. Following this 20-minute session, the participant was then told to enter the adjacent room, where they were met by the research assistant. The participant was asked by the research assistant to sit at the computer, fill out the questionnaire, and then knock on a third adjacent door when finished. Once finished, the participant was then met by the researcher and debriefed about the true nature of the study.

Results

Descriptive statistics

The final sample size was 23 with 5 participants in the face-to-face/ no table condition, 6 participants in the face-to-face/ table condition, 6 participants in the angle/ no table condition, and 6 participants in the angle/ table condition. The distribution of each counselor is shown in Table 1. The power of this sample in relation to the quantitative measures is 0.61. This is the power to detect a difference of 1.5 between two sample means across two conditions of 6, with an alpha level 0.05, a standard deviation of 1, and three extra parameters.

Table 1

Counselor Distribution Amongst Seating Conditions

Orientation	Boundary	Counselor	Number of participants
Face-to-face	Table	1	1
		2	2
		3	1
		4	1
		Total	5
	No Table	1	1
		2	3
		3	1
		4	1
		Total	6
	Total	1	2
		2	5
		3	2
		4	2
		Total	11
Angle	Table	1	1
		2	1
		3	2
		4	2
		Total	6
	No Table	1	1
		2	1
		3	2
		4	2
		Total	6
	Total	1	2
		2	2
		3	4
		4	4
		Total	12

Quantitative Measures

The correlation for the empathy subscale, regard subscale, and satisfaction with the session subscale can be seen in Table 2. Using a mixed-model analysis to investigate the effect of gender and age, there is no significant effect for either gender or age on perceptions of empathy or positive regard. For satisfaction with the session, there is no significant effect for age, but there is a significant effect for gender with males being more satisfied with the session than females ($M = 4.54, SE = 0.56; M = 3.08, SE = 0.16$).

Empathy subscale

A non-significant Shapiro-Wilk test value of $W[23] = 0.941, p = 0.19$ and a look at the response distribution confirms the normality of the data for the empathy subscale. A non-significant Levene's test of $F[15,7] = 0.923, p = 0.58$ also confirms the data's homogeneity of variance.

Analysis of variance was used to test for seating, orientation, and counselor effects on the outcome measures. There were two levels for seating orientation (face-to-face, angle), two levels for spatial boundary (no table, table), and four levels for counselor effect (counselor 1,2,3, and 4). There is no significant effect of orientation on perceptions of empathy. There is a close to significant effect of spatial boundaries on perceptions of empathy ($F[1, 16] = 3.032, p = 0.10$, with effect size 0.16^2). Mean comparisons show that students who interacted with no table present perceived the counselor as more empathetic than those who interacted with a table present ($M = 1.08, SD = 0.59; M = 0.63, SD = 0.58$). There is also no significant effect of the counselor or an orientation x spatial boundary interaction on perceptions of empathy.

Table 2

Correlation Matrix for Quantitative Measures

		Empathy Scale Score	Regard Scale Score	Satisfaction Scale Score
Empathy Scale Score	Pearson Correlation	1	0.629**	0.202
	Sig. (2-tailed)		0.001	0.354
	N	23	23	23
Regard Scale Score	Pearson Correlation	0.629**	1	0.622**
	Sig. (2-tailed)	0.001		0.002
	N	23	23	23
Satisfaction Scale Score	Pearson Correlation	0.202	0.622**	1
	Sig. (2-tailed)	0.354	0.002	
	N	23	23	23

** . Correlation is significant at the 0.01 level (2-tailed).

Regard subscale

A non-significant Shapiro-Wilk test value of $W[23] = 0.932$, $p = 0.12$ and a look at the response distribution confirms the normality of the data for the regard subscale. A non-significant Levene's test of $F[15,7] = 1.572$, $p = 0.28$ also confirms the data's homogeneity of variance. There is no significant effect of orientation on perceptions of regard. There is no significant effect of spatial boundaries on perceptions of regard. There is also no significant effect of the counselor or an orientation x spatial boundary interaction on perceptions of regard.

Satisfaction subscale

A non-significant Shapiro-Wilk test value of $W[23] = 0.962$, $p = 0.50$ and a look at the response distribution confirms the normality of the data for the satisfaction subscale. A non-significant Levene's test of $F[15,7] = 1.213$, $p = 0.42$ also confirms the data's homogeneity of variance. There is no significant effect of orientation on students' satisfaction with the session. There is no significant effect of spatial boundaries on students' satisfaction with the session. There is also no significant effect of the counselor or an orientation x spatial boundary interaction on students' satisfaction with the session.

Qualitative Measures

Three open-ended questions presented towards the end of the questionnaire were used to assess participants' individual perceptions of counselor interest, comfort, and capability. The researcher and research assistant reviewed the responses to assess the participants' perceptions of the counselors' interest (and the characteristics of the session that gave them this impression), perceptions of comfort (and the characteristics of the session that gave them this impression), and the participants' capability of maintaining their professional career after speaking with the

counselor. This was done by first assessing participants' perceptions and then utilizing the framework suggested by Bloom, Weigel, & Trautt (1977) to ascertain whether participants' mentioned characteristics of themselves, the counselor, the counselor-client interaction, or the physical environment as the basis for their answers.

Responses were coded as being either positive, ambiguous, or negative. For the question of counselor interest, any answer where the participant suggested that the counselor was interested without qualification was coded as "interested." Any answer where the participant mentioned something good about the session, but something negative as well (or vice versa), or any answer where the participant commented on aspects of the interaction, but didn't suggest whether or not they thought the counselor was interested was considered "ambiguous." Any answer where the participant openly stated that the counselor was not interested or failed to mention any positive aspects of the interaction was coded as "uninterested." The same holds true for the questions of comfort and student capability, with the exception that responses for the capability question were coded as neutral if the participant mentioned that they feel the same level of capability as before the session.

