THE EFFECTS OF GENDER AND CLIENT SEXUAL ORIENTATION ON COUNSELORS’ ATTITUDES AND SELF-EFFICACY

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Research examining the effects of client sexual orientation on counselors’ attitudes has focused on clinical judgment biases and diagnostic evaluation. These samples are often counseling students or counselor trainees. Little research has examined practicing counselors’ attitudes toward clients of different gender and sexual orientation using self-efficacy measures. The current study uses a gender stratified national sample of practicing counselors to examine the effects of gender and client sexual orientation on counselors’ attitudes and self-efficacy. The effects of counselors’ general self-efficacy and cognitive complexity are controlled. An experimental design with random assignment is used to group participants into four comparison groups. A client vignette is used differing only by gender and sexual orientation. A semantic differential attitude instrument and three Counselor Self-Estimate Inventory (COSE) subscales are the dependent measures. Counselor gender, client gender, and client sexual orientation are used as independent variables. The four covariates are general self-efficacy, measured by two COSE subscales, and three counselor cognitive complexity scores, measured by the Repertory GRID. No interaction or main effects are found among the groups. When covariates are removed, one interaction effect is found between client gender and client sexual orientation. Counselors report more self-efficacy when counseling the homosexual female or the heterosexual male vignette client rather than the homosexual male or the
heterosexual female vignette client. Implications for research, practice and training are discussed.

Approved:

Patricia Beamish

Associate Professor of Counselor Education
To my Aunts Betty Berzon and Terry DeCrescenzo.

Their writings and powerful presence inspire me to speak my voice.
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CHAPTER ONE

Background of the Study

Introduction

Counselors’ judgment of clients can unknowingly influence the counseling relationship. This judgment may result in a bias negatively affecting counseling outcomes (Danzinger & Welfel, 2000; Reeve, 2000). For example, Danzinger and Welfel studied age and gender bias among counselors. They found counselors judged the competence of older clients and female clients to be lower than younger clients and male clients. Client age was also found to affect counselors’ judgment of prognosis for the client. Prognosis for older clients was perceived more negatively than for younger clients. These findings were identified as counselor bias, since previous research findings suggest older adults are open to change and can benefit from mental health services. These age and gender biases may negatively impact the counselor/client therapeutic relationship.

Counselor bias stems from counselor attitudes, which include counselors’ values and beliefs from their own cultural experience (Fassinger & Richie, 1997; LaMar & Kite, 1998). Herek (2000) described these types of connections between bias and values as attitude activation. When set in motion, this attitude connects to other attitudes in the person’s cognitive structures, including memory associated with feelings, beliefs, and images.

Counselor self-examination of their attitudes toward clients has been identified as a step towards changing unwanted biases (Fassinger & Richie, 1997; K. A. Morrow & Deidan, 1992; Sodowsky, Kuo-Jackson, & Loya, 1997). Overt biases are more apparent to counselors than hidden biases as they listen to their own self-talk, reflecting on their
interaction with clients. Counselors’ “hidden biases”, however, are often more difficult for counselors to identify (S. L. Morrow, 2000). Factors influencing these biases include counselor beliefs (Cranford, 2000; Fowler, O'Rourke, Wadsworth, & Harper, 1992; Spengler & Strohmer, 1994), self-efficacy (Larson, Suzuki, Gillespie, Potenza, & al., 1992; Leach, Stoltenberg, Eichenfield, & McNeill, 1997; Meier, 2001) and number of years counseling experience (Danzinger & Welfel, 2000).

Counselor Self-Efficacy and Attitudes

Self-efficacy has been defined as one’s perceived judgment of performance ability in certain situations (Bandura, 1982). These judgments determine behavior, thought patterns, and emotional responses to those situations. Counselor self-efficacy is defined as counselors’ view of their counseling performance (Larson et al., 1992).

Two factors have been identified as influencing counseling self-efficacy: counselor skill level and years of counseling experience (Larson et al., 1992). These factors were positively correlated with self-efficacy.

Experience and self-efficacy have been studied primarily among counselor trainees. Leach et al. (1997) found that among counselor trainees self-efficacy increased with more experience. They examined the Intervention Skills Competence and Individual Differences domains of the Integrated Developmental Model of supervision. This model includes three levels of counselor trainee development. The level of trainee development impacted self-efficacy, including in the area of multicultural skills. They concluded that more experienced counselors had higher self-efficacy for counseling culturally diverse clients and were more aware of their own values than less experienced counselors.
Another study supported a positive link between counselor training experience and self-efficacy, particularly related to counselors’ self-perception of being nonjudgmental toward clients. Meier (2001) studied trainee development through self-reported skills over time. He found that counselors’ perceptions of their competence were high on nonjudgmental tasks at the end of the first year of counselor training. If this were the case, then experienced counseling practitioners would perhaps indicate even higher abilities to be nonjudgmental toward clients.

Similar to above studies, Heppner, Multon, Gysbers, Ellis and Zook (1998), while focused on counseling self-efficacy among career counseling practicum students, found that self-efficacy increased over time. They used the Career Counseling Self Efficacy Scale (CCSES), which included a factor called Multicultural Competency Skills. This factor included skill ability to work with clients of all different types of diversity, including sexual orientation.

The Counseling Self-Estimate Inventory (COSE) developed by Larson et al. (1992), which preceded the CCSES, was another measure of counseling self-efficacy that examined cultural competence. These researchers conducted five studies in the development of the COSE inventory which revealed five factors, or groups of items on the inventory that were most similar. Although one of the factors measured counselor self-efficacy with regard to cultural competence, it included items specific only to clients differing in ethnicity or social class. The Awareness of Values factor, however, was designed to assess how counselors view their likelihood to impose their values or judgments on clients. In another study, Larson et al. identified the COSE inventory as a significant predictor of counseling behaviors, including nonjudgmental counseling.
responses. Therefore counselors’ self-efficacy includes concepts of judgmental responses in counseling.