For the questions of counselor interest and comfort, responses were also coded as characteristic of the "client" if the reason for the participant's answer had something to do with the client or his/her personality. They were coded as "counselor" if the reason for the participant's answer had something to do with the counselor's behavior or attitude. They were coded as "counselor-client interaction" if the reason for the participant's answer had something to do with the dialogue, the interaction, or the questions being asked. They were also coded as "physical environment" if the reason for the participant's answer had something to do with the

physical environment (the seating arrangement, the table, etc.). Participants' responses could have been coded in more than one category.

Initial correlations between the researcher's and the research assistant's assessments for the interest question showed Pearson correlations of 0.837 for overall interest, 0.797 for client characteristics, 0.523 for counselor characteristics, 0.168 for counselor-client interaction characteristics, and 1.00 for physical environment characteristics. The initial low correlation for the counselor-client interaction characteristics might have been due to a misinterpretation between the researcher and research assistant about the labeling of the characteristics. Initial correlations between the researcher's and the research assistant's assessments for the comfort question showed Pearson correlations of 0.885 for overall comfort, 0.565 for client characteristics, 0.580 for counselor characteristics, 0.565 for counselor-client interaction characteristics, and 1.00 for physical environment characteristics. Initial correlations between the researcher's and the research assistant's assessments for the capability question showed a Pearson correlation of 0.768. Ultimately, the researcher and the research assistant discussed all items of disagreement until a consensus was made about each statement.

Interest

In general, the majority of participants perceived the counselor as either interested or with some ambiguity. The reasons for the majority of these responses were due to characteristics of the counselor or characteristics of the counselor-client interaction. As one participant stated: "The counselor's body language was very open, so that made me feel like she was attentive and interested in what I had to say. In addition, she encouraged me to speak more when needed and referenced things I had said earlier in the conversation."

Looking at the responses per experimental condition (Figure 6), both participants within the face-to-face no table condition and the angle no table condition perceived the counselor as either interested or with some ambiguity. Within the face-to-face table and angle table conditions, most responses were either interested or ambiguous, respectively. A few participants within the face-to-face table and angle table conditions also felt that the counselor was uninterested. The reasons for the majority of these responses were similar across all conditions, relating to characteristics of the counselor or the counselor-client interaction (Figure 7).

More participants in the no table conditions perceived the counselor as interested or with some ambiguity than those in the table conditions (Figure 8). As one participant mentioned, “the counselor appeared to be interested in how to help me, however, I still felt like the counselor seemed mechanical. By mechanical, I mean that the counselor seemed to have a prepared set of questions instead of asking questions on the spot.” More participants in the table conditions also felt that the counselor was uninterested in them. One participant states: “The counselor appeared uninterested. The facial expression was very neutral, and the counselor spoke infrequently.”

When comparing the face-to-face seating orientation to the angle seating orientation, a pattern begins to emerge such that responses within the face-to-face conditions tended to be more skewed toward the uninterested direction, whereas responses within the angle conditions tended to be more ambiguous.