The above research not only provided understanding about factors influencing self-efficacy, it also identified how increased counselor experience and training level are associated with higher levels of self-efficacy, including nonjudgmental responses to clients. Therefore, counselors’ perceived attitudes toward clients might be identified through counselor self-efficacy measures, which provides a basis to examine a possible link between self-efficacy and counselor attitudes toward lesbian and gay clients.

**Counselor Cognitive Complexity and Attitudes**

Cognitive complexity (Bieri et al., 1966) has been either identified as level of cognitive differentiation or cognitive integration (McLennan, 1995). Bieri et al. (1966) defined cognitive differentiation as the ability to view behavior from many different aspects. Holloway and Wampold (1986) defined cognitive differentiation as a personality characteristic that contributes to the counselors’ performance within a particular environment that is either structured or unstructured. In their study, counselors with low cognitive differentiation performed better in high structured environments, like training environments. On the contrary, counselors with high cognitive differentiation did not perform differently in high or low structured environments.

This difference among counselors’ cognitive complexity levels was not supported by other researchers (Blaas & Heck, 1978). Blaas and Heck found that, within training environments, cognitive complexity levels of counseling students was not related to differences in counseling skills. However, Duys and Hedstrom (2000), in a more recent study, found different results when they examined how counseling skills influenced
cognitive complexity. They discovered that a basic counseling skills training course improved cognitive complexity levels among counselor education students.

Research in structured environments such as a counseling student-training program has focused on the connection between cognitive complexity and skills training development (Blaas & Heck, 1978; Duys & Hedstrom, 2000; Holloway & Wampold, 1986). However, cognitive complexity research among more experienced practicing counselors has focused on the impact of counselors’ cognitive complexity and client characteristics on counselors’ clinical judgment (Cranford, 2000; Spengler & Strohmer, 1994).

Cranford (2000) examined the role of cognitive complexity among clinicians’ diagnosis of racially different clients. He found no significant differences between clinicians’ cognitive complexity level, client race, and clinicians’ accurate diagnostic ability. In a similar study, although using a counseling student sample, Stohmer, Biggs, Haase, and Keller (1983) found that counselors’ conceptual level had no influence on the quality of counseling hypotheses created and tested among clients with and without physical disabilities. Therefore, it appeared counselor cognitive complexity was not related to attitude toward client race or physical disability.

However, other research yielded different results. Spengler and Strohmer (1994) studied counseling psychologists’ clinical judgment of clients with mental disabilities and found differences in clinical judgments among those with low versus high cognitive complexity. They found that biased clinical judgments were more likely among counselors with low cognitive complexity. Counselors with high cognitive complexity, however, could integrate client information that was ambiguous or incongruent better
than counselors with low cognitive complexity. Based on the above studies, the client characteristic of mental disability was the only characteristic to impact counselors’ cognitive complexity on clinical judgment. More research is needed about the impact of other client characteristics in relation to counselor cognitive complexity, such as sexual orientation.

Only one cognitive complexity study was found that specifically addressed attitudes toward lesbians and gay men. Smith and Gordon (1998) studied college students’ personal structure as a predictor of attitudes toward homosexuality. Personal structure was defined as cognitively structuring reality in unambiguous ways. High need for personal structure is analogous to someone with low cognitive complexity. They found that scores of those participants with a greater need for personal structure were significantly correlated, yet not strongly, with negative attitudes toward lesbians and gay men than scores of those with low need for personal structure. These results were also significant for male and female subgroups.

Some cognitive complexity studies used beginning counselors in training programs (Blaas & Heck, 1978; Duys & Hedstrom, 2000; Holloway & Wampold, 1986; Strohmer et al., 1983) or college students (M. R. Smith & Gordon, 1998) as participants. No studies found examined counseling practitioners’ cognitive complexity and attitudes toward the lesbian and gay clients.

Counselor Attitudes toward Lesbian and Gay clients

Marginalized by society, lesbians and gay men often seek treatment from mental health counselors (Whitley & AEGisdottir, 2000; Whitley & Lee, 2000). They use the mental health system at higher rates than heterosexuals. Liddle (1997) compared the
utilization of therapy of gay men and lesbians to heterosexuals. The sample was matched on gender, race and age. Although gender was not a significant factor, sexual orientation was a factor in the utilization of mental health services. Lesbian and gay clients reported receiving mental health services from an average of 4.32 therapists throughout their lives, while heterosexuals reported receiving services from an average of 3.08 therapists (Liddle).

There are many difficult aspects to counseling lesbian and gay clients. Discrimination, coming out to self and others, internalized homophobia, and connections to the lesbian, gay, and bisexual community, are treatment issues relevant to many lesbian and gay clients (Berzon, 2001b; Dworkin, 2000). Each of these issues may be exacerbated by other factors relevant to special client groups, such as youth development and peer pressure (Coleman & Remafedi, 1989), couples living together but not recognized legally (Ossana, 2000), and parent and family dynamics (Matthews & Lease, 2000). Counseling issues specific to lesbian and gay youth include the overlay of developmental issues, as well as, a more intense rejection by their peers and the stigma society has placed on lesbian and gay identities (Mallon, 1994). Depression, feeling hopeless and helpless, low self-esteem, impulsive behaviors, substance abuse, isolation, and suicide are some of the issues lesbian and gay youth may face in counseling as they cope with feelings related to their sexual identity struggles (Coleman & Remafedi, 1989; Mallon, 1994).

Lesbian and gay couples have struggles different than those of heterosexual client couples. Cultural oppression is present when they are not legally recognized as having the same rights and privileges as heterosexual couples (Berzon, 2001a; Ossana, 2000). If
these couples have children, they often struggle to be viewed as a family unit without the same legal support available to heterosexual families (Matthews & Lease, 2000).