Figure 6. Comparison of Interest by Seating Condition

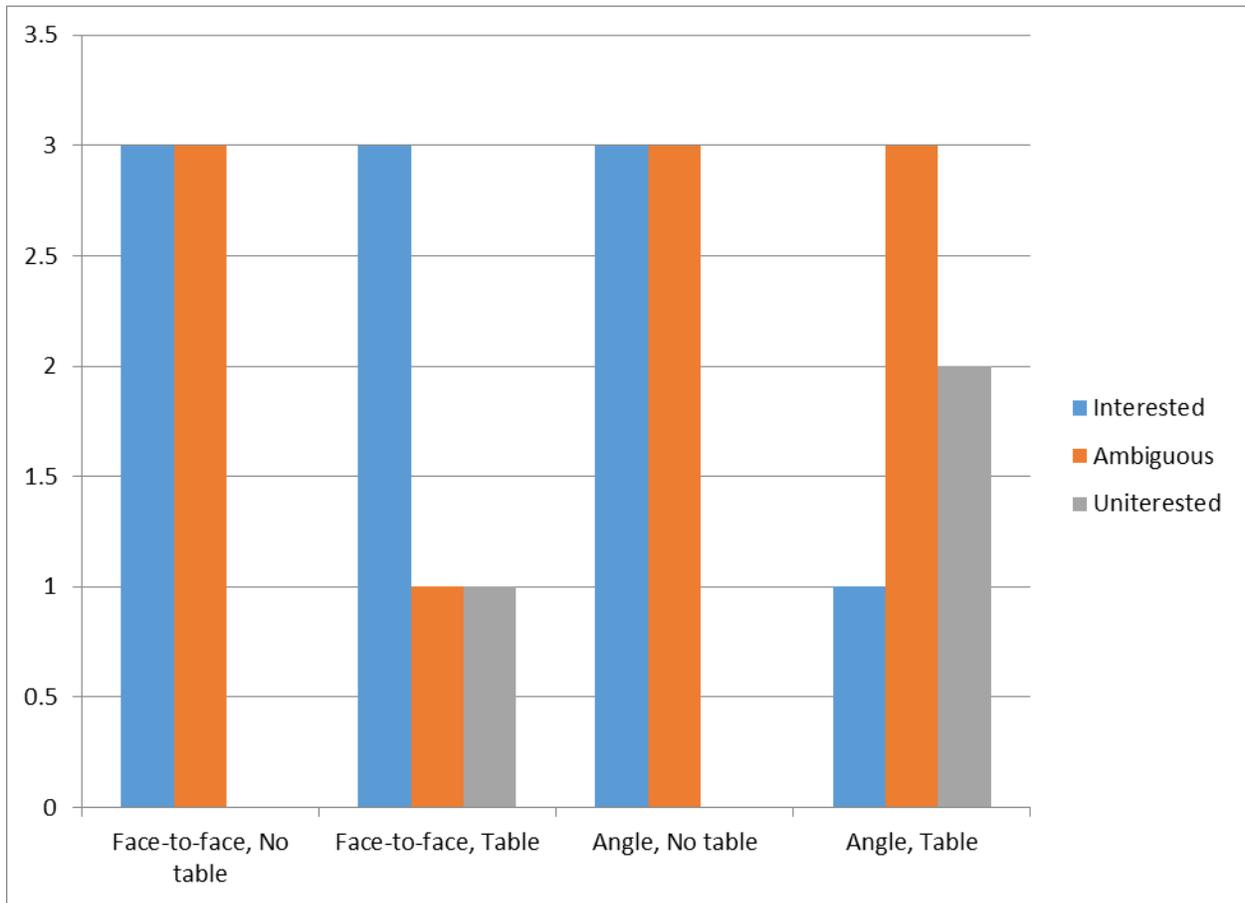


Figure 7. Comparison of Characteristics of Interest by Seating Condition

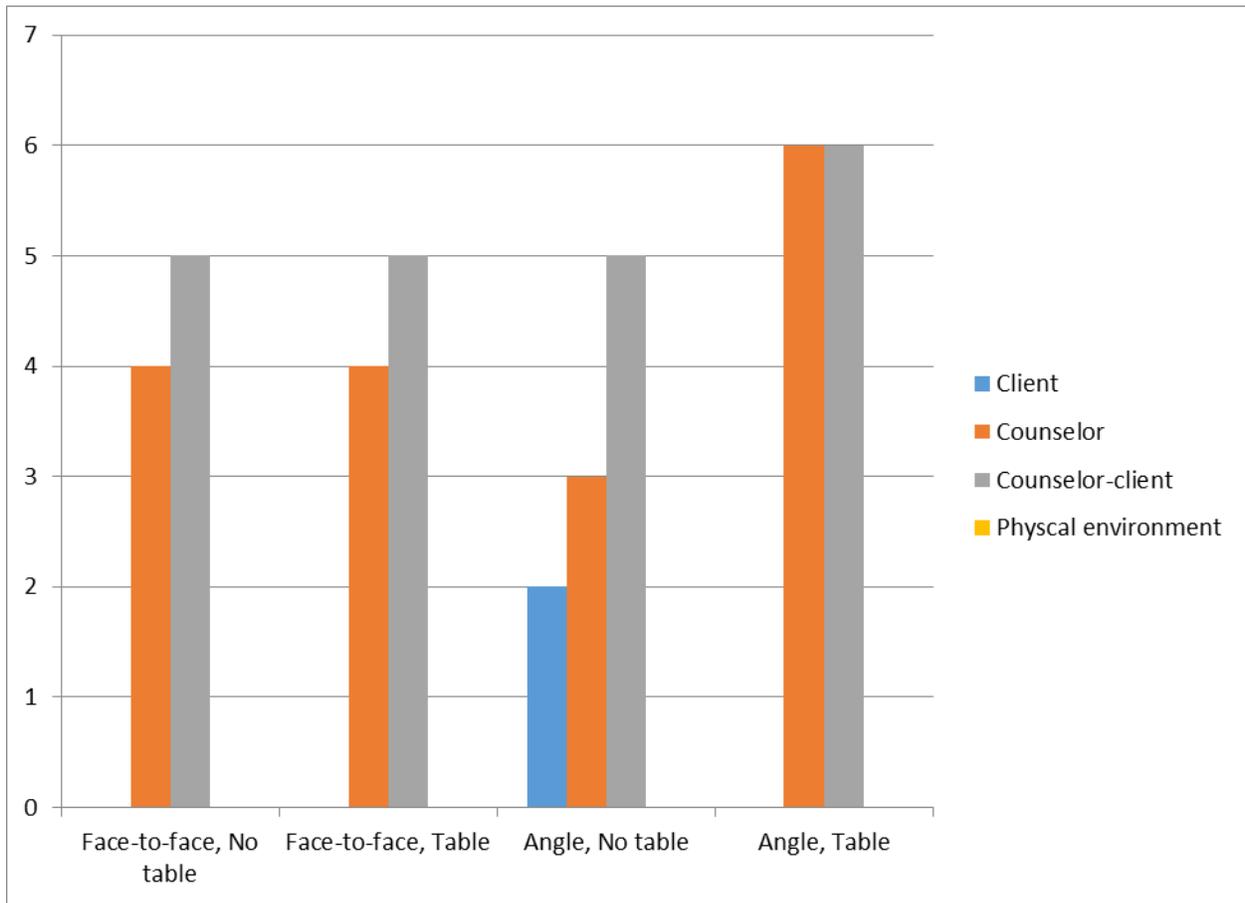
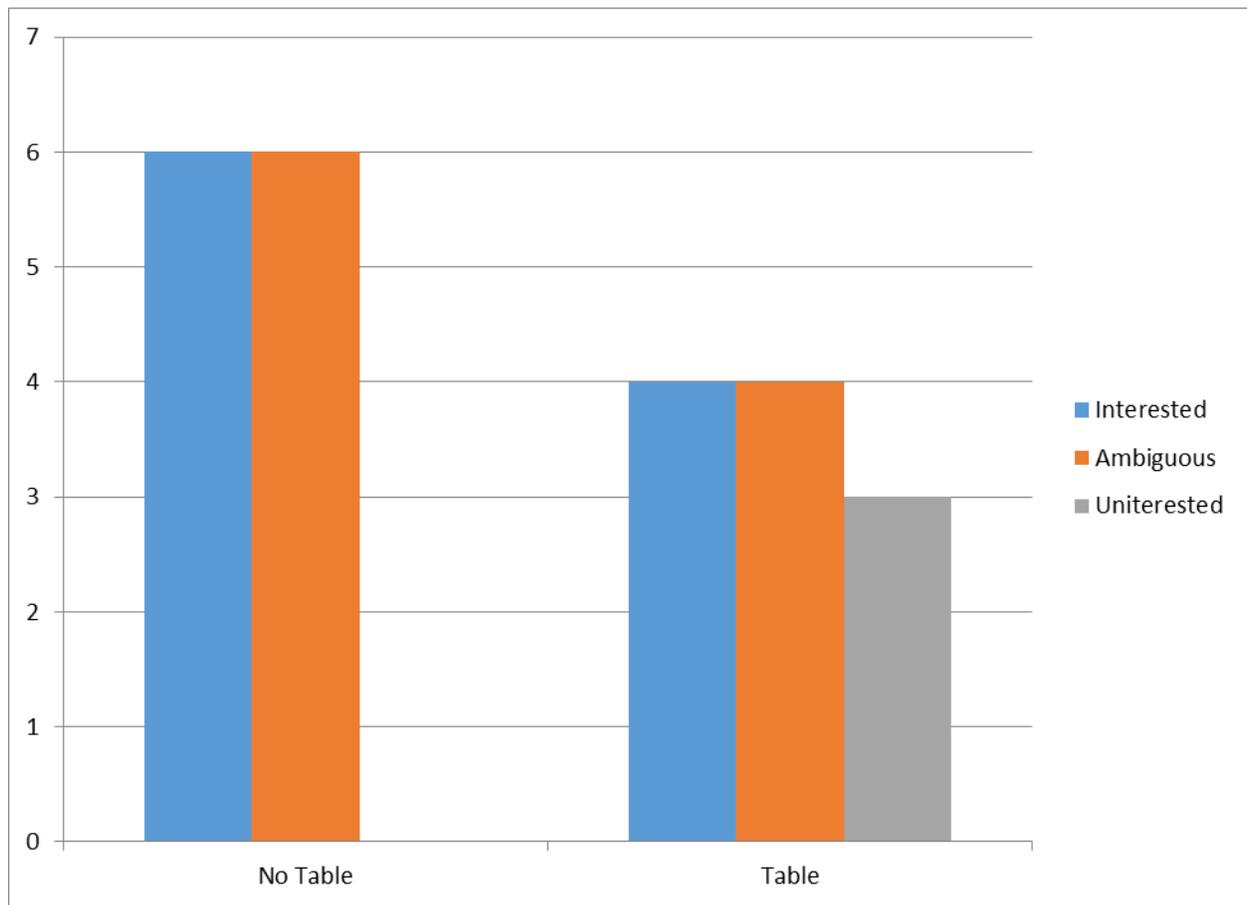


Figure 8. Comparison of Interest by Spatial Boundary



Comfort

In general, the majority of participants felt comfortable or ambiguous feelings when exploring their interests. The reasons for the majority of these responses were due to characteristics of the client, the counselor or characteristics of the counselor-client interaction. For example, one participant stated: "I was comfortable because the counselor seemed relaxed, patient, and open. She asked me open-ended questions which I could answer how I wanted. When she asked more specific questions, like "Where do you see yourself in 10 years", a question that evokes feelings of anxiety for me, I became less comfortable and wasn't able to open myself up as well. But, instead of answering the question, I told her how I felt about the question." A few responses also mentioned characteristics of the seating arrangement or the comfort of the chairs.

Looking at the responses per experimental condition (Figures 9), more participants in the face-to-face no table condition felt comfortable exploring their interest than any other condition. Similar responses of comfort were also reported in the angle table condition. More participants in the face-to-face table condition and the angle no-table condition felt ambiguous about their level of comfort. In terms of why participants felt the way they did, more reasons relating to the client-counselor interaction were given in the face-to-face table condition (Figure 10). Similar reasons for responses were seen across both the face-to-face no-table condition and the angle no-table conditions with more participants citing characteristics of themselves and the counselor as the basis for their answers.

Those in the angle table condition reported more responses related to the physical environment. One participant in particular expressed how the seating arrangement affected her

experience: “I feel like the seating arrangement was a bit awkwardly oriented as well. It made me kind of face out diagonally and often eye contact did not seem natural, which is a key thing I look for when I converse with people to establish trust and gauge how the conversation is going. I would have preferred more of a circular or frontal seating arrangement.”

More participants within the no-table conditions felt comfortable and expressed less ambiguity exploring their interests than those within the table conditions. Similar responses of discomfort were found across both of these conditions. When comparing seating orientation, similar responses emerged between the two conditions with more participants expressing comfort exploring their interests, then ambiguity, then discomfort.