The effectiveness of mental health services to lesbian and gay clients is often determined through client satisfaction studies. In earlier studies, counselors’ attitudes toward this population adversely affected client-counseling satisfaction. Rudolph (1988) reviewed literature on counselors’ attitudes toward homosexuals and identified a connection between negative attitudes by counselors and gay or lesbian client dissatisfaction with counseling services. More recent research regarding lesbians’ therapy satisfaction indicates lesbians are generally satisfied with their therapy experiences (Bieschke, McClanahan, Tozer, Grzegorek, & Park, 2000; Liddle, 1999).

Client counseling satisfaction is not the only area that may be affected by counselors’ attitudes toward lesbian and gay clients. Counselors’ attitudes may also impact clinical judgment. Prior research related to the impact of a clients’ sexual orientation on clinical judgment of therapists, particularly regarding diagnosis, is controversial. Davison and Friedman (1981) found that negative stereotypes about gay male clients have contributed to a distortion in clinical judgment for therapy students. Garfinkle and Morin (1978), however, found that sexual orientation did not significantly impact the diagnosis of a client by practicing psychotherapists.

Statement of the Problem

Four points summarize the research regarding counseling attitudes, counselor self-efficacy, counselor cognitive complexity, and counselor attitudes toward lesbians and gay men. First, counseling attitudes, biases, and beliefs or judgments about clients are related to each other (Fassinger & Richie, 1997; LaMar & Kite, 1998). Second, counselor self-
efficacy has been used to assess non-judgmental attitudes toward clients (Larson et al., 1992). Counseling skill level, years of counseling experience, and supervision have been positively correlated with increased counseling self-efficacy (Larson et al.). Third, counselor cognitive complexity levels do not impact counseling skill development of beginning counseling students (Blaas & Heck, 1978). Although cognitive complexity of experienced counselors did not influence clinical judgments of racially different clients (Cranford, 2000) or clients with a physical disability (Strohmer et al., 1983), it did influence clinical judgment of clients with mental disabilities (Spengler & Strohmer, 1994). Fourth, lesbian and gay clients are found to have unique counseling needs (Dworkin, 2000). Researchers disagreed regarding lesbian and gay client satisfaction (Bieschke et al., 2000; Liddle, 1999; Rudolph, 1988) and the impact of sexual orientation on counselor clinical judgments (Davison & Friedman, 1981; Garfinkle & Morin, 1978).

In addition to the above summary points, the research sample was an important consideration in the current study. Empirical studies measuring attitudes toward lesbians and gay men using samples of non-student counseling practitioners or professionals in a helping profession were limited (Berkman & Zinberg, 1997; Garfinkle & Morin, 1978; Lilling & Friedman, 1995; Sears, 1991; Wisniewski & Toomey, 1987). All of these study samples were comprised of exclusively social workers, exclusively psychologists, or psychotherapists from across professional disciplines. The current study utilized the under-studied sample of non-student mental health counseling practitioners.

Studies focusing on counseling students’ or trainees’ attitudes toward lesbians and gay men (Barrett & McWhirter, 2002; Gelso, Fassinger, Gomez, & Latts, 1995; Rudolph, 1990; M. R. Smith & Gordon, 1998) do not include examination of self-efficacy and
cognitive complexity, with one exception. M. R. Smith and Gordon (1998) studied how cognitive structure predicts attitudes toward homosexuals among college students enrolled in a general psychology course.

Although many studies have detected the overt attitudes of mental health professionals toward this client group (Berkman & Zinberg, 1997; Lilling & Friedman, 1995; Wisniewski & Toomey, 1987), and some have even examined gender differences as well (Berkman & Zinberg, 1997; Garfinkle & Morin, 1978; Wisniewski & Toomey, 1987), few studies have examined gender difference of hidden attitudes toward lesbian and gay clients (Garfinkle & Morin, 1978; Gelso et al., 1995). Furthermore, no studies were found examining how gender difference of counselors’ hidden attitudes toward lesbian and gay clients may be related to counselors’ estimate of their skill ability and their cognitive complexity.

Hidden attitudes are often measured using a vignette research design (Neff, 1979). Studies using such designs have been able to alter one or two elements in the vignette so that group comparisons can be made based on key variables. Not only is this a way to help control for socially desirable responses (Hughes & Huby, 2002), but it also helps disguise the true purpose of the study in order that hidden attitudes can be assessed more effectively (Constantine & Ladany, 2000). In the current study, a client vignette determined participant comparison groups. Following the vignette was a semantic differential rating scale to measure attitudes toward the particular fictitious client.

Kite and Whitley (1996), in a meta-analysis of sex differences in attitudes toward homosexuals, found sex differences existed particularly when the attitude target was a gay man or the sex of the target person was unspecified. These authors also found that
these gender differences seem to be increasing over time from the 1970s to the 1990s, possibly due to more accurate measurement techniques. Kerns and Fine (1994) studied attitudes toward lesbians and gay men and found gender differences as well. Males had more negative attitudes toward gay men than females.

One explanation for the gender differences is that men perceive lesbianism to have greater erotic value than male homosexuality. Men’s attitudes toward lesbians and gay men did not differ when the effects of this variable were removed (Louderback & Whitley, 1997). Another explanation is related to the contextual cues for heterosexual men who respond to questions about gay men and lesbians. This may tap into men’s memory link to negative cognitions about gay men more than lesbians (G. M. Herek, 2000).