Figure 9. Comparison of Comfort by Seating Condition

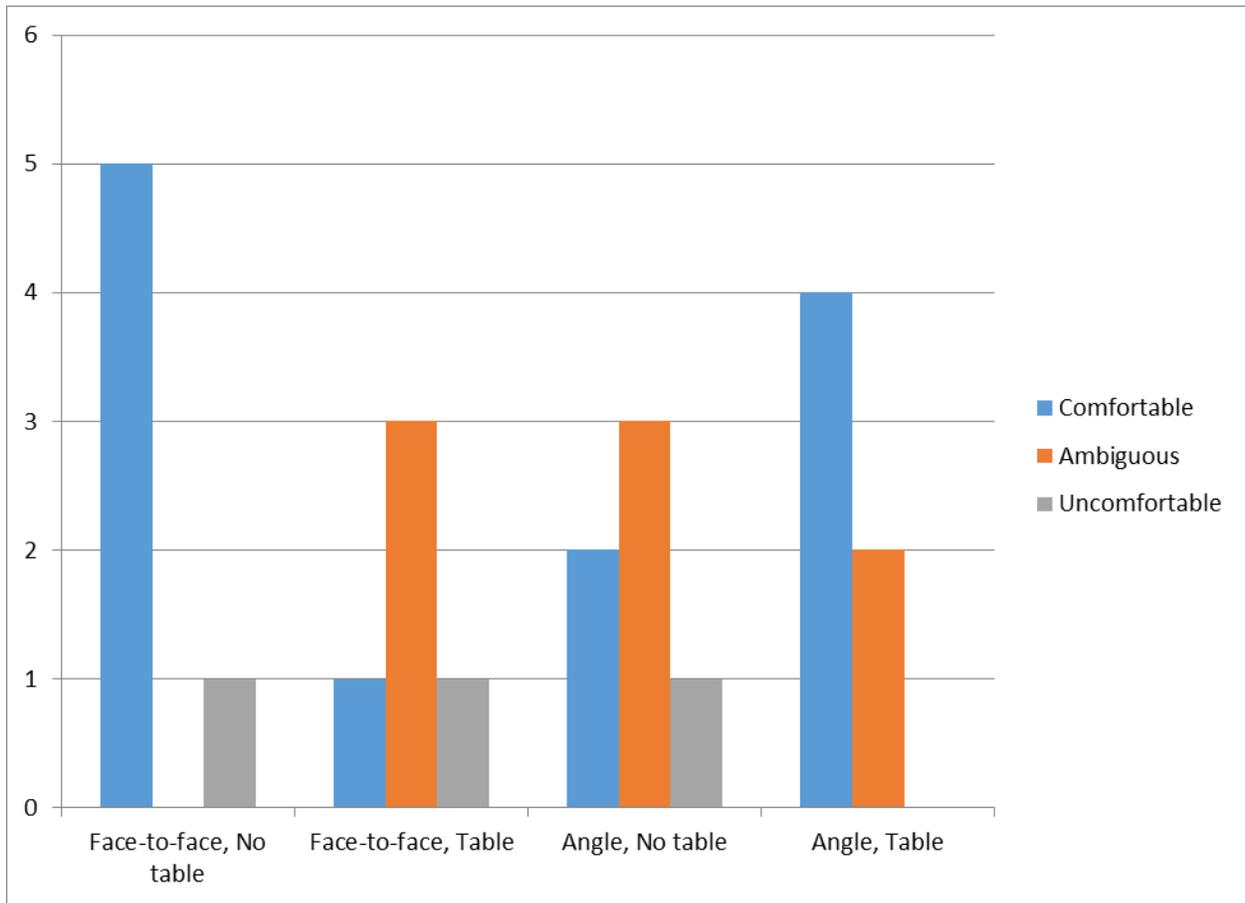
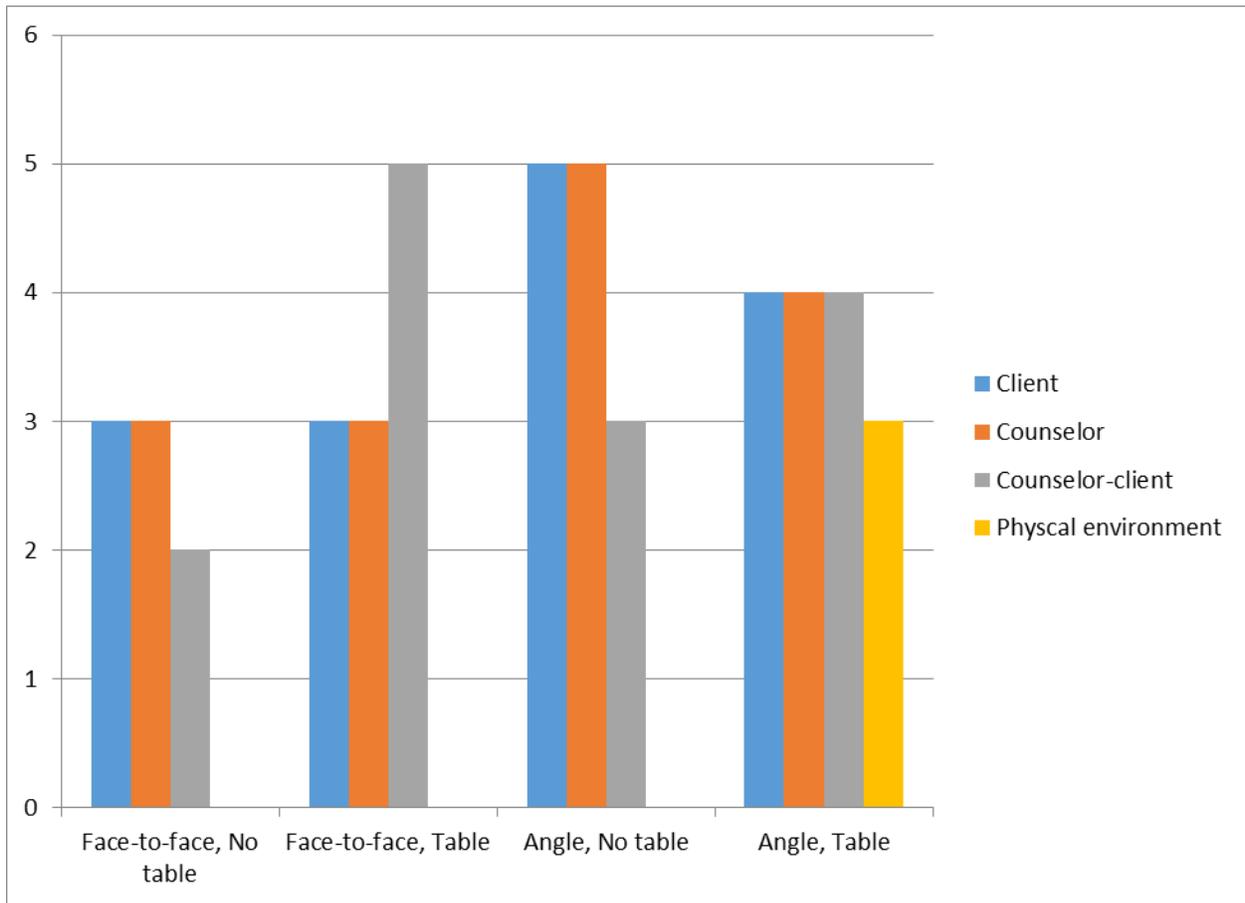


Figure 10. Comparison of Characteristics of Comfort by Seating Condition



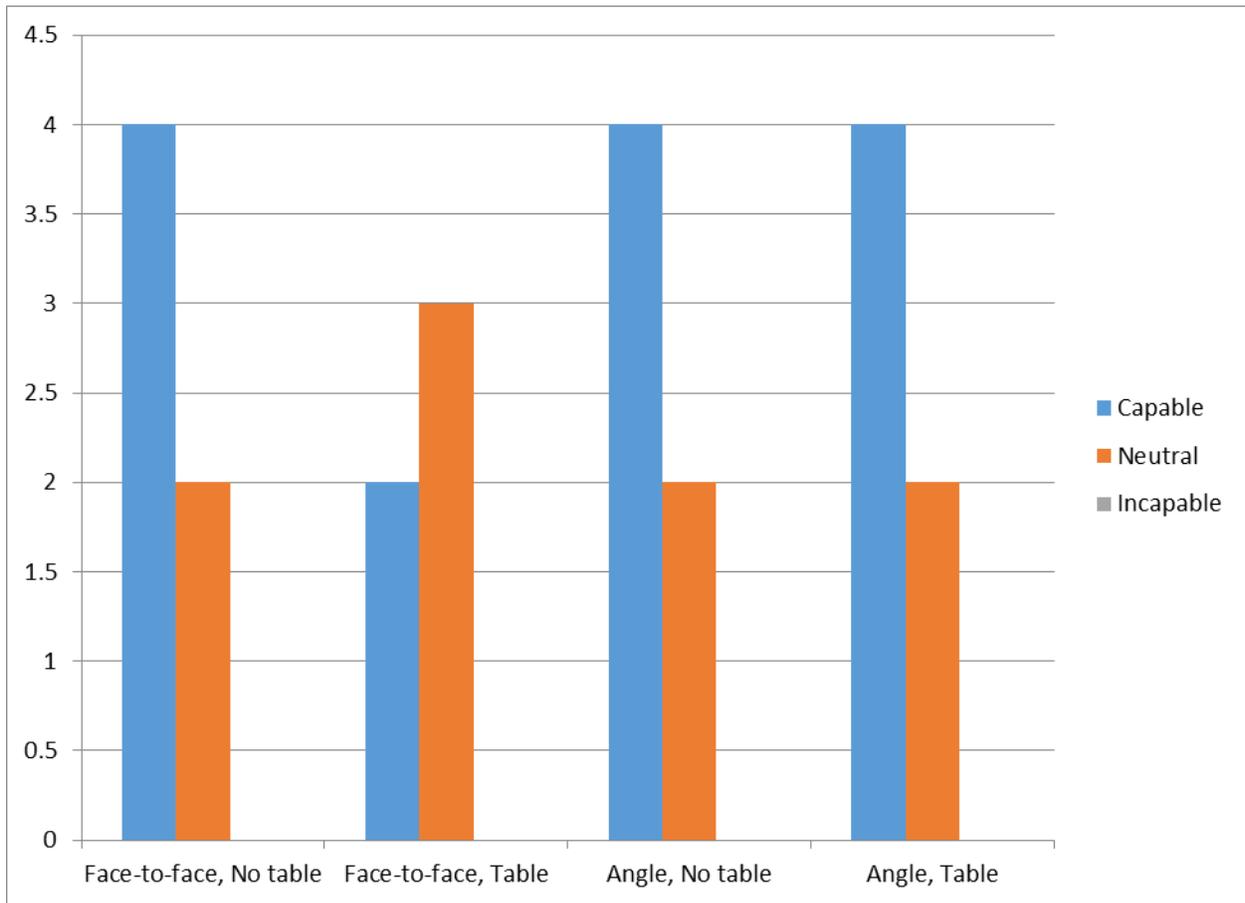
Capability

In general, more participants felt capable rather than neutral about maintaining their professional goals. No participants felt incapable. As one participant stated: “I feel better about my professional career goals after talking with the counselor. I feel more confident in my decisions up to now and I think I have a slightly clearer image of what I really care about and want to pursue in the future.”

Looking at the responses per experimental condition (Figure 11), the majority of participants in each condition except the face-to-face table condition felt capable of maintaining their professional goals after speaking with the counselor. Those within the face-to-face table condition expressed more neutral feelings about their level of capability. One participant highlights: “I don't think my interaction with the counselor today made any change on my thoughts.”

When comparing effects, the majority of participants in the no-table conditions felt capable of maintaining their professional career, while similar proportions of capability and neutrality are expressed within the table conditions. When comparing the effect of seating orientation, the same is true with the majority of participants feeling capable of maintaining their professional career within the angle conditions, and similar proportions of participants feeling capable of maintaining their professional career in the face-to-face conditions.

Figure 11. Comparison of Capability by Seating Condition



Discussion

This study investigated the effect of seating orientation and the presence of a spatial boundary on students' experience of person-centered therapy. It was hypothesized that the angle seating conditions (90-degrees) would result in greater perceptions of empathy, level of regard, satisfaction with the session, and subjective experiences of satisfaction (H1). It was also hypothesized that seating arrangements with a spatial barrier between a counselor and participant would result in greater perceptions of empathy, level of regard, satisfaction with the session, and subjective experiences of satisfaction (H2). Neither of these hypotheses were fully supported. The first hypothesis (H1) was partially supported as more people within the angle condition felt capable of maintaining their professional goals after the session. Close to significant effects were found for the absence of a table. Those within the no-table condition perceived the counselor as more empathetic than those within the table conditions. Furthermore, all participants in the no-table condition felt that the counselor was either interested in them or perceived the counselor ambiguously. This is unlike the participants in the table conditions who more often reported that the counselor was uninterested in them.

The finding that seating orientation did not have a significant effect on perceptions of empathy, level of regard, satisfaction, or all levels of subjective experience aligns with the studies done by Mehrabian (1967) and Mehrabian (1968b). These studies found that a more direct body orientation is not necessarily indicative of a positive attitude. However, this finding is dissimilar from the findings of Kelly (1972), Mehrabian (1968a), Mehrabian & Diamond (1971a), Mehrabian & Diamond (1971b), Sommer (1959), and Sommer (1965). The studies by Kelly (1972) and Mehrabian (1968a) suggest that a more direct or face-to-face orientation

positively affects perceptions of liking. Furthermore, the studies done by Mehrabian & Diamond (1971a) and Mehrabian & Diamond (1971b) suggest that a face-to-face orientation contributes to more conversation, whereas the studies by Sommer (1959) and Sommer (1965) suggest that the angle orientation is the most preferred for conversation.