This study utilized an experimental research design with random assignment of participants to four experimental groups, determined by four fictitious client vignettes differing only by client gender and sexual orientation. Packets of questionnaires were mailed to an equal number of male and female clinical mental health practitioners throughout the United States. A three-way Multivariate Analysis of Covariance (MANCOVA) procedure was performed on the data with the following grouping variables: gender of the participant, gender of the vignette client, and sexual orientation of the vignette client. The dependent variables included the average score on the semantic differential attitude measure and three of the five subscales of the COSE. The covariates were three scores obtained from the Repertory GRID test and two of the five subscales of the COSE. The effects of demographic variables (age, years of counseling experience, highest degree obtained and geographic region of practice) were explored.
Research Question

What are the effects of counselor gender (male or female), client gender (male or female), and client sexual orientation (homosexual or heterosexual) on counselors’ attitudes toward clients (as measured by scores on the Attitude Measure: a semantic differential rating scale) and counselor self-efficacy (as measured by three subscales of a modified version of the Counseling Self-Estimate Inventory; Micro skills, Process, and Awareness of Values) with general counselor self-efficacy (as measured by two subscales of the modified version of the Counseling Self-Estimate Inventory; Difficult Client Behaviors and Cultural Competence) and counselor cognitive complexity scores (as measured by three different differentiation scores derived from the Repertory GRID test: Beiri’s cognitive complexity score; intensity score; percentage of variance accounted for by the first factor) as covariates?

Significance of the study

Results from this study may contribute to a growing understanding of how counselors can improve their treatment of the lesbian and gay client population through self-perceptions of their own abilities, their cognitive complexity levels, and their attitudes. Counselor self-awareness and close examination of attitudes toward gay men and lesbians have been emphasized in the literature (Hayes & Gelso, 1993; Rudolph, 1988). This study may provide such awareness for counseling practitioners.

Counseling self-efficacy includes counselors’ awareness of personal values and judgments toward clients. High levels of counselor self-efficacy have been associated with increased counseling experience (Heppner et al., 1998) as well as non-judgmental attitudes (Larson et al., 1992; Meier, 2001). Also, the counseling literature supports the
idea that counselors who have a low level of cognitive complexity are not as effective at
counseling (Linville & Jones, 1980) at diagnosing (Cranford, 2000), at empathic
understanding (Alcorn & Torney, 1982), and at case conceptualization (McLennan,
Twigg, & Bezant, 1993) as those who have higher levels of cognitive complexity.

Results from this study may also have implications for counselor training programs.
In the 1970s and 1980s there was a lack of training for counselors working with lesbian
and gay clients (Buhrke, 1989; Thompson & Fishburn, 1977), including a lack of courses
in counseling programs that address this client population (Iasenza, 1989). Buhrke and
Douce (1991) responded to this training deficit by providing helpful suggestions for
incorporating lesbian and gay issues into counseling psychology courses. More recently,
issues specific to lesbian and gay clients have begun to be addressed in counselor training
programs (Fassinger & Richie, 1997; Phillips, 2000) as part of the growing sensitivity to
multicultural counseling competencies (Fassinger & Richie).

The purpose of this study was two-fold. First, it evaluated male and female
counselors’ underlying attitudes toward lesbian, gay, and heterosexual clients related to
counselors’ self-confidence to work effectively with these client groups. Second, it
evaluated any possible impact of counselors’ cognitive complexity and general self-
efficacy on underlying attitudes toward lesbian, gay and heterosexual clients. Identifying
these connections could assist counselors toward a self-awareness of their own attitudes.

Delimitations of the Study

Two delimitations of this study were identified. First, the population being sampled
involved only those mental health counselors with specific training or experience. They
were licensed counselors working in the United States who are members of the American
Counseling Association (ACA), a recognized national professional counselor organization. The sample was stratified on gender, so that there was an approximately equal number of male and female participants in this study. Generalizability of this study’s results were limited due to possible sampling bias. Individuals who comprise the population of all trained counselors are not required to be members of the ACA organization. Although the sample was chosen to be representative of the counselor population, it did not include those counselors who do not join organizations.

Second, the study did not include attitudes toward bisexuals or transgender clients. These two groups have unique qualities that are beyond the scope of this study.

Limitations of the Study

Four limitations of this study were identified. They involved the method, design, and language. First, this experimental study used random assignment of sample participants to one of four treatment groups. Although some sources of bias was controlled, limitations exist in the ability of this researcher to control all aspects of the study, thereby impacting the internal validity of the study. One example of this is the use of self-report measures, which assumes that the respondents answered in an honest manner.

Second, the design of the study included a vignette of a fictitious client case. The purpose of this design was to identify attitudes toward lesbian and gay clients that are not easily detected. There are many studies related to this topic that use a vignette-type design (Barrett & McWhirter, 2002; Garfinkle & Morin, 1978; Gelso et al., 1995; Hayes & Gelso, 1993). However, only two studies did not, in addition, include an existing measure of homophobia (Garfinkle & Morin, 1978; Lilling & Friedman, 1995). These researchers carefully disguised the purpose of their study.
Although there are benefits to the use of vignettes to study attitudes (see chapter 3), including how it helps control for socially desirable responses (Hughes & Huby, 2002), there are also limitations. A written description of a client situation is not as realistic as live observation (Faia, 1980; Neff, 1979). Furthermore, it is possible that a participant may recognize the fictitious case study vignette since it was taken from the DSM-IV casebook. Much like the practice effect for those who have taken tests multiple times, those who were familiar with this case vignette may have responded differently than those who had never seen it before.

Third, participants were not asked their own sexual orientation. This information may reveal the purpose of this study and contribute to participants’ professionally desirable responses instead of their actual attitudes (Bieschke et al., 2000). This was a limitation since both heterosexist bias and internalized homophobia have an impact on attitudes (Bieschke et al.), and counselors’ sexual orientation, specifically, has been identified as impacting counselors’ behaviors toward lesbian and gay clients (Bieschke & Matthews, 1996).

The last limitation of this study includes the concept of labeling. Rothblum (2000) reviews various terms throughout history for the identification of persons who choose to love and have sexual partners different from society’s norm. European-American culture has influenced the changing sexual self-identification terms. Even gender is being considered a term with fluid meaning.

The language used to describe relationships among gay men and lesbians in the literature is as diverse in both label and meaning as there are people studying these topics. Terms like “same gender loving person” to describe gay men and lesbians are often more
“politically correct.” Much of the published literature includes labels like “Gay,” “Lesbian,” “bisexual,” and “transgender.” Society may soon be moving toward a “don’t label me” position regarding sexual preference. Proponents may say, “I am a person who happens to be attracted to a same (or other) gendered person at this particular time in my life. Make no assumptions or inferences about my statement or behavior.” Opponents may be concerned more about labeling and identification for the purpose of fighting for civil rights. This discussion, although important, is beyond the scope of this study. Terms most commonly used in the research was used in this study to assist readers’ understanding of the topic and for help in creating operational definitions of variables for comparison.

**Definitions of Terms**

**Attitude**

Attitude is defined as a mental state with a bipolar process including a positive or negative direction, varied intensity, and focus toward a particular object. Evaluative responses were made toward the attitude object and were measured using the semantic differential technique (Osgood, Suci, & Tannenbaum, 1957).

**Cognitive Complexity**

Cognitive complexity is defined as “a cognitive structural approach to individual differences” (MacNeil, 1974, p. 3). MacNeil identifies the two types of complexity, discriminative and integrative, as distinctly different from one another. However, Tetlock (1983), defines them connected to each other. This study will focus on both discriminative and integrative complexity in order to identify differences in ability to
view others from many different aspects, as measured by Bieri et al.’s (1966) Repertory GRID technique.

*Gay Person*

A gay person is defined as a self-identified male who self-identifies as a person who has “same-gender physical and emotional desires, and who lives in contemporary Western society” (Broido, 2000, p. 15).

*Gender*

Gender is defined, for the purpose of this study, as referring to one of two categories, self-identified female or self-identified male.

*Heterosexual*

Heterosexual persons is defined as those who experience other-gendered sexuality as a central part of their identity (Broido, 2000).

*Homosexual*

Homosexual persons is defined as those who “engage in primarily same-gender sexual behavior or who experience same-gender emotional desire, however they identify themselves” (Broido, 2000, p. 15).

*Lesbian Person*

A lesbian person is defined as a self-identified female who self-identifies as a person who has “same-gender physical and emotional desires, and who lives in contemporary Western society” (Broido, 2000, p. 15).

*Self-Efficacy*

Self-efficacy is defined in this study as the estimation of self-performance in a counseling situation (Larson et al., 1992), which determines behavior, thought patterns,
and emotional responses to such situations (Bandura, 1982). Self-efficacy was measured by the Counseling Self-Estimate Inventory (Larson et al.).

*Sexual orientation*

Sexual orientation is defined in this study as physical and emotional desires toward the same or other gendered persons (Broido, 2000). This encompassed homosexual and heterosexual persons.

*Conclusion*

This introductory chapter provides a background for the current research study concerning counselor self-efficacy, cognitive complexity and attitudes toward lesbian and gay clients. Two research questions are proposed to identify the male and female effects of counselor attitudes toward lesbian and gay clients on counselor self-efficacy and cognitive complexity. The significance of this study includes the potential for the results to assist counselors toward greater self-awareness, as well as, possible implications for counselor training programs. Delimitations and limitations of the study are presented along with a section providing definitions of primary terms used in this study.
CHAPTER TWO  
Review of the Literature  

Introduction  
This chapter includes the critical examination of literature concerning counselor practitioners’ self-efficacy, cognitive complexity, and attitudes toward lesbian and gay clients, as it specifically relates to gender and degree of counseling experience. Counselor self-efficacy, based on Bandura’s (1986) Social Cognitive Theory, is defined as a cognitive process of self-examination of skill expectancies. Cognitive complexity, based on Kelly’s (1955) Personal Construct Theory, is defined as a cognitive process of identifying the complexity with which others are viewed. Attitudes help to determine non-judgmental ways counselors view clients, particularly lesbian and gay clients. These attitude formations can begin early in a counselor’s development (Fassinger & Richie, 1997). They may continue as counselors gain experience, perhaps connecting with the cognitive functions of self-efficacy and cognitive complexity. Counselor gender has been known to impact attitudes toward clients (Berkman & Zinberg, 1997; Kite & Whitley, 1996) and has been examined in the counselor self-efficacy literature (Larson et al., 1992). Counselor experience is a factor that is not clearly established as a predictor of counselor self-efficacy among counselor samples (Larson & Daniels, 1998), therefore, further exploration of this variable is needed.

Counselor Self-Efficacy  
Social Cognitive Theory  
Social Cognitive Theory, developed by Bandura (1986), originated from his Social Learning Theory (Bandura, 1977). The concept of self-efficacy (Bandura, 1977; 1986)
emerged and developed from these theories. Bandura (1982) proposed that “Perceived self-efficacy is concerned with judgments of how well one can execute courses of action required to deal with prospective situations.” (Bandura, 1982, p. 122).

Efficacy expectancy and outcome expectancy are two concepts that have received much attention in the literature. Bandura (1982) defined efficacy expectancy as perception of one’s capabilities or confidence to perform particular behaviors. Outcome expectancy was defined as the consequences of efficacy expectancy.