A possible explanation for these differences might be that the students' judgements of empathy/ regard is less a consequence of the physical environment and more a consequence of counselor cues and interaction. It was previously suggested by the author at the outset of this investigation that to produce a relational message of empathy or regard, seating orientation might be used to convey immediacy within the conversation (Coker & Burgoon, 1987) to the receiver (Figure 1). However, with the finding that seating orientation did not have a significant effect on perceptions of empathy or regard, along with the finding that more participants cited characteristics of the counselor or counselor-client interaction for the basis of their open-ended responses, this explanation might be changed. It could be that counselor behaviors signify positivity, which might translate into a relational meaning of empathy or regard (Figure 12). Within this framework, the relational message of empathy or regard might be produced through more distal cues of the counselor, such as smiling and nodding. Such cues might convey more involvement (Coker & Burgoon, 1987) to the client, and ultimately have a greater effect in enhancing the person-centered therapy experience.

Another explanation for the failure to find significant effects for seating orientation might be that there are conceptual differences between seating for conversational purposes and seating for counseling purposes. Following the verbal communication perspective, it was suggested at the outset of this investigation that certain orientations might be more conducive for

Figure 12. The Effect of Therapeugenic Factors on Empathy and Regard (revisited)

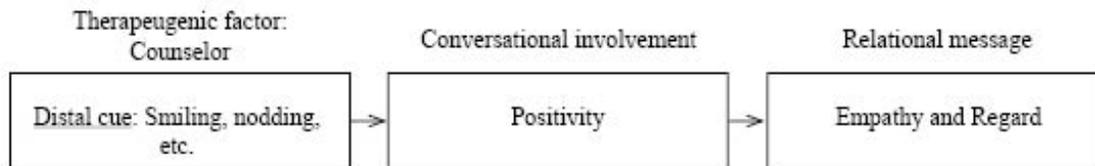


Figure 12. The effect of therapeugenic factors on empathy and regard based on counselor cues of positive regard. Terms adapted from Bloom, L., Weigel, R., & Trautt, G. (1977). "Therapeugenic" Factors in Psychotherapy: Effects of Office Decor and Subject-Therapist Sex Pairing on the Perception of Credibility. *Journal of Consulting and Clinical Psychology*, 867-873, and Coker, D., & Burgoon, J. (1987). The Nature of Conversational Involvement and Nonverbal Encoding Patterns. *Human Communication Research*, 463-494.

conversation. This was taken from the findings of Sommer (1959) and Sommer (1965), which suggested that people prefer certain orientations over others when sitting at a small table.

However, it might be true that the most preferred orientations for conversation are not necessarily the best orientations for perceptions of empathy. Further still, the studies by Sommer (1959) and Sommer (1965) were based on seating at a table, whereas the findings for this study were based on the presence of a table between two chairs. This operationalization might have also been the cause of the present results, since sitting at a table might be theoretically different than sitting with a small coffee table between two interactants.

In relation to the presence of a spatial boundary, the finding that the absence of a table lead to greater perceptions of empathy is contrary to the findings of Haase & Dimattia (1970) and White (1953). These studies found that a client preferred counseling across the corner of a desk (Haase & Dimattia, 1970), and that clients sat “at ease” when a desk was present between a therapist and client (White, 1953). The finding that the absence of a table lead to greater perceptions of empathy supports the findings of Zweigenhaft (1976). This study found that college faculty who interact with students across a desk received fewer positive evaluations in terms of interaction, and were evaluated as less positive overall than those without a desk (Zweigenhaft, 1976).

A general explanation for the findings of this study could be that the absence of a table between two interactants might signify a greater willingness to know someone. By removing the physical barrier, a counselor might convey more openness and vulnerability in his/her attempt to convey empathy. This is further supported by the finding that more participants in the table condition (3) felt that the counselor was uninterested in them than those in the no table condition

(0). Furthermore, the lack of any significant effects of a spatial boundary on regard could also be because regard is less a consequence of the physical layout and more a consequence of the counseling interaction. As highlighted by the characteristics participants cited for the basis of their open-ended responses, the perception of counselor regard might be due more to how the counselor engages the client during the session through body language and the questions asked. These factors might mitigate any effect that the presence of a spatial boundary has on how much the counselor respects the client.

The finding that males were more satisfied with the session than females requires further research to confirm its saliency. Considering the small sample size and the disproportionate number of females to males, this finding requires further research to make any claims about its effect.

Limitations

The generality of these findings are limited for several reasons. This study only utilized participants from Cornell University. The findings might be different for participants from other universities. Two, the age range of the participants (19-20 years) suggests that the findings might not be generalized to older age groups. Furthermore, 87% of the participants were female. This might limit the extent to which these findings can be generalized to males.

There are several other limitations of this study. First, the basis of counseling is very dissimilar from what one would expect in an actual counseling session. Regular counseling sessions offered by EARS typically last closer to an hour rather than 20-minutes, as used within this study. Second, the sessions are usually less restricted as students' are able to talk about whatever issues they like, as opposed to just career-related topics. In this sense, having a regular

open session might have allowed the student to feel more comfortable since he/she would have been able to control the topic of the session.

Third, intentionality might be a factor. Many of the student participants sought to acquire extra-credit for one of their courses. This incentive might be theoretically different from those students who typically go to counseling for personal reasons as their main motivation. Those with personal reasons as their main motivation might have attempted to work harder in establishing a “therapeutic alliance” (Farber, 2006) with the counselor, thus leading to more positive perceptions. Finally, this study only used one session to infer students’ experience of person-centered therapy. Had the study been a prolonged investigation over multiple sessions as oppose to a single cross-sectional study, different results might have been found. Participants might have grown to perceive the counselor as more empathetic and understanding over time.

This investigation also has various methodological limitations. The sample was very small ($N = 23$). The statistical power of this sample size was only 0.61. Had the sample been larger, the investigation might have acquired more power and possibly lead to more statistically significant findings. The intimate nature of counseling also makes it ethically difficult to monitor sessions using audio or visual devices. Such observation would have probably made the task of identifying perceptions easier. Furthermore, this study was done in an experimental setting, devoid of any other characteristics of a counseling office. Typical office settings might have other elements such as lighting, artwork, and plant life that might also influence clients’ counseling experience (Pressly & Heesacker, 2001). Such characteristics, when used in tandem with seating orientation and a coffee table, might result in findings dissimilar from those found within this study.