High self-efficacy with some moderate levels of self-doubt could produce effective outcomes. However, Bandura (1982) notes low self-efficacy has been associated with higher self-generated fear arousal. Larson and Daniels (1998) made connections between Social Cognitive Theory and counselor self-efficacy when they examined studies within four categories related to counselors. These were (a) stable counselor characteristics, (b) other counselor variables, (c) counselor performance, and (d) counselor supervision or work environment. Stable counselor characteristics represent the person variables. Other counselor variables represent outcome expectancies, affective arousal and self-evaluation. Counselor performance represents the counselor’s actions. Counselor supervision represents the counselor’s environment.

*Gender and Counselor Self-Efficacy*

Gender is a stable counselor characteristic that has not received much attention among published research studies on counselor self-efficacy (Larson & Daniels, 1998). In their review of self-efficacy research, Larson and Daniels (1998) only found 14 studies that examined counselor characteristics, including gender. Although they found some differences between self-efficacy among trainees with varying levels of supervision and
experience, gender was not found to impact counselor self-efficacy. More attention on the characteristic of gender and self-efficacy is needed, since the studies that have included gender have not had adequate gender group sizes to contribute significantly to the study of gender and self-efficacy.

Gender does not impact counselor self-efficacy according to a review of the counseling self-efficacy literature by Larson and Daniels (1998). They did not find any studies where counselor self-efficacy differed by gender for counselor trainees or for practicing counselors. However, gender group size imbalances may play an important role in their inability to determine gender differences. While, Larson et al. (1992) found no gender differences between self-efficacy scores of counselor trainees, the groups within the sample were uneven (i.e., seventy-five percent female versus twenty-five percent male). The problem with unequal sized groups, while using comparative statistical analyses to determine group differences, is that it may violate an assumption that group variances are equal. This assumption is important to the accuracy of the statistical analysis to determine if differences exist. Generally, an acceptable group size exists for comparative analysis if the group size ratio of the number of participants in the largest group to the number of participants in the smallest group equals less than 1.5 (Stevens, 1996).

The problem of unequal group sizes was corrected in Sutton and Fall’s (1995) study of school counselors from a primarily rural state. The researchers also found no gender differences among self-efficacy scores. Although their gender groups were equal, other methodological problems contribute to caution when examining their results. The three factors of the Counselor Self-Efficacy Scale, developed for this study, produced only
low-to-moderate internal consistency reliability coefficients, ranging from .65 to .75. The authors derived this measure from modifying a teacher self-efficacy scale (Gibson & Dembo, 1984). Perhaps the measure was weakened in the process of attempting to make it more appropriate for counselors.

*Attitudes and Counselor Self-Efficacy*

Larson and Daniels (1998) defined other counselor variables impacting self-efficacy as outcome expectancies, affective arousal, and self-evaluation. Attitude, unlike the stable characteristic of gender, is a counselor variable that changes. Attitudes are the judgments counselors make while interacting with clients. Larson and Daniels found studies that have examined self-evaluative variables, such as attitudes, and concluded that there is a positive relationship between self-efficacy and self-evaluation.

Only a few studies were found in the literature addressing attitudes toward clients and counselor self-efficacy. These studies focused on trainee development and reported results related to nonjudgmental attitudes (Heppner et al., 1998; Meier, 2001). The following section reviews these findings.

Heppner, Multon, Gysbers, Ellis, and Zook (1998) studied career counseling self-efficacy of counseling psychology graduate-student trainees. They used a subscale of an instrument that was developed from work with clients differing in race, ethnicity, sexual orientation, social and economic class, age, and levels of physical and mental ability. Although the trainees increased their career self-efficacy over their practicum experience, the researchers’ hypothesis that self-efficacy was related to outcome measures of decidedness, vocational identity, and psychological resources for clients were generally
not supported. Additionally, those variables that were related did not appear to be in linear relationship.

Another recent study found an increase in self-efficacy of trainees related to a corresponding increase in nonjudgmental attitudes. Meier (2001) studied graduate-student trainee development change from pre-and post-counseling course experience using specific items of the Counseling Self-Estimate Inventory (COSE) and Counselor Evaluation Rating Scale (CERS). Three of these items were related to non-judgmental attitudes or self-awareness of attitudes. Although he concluded that after one year of training, students ought to see themselves as having increased competence on being nonjudgmental, results of his study do not fully support this statement. The significant results found may have been the result of chance findings, since he did not adjust alpha levels for the many number of tests run. Other methodological problems concerning this study are noted in the following section related to counseling experience and self-efficacy.

**Counseling Experience and Counselor Self-Efficacy**

This section will examine trainee counseling experience and post-training experience. Although Daniels and Larson (2001) did identify a relationship between attitudes and self-efficacy, they used samples of counselor trainees. A sample of counselors who are practicing, and gaining experience in the process, may reveal differing results (i.e., counseling experience may play a role in counseling self-efficacy).

Researchers, however, are not in agreement on the relationship between counseling experience and counselor self-efficacy. There is agreement that counselor self-efficacy
develops through counselors’ training (Urbani et al., 2002), but not always through experience (Heppner et al., 1998; Leach et al., 1997; Meier, 2001).

Among counselor trainees, counselor experience has correlated positively with counselor self-efficacy (Meier, 2001; Urbani et al., 2002). Meier (2001) studied trainee development changes after a counseling course experience. The hypothesis was that students who have already acquired a skill would not show change in counselor self-efficacy at the end of the course. This was found to be true. All items with a pre-test ceiling effect (Mean + 1 standard deviation > highest possible item score) also had a post-test ceiling effect.

Although the results of Meier’s (2001) study identify how a course can impact counselor self-efficacy, again there are some methodology concerns. Item analysis of the COSE was used with what he describes as longitudinal data (i.e., data gathered from repeated measurement of the same subjects over time). These data, however, do not appear to be in fact longitudinal, but are the combining of five snapshots of data over a five-year period using different participants.

Another study examined counselor self-efficacy of trainees through use of a training model. Urbani et al. (2002) hypothesized that the experimental group, those receiving the training, would score higher on the COSE than a control group of students who did not receive the training. They did find a significant difference between the groups, indicating that counseling students who participate in this skill counselor training model rated themselves as having more self-efficacy than those who did not participate. The study appears to be sound except for a pre-test administration of the COSE that was not used in the final comparison analysis, but was provided to the participants early in the study. The
knowledge of their scores may have contributed to the difference among the groups, especially since the pre-test COSE scores were not included in the results of the study.

More counselor self-efficacy in trainees is not always increased according to the study results of Heppner et al. (1998). They hypothesized an increase in career counseling self-efficacy over practicum experience. Results were significant for an increase in self-efficacy; however, this increase was positively correlated with client perception of less personal control in counseling. This means that counselors may overestimate or underestimate their efficacy and thereby have a negative impact on the counselor/client relationship.

Leach et al. (1997) conducted a study and did not find interaction effects with trainee practicum courses, difficult client experience, and self-efficacy. They studied self-efficacy of graduate students from four universities, who were divided into two levels of training based on Stoltenberg and Delworth’s (1987) IDM supervision model for counselor trainees. Groups were separated based on the number of practicum courses experienced, which was correlated with a dependent measure of supervisee development. The number-of-difficult-clients-counseled variable was used to determine three group levels. These two factors, practicum courses and difficult clients, with a third (client type – reactively depressed or sexually abused) were used as independent variables with counselor self-efficacy as a dependent variable. No interaction effects were found. However, in subsequent analyses, level 2 participants were found to have greater self-efficacy than level 1 participants. Conclusions from this study indicate that client characteristic and course experience are not together related to self-efficacy. However, basic developmental level of trainees does affect counseling self-efficacy.
These studies have identified some relationship between counselor trainees’ experience and self-efficacy. Attention has also been given to the relationship between post-trainee counseling experience and counselor self-efficacy. This relationship depends on the developmental level of the counselor (Larson & Daniels, 1998; Leach et al., 1997). In counselors’ earlier developmental levels, counselor self-efficacy is negatively correlated with experience, meaning as counselors’ experience increases their self-efficacy scores decrease. In later development of the counselor the opposite is true (Larson & Daniels), experience and self-efficacy increase together. An exception to these trends is the counselor with no experience who scores low on counselor self-efficacy (Melchert, Hays, Wiljanen, & Kolocek, 1996). In other words, self-efficacy and counseling experience do not have a linear relationship.

However, counseling experience is a factor in the study of counselor self-efficacy when counselors have less than two years experience. Larson et al (1992) supports the conclusion that there is a difference between the counselor self-efficacy scores for counselors with no experience versus two or more years of experience. Their results did not identify a difference between counselors with two to eight years’ experience and nine to 39 years’ experience. Therefore, experienced counselors’ self-perceptions of ability may remain stable at some point. However, this conclusion is limited since Larson et al’s used years of experience as a categorical variable, as opposed to a continuous one where experience may be more specifically defined and measured.

Measuring Counselor Self-Efficacy

During the past 15 years there have been three instruments specifically developed to measure self-efficacy for school counselors and career counselors. Sutton and Fall (1995)
developed the Counselor Self-Efficacy Survey (CSS), a 33-item measure with 6-point Likert-type rating scale for use with school counselors. This instrument was a modified version of a teacher efficacy scale developed by Gibson and Dembo (1984). Items were added/deleted to form the new instrument intended to measure efficacy expectancy and outcome expectancy. Although experts in career counseling provided feedback, it appears that the instrument’s reliability is not very strong. Three factors emerged with reliability coefficients from .65 to .75. No other studies were found that used this instrument.

The Career Counseling Self-Efficacy Scale (CCSES) was designed by O’Brien, Heppner, Flores, and Bikos (1997) to measure self-efficacy. Four studies were conducted to provide test-retest reliability; convergent, discriminant, and construct validity; and factor analysis of the instrument. As anticipated, reliability coefficients for a student sample were .93 and .90 for a sample of psychologists, strengthening the validity of this instrument.

Perrone, Perrone, Chan, and Thomas (2000) used a modified form of the CCSES with school counselors. Three of the four factors in the O’Brien, et al (1997) study were replicated with reliability coefficients ranging from .90 to .93. Perrone et al. also found three factors with high reliability on the CCSES Importance Scale, a scale using the same items as the CCSES to identify the importance of each item for career counseling in school settings. Counselors reported the lowest self-efficacy on items related to understanding special multicultural issues, such as gender, culture, ethnicity, and sexual orientation.

Instruments have also been developed specifically to measure self-efficacy among mental health counselors. Three such measurements permeate the literature on counselor
These measurements are: the Counseling Self-Estimate Inventory (COSE), (Larson et al., 1992); the Counselor Self-Efficacy Scale (CSES), (Johnson, Baker, Kopala, Kiselica, & al., 1989); and the Counselor Self-Efficacy Scale (COSES) (Melchert et al., 1996). The COSE has been the most widely used to measure counselor self-efficacy (Larson & Daniels, 1998).

Analysis of the CSES and the COSES reveals, again, a specification that is more appropriate for other samples (Larson & Daniels, 1998). The CSES is reportedly focused on the integration of basic skills, the focus of primarily a trainee’s experience. The COSES focuses on both individual and group counseling skills. The COSE was designed for assessment of more advanced counseling skills, which would be useful with a more experienced sample of practicing counselors. The CSES and the COSES also have not been developed using factor analytic procedures to demonstrate construct validity, as has the COSE.

The Counseling Self-Estimate Inventory (COSE) was developed as a 37-item measure of counselor self-efficacy (Larson et al., 1992), which is a judgment of counselors’ ability to counsel a client effectively in the near future. The construct validity was demonstrated through factor analysis of the COSE, yielding five subscales with moderate-to-strong reliability. Correlation coefficients ranged from .62 to .88. The five factors are Microskills, Counseling Process, Difficult Client Behaviors, Cultural Competence, and Awareness of Values (Larson & Daniels, 1998).