Future Research

With all of the aforementioned limitations, future research should address these specific issues. Replication studies should attempt to use a larger sample to gain more statistical power. New studies should also attempt to study this phenomenon within longer session periods, over multiple sessions, with students who are not seeking extra credit, and within an environment with multiple elements of study. Such adjustments would result in greater external validity since these studies would likely characterize the true counseling experience more accurately.

Future studies might also benefit from identifying whether participants have a history of counseling and to study participants with issues other than career-counseling. Identifying participants' history of counseling might help elucidate how receptive participants are to counseling practices and perceptions of empathy/ regard. Utilizing participants with a range of issues might also help reinforce the study's external validity by determining how salient the effect of these environmental alterations are across various social contexts and in which contexts these alterations might have the greatest impact.

Implications

Implications of this research suggest that the absence of a table during counseling might result in more positive perceptions of counselor empathy. Furthermore, counselors should pay careful attention to their own behaviors and the counseling interaction, as these factors generally seem to determine students' perceptions of counselor interest and comfort in exploring their interests.

Conclusions

Student use of counseling is becoming a very common practice for many American college students. With about 10.4% of college students seeking either individual or group counseling (Gallagher, 2012), it is important to consider how the counseling experience is being carried out in practice. Person-centered therapy is one form of therapeutic practice with empathy and positive regard as the cornerstones of its philosophy (Rogers, 1965). The current study sought to investigate how the physical environment (specifically, seating orientation and the presence of a table) might affect students' experience during this process of counseling. It was found that participants with no table between themselves and the counselor felt that the counselor was more empathetic. It was also found that most participants cited characteristics of the counselor and of the counselor-client interaction as the basis of their judgments of counselor interest and their willingness to explore certain career-related topics. This suggests that in order to create a more positive counseling experience, counselors should remove any spatial barrier between themselves and the client. They should also pay careful attention to how their own behavior and their interaction with the client might affect the client's perceptions of them.

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Below are listed a variety of ways that one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true or not true in your present relationship with the therapist. Slide each statement somewhere on the line according to how strongly you feel it is true or not true. Please mark every one.

The counselor tried to see things through my eyes.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

The counselor understood my words but not the way I felt.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

The counselor was interested in knowing what my experiences meant to me.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

The counselor nearly always knew exactly what I meant.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

At times the counselor jumped to the conclusion that I felt more strongly or more concerned about something than I actually did.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

Sometimes the counselor thought I felt a certain way, because he/she felt that way.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor understood me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor's own attitudes toward some of the things I said, or did, stopped him/her from really understanding me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor understood what I said, from a detached, objective point of view.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

The counselor appreciated what my experiences felt like to me.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

The counselor did not realize how strongly I felt about some of the things we discussed.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

The counselor responded mechanically.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

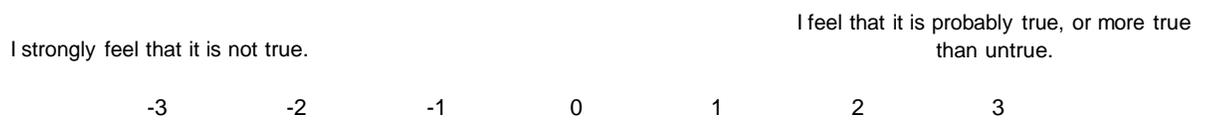
The counselor usually understood all of what I said to him/ her.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.	
	-3	-2	-1	0	1	2	3

When I did not say what I meant at all clearly he/she still understood me.



The counselor tried to understand me from my own point of view.



The counselor was able to be deeply and fully aware of my most painful feelings without being distressed or burdened by them him/her-self.



Below are listed more ways that one person could feel or behave in relation to another person. Please consider each statement with respect to whether you think it is true or not true in your present relationship with the therapist. Slide each statement somewhere on the line according to how strongly you feel it is true or not true. Please mark every one.

The counselor respected me.



The counselor disapproved of me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor is curious about “the way I tick,” but not really interested in me as a person.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor liked seeing me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor was indifferent to me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor appreciated me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

The counselor was friendly and warm toward me.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.
-3	-2	-1	0	1	2	3

The counselor cared about me.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.
-3	-2	-1	0	1	2	3

The counselor felt that I was dull and uninteresting.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.
-3	-2	-1	0	1	2	3

The counselor was interested in me.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.
-3	-2	-1	0	1	2	3

The counselor just tolerated me.

I strongly feel that it is not true.						I feel that it is probably true, or more true than untrue.
-3	-2	-1	0	1	2	3

The counselor did not really care what happened to me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.			
-3	-2	-1	0	1	2	3	

The counselor seemed to really value me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.			
-3	-2	-1	0	1	2	3	

The counselor disliked me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.			
-3	-2	-1	0	1	2	3	

The counselor was impatient with me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.			
-3	-2	-1	0	1	2	3	

The counselor felt deep affection for me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.			
-3	-2	-1	0	1	2	3	

The counselor regarded me as a disagreeable person.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

At times, the counselor felt contempt for me.

I strongly feel that it is not true.				I feel that it is probably true, or more true than untrue.		
-3	-2	-1	0	1	2	3

Please select the answer that best describes your satisfaction with the interaction and the counselor in the session you completed.

I am satisfied with the quality of counseling I received.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

My needs were met by the session.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would recommend the session to a friend.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I would return to this session if I needed help.

Strongly Disagree	Disagree	Neither Agree nor Disagree	Agree	Strongly Agree
<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

I am now able to deal more effectively with my problems.

Strongly Disagree

Disagree

Neither Agree nor
Disagree

Agree

Strongly Agree

I was able to focus on what was of real concern to me.

Strongly Disagree

Disagree

Neither Agree nor
Disagree

Agree

Strongly Agree

Please answer the following questions.

Please provide a 2-5 sentence statement commenting on how interested the counselor appeared to be in you as a person, and what characteristics of the interaction gave you this impression.

Please provide a 2-5 sentence statement commenting on how comfortable you were with exploring your interests with the counselor and what characteristics of the interaction gave you this feeling.

How capable do you feel about maintaining your professional career after interacting with the counselor?

What is your gender?

What is your age?