The COSE instrument has been positively related to counselor performance, more self-esteem, less state and trait anxiety, better problem-solving skills, more performance expectation and satisfaction in a class setting, more positive outcome expectancy, and
counseling interviewing skills (Larson et al., 1992). Counseling self-efficacy and training anxiety were predictors of counselor trainee performance. Even though these findings are limited to a predominantly white, female sample (Larson et al.), the COSE has been found to be a very effective measure of counselor self-efficacy.

*Counselor Cognitive Complexity*

**Personal Construct Theory**

The basic foundation of all definitions of cognitive complexity is rooted in an understanding of the Personal Construct Theory of personality developed by Kelly (1955). The tenets of the theory include the basic assumption that, “[a] person’s processes are psychologically channelized by the ways in which he anticipates events.” (p. 46). In other words, a person chooses to operate within a structured web of ever-changing systems that function as boundaries on behaviors predicated on unknown future events.

The theory also includes eleven corollaries (Kelly, 1955). Each one expands on an aspect of the theory and provides an avenue for operationalizing the concepts in the theory to be used for research and evaluation. O’Keefe and Sypher (1981) emphasized the bipolar constructs described in the theory. These constructs are interrelated in an organized system created to make judgments and predictions about events or people.

Adams-Webber’s (2001) study supported two of Kelly’s (1955) corollaries, one about individuality and one about sociality. Kelly writes, “Individuality Corollary: Persons differ from each other in their constructions of events” (p. 55), and “Sociality Corollary: To the extent that one person construes the construction processes of another, he may play a role in a social process involving the other person.” (p. 95). The cognitive complexity levels of 40 male/female adult couples were studied (Adams-Webber).
Supporting Kelly’s personal construct theory, the researcher found a positive correlation between the cognitive complexities of individuals within the couple dyad. In addition, a significantly higher number of constructs were used for the “liked” person than the “disliked” person. The findings also supported Crockett’s (1965) “Familiarity Hypothesis”, which states, “individual’s constructs relative to others with whom he interacts frequently and intimately will be more complex than his constructs relevant to categories of persons with whom he interacts less frequently” (Crockett, 1965, p. 63). These two corollaries identify a connection between individual construct systems and those of others who are similar or different based on contact frequency and experience.

Cognitive complexity, a term created and developed by Bieri (1955), is “a cognitive structural approach to individual differences.” (MacNeil, 1974, p. 3). Although this definition sounds simple enough, researchers have struggled for two decades to adequately define cognitive complexity (Conway, Schaller, Tweed, & Hallett, 2001; Goldsmith & Nugent, 1984; Daniel J. O'Keefe & Sypher, 1981). Cognitive complexity encompasses a number of different components that do not easily convert into clear measurable constructs with practical significance. This section will explore a definition of cognitive complexity. Factors influencing the cognitive complexity of counselors and measurement strategies of this variable will be addressed.

Cognitive structure can be defined as the way people process different types of information. Several researchers identified cognitive discrimination and cognitive integration as the two primary types of cognitive structures (Chambers, 1985a, 1985b; MacNeil, 1974). MacNeil (1974) further defined these structures in terms of their function. The function of the cognitive discrimination structure is to separate, or break
down, incoming stimuli into pieces. The function of the cognitive integration structure is to identify how separate pieces of information are related or combined together.

In terms of their function, MacNeil (1974) separates the cognitive discrimination structure into differentiation and articulation; and the cognitive integration structure into dimensional integrative complexity and rule integrative complexity. Differentiation is the number of construct dimensions (Kelly, 1955), or bipolar scales of judgment, in one’s discriminating structure, whereas, articulation is the number of levels in a dimension. For example, a construct dimension is “outgoing versus shy.” Articulation is how many levels between these two opposite constructs are available for rating someone or something. An example is a seven-point rating scale; outgoing is “1” and shy is “7” with 5 degrees of ratings in between. Dimensional integrative complexity has to do with the degree of interrelatedness between dimensions; for example, the dimensions’ ratings may correlate with each other, impacting each other in a possible pattern. Rule integrative complexity is the degree of complexity with which one relates or integrates information within or across dimensions (MacNeil), for example, how one may use one construct dimension to rate someone else on the same or different construct dimension.

Early research on cognitive complexity theory focused on cognitive differentiation (Daniel J. O'Keefe & Sypher, 1981), ignoring the connection between rule integrative complexity and other concepts of cognitive complexity (MacNeil, 1974). In the mid 1980s the definition of cognitive complexity underwent revision.

Unlike MacNeil’s (1974) definition of cognitive complexity, Tetlock (1983), concluded that differentiation and integration are not mutually exclusive. He defined integrative complexity inclusive of both differentiation and integration. Integration must
include differentiation, which is the number of constructs a person takes into
consideration. It is like having a three-dimensional puzzle, where the whole picture of the
construct system is as important as a few individual comparisons. Tetlock’s definition
supports the use of more than one measurement of cognitive complexity, measuring the
interrelatedness of dimensions as well as the differentiation of the dimensions.

There are two advantages of using both the cognitive differentiation and cognitive
integration types of cognitive complexity. First, both of these definitions have been
connected to Kelly’s (1955) well-established Personal Construct Theory. This provides a
strong theory basis for researching both types of cognitive complexity. Second, research
indicates the importance of considering both differentiation and integration together
conceptually as they are part of a developmental process and are considered orthogonal,
or uncorrelated (Gallifa & Botella, 2000).

However, a disadvantage can also be identified when using both cognitive
differentiation and cognitive integration types of cognitive complexity. This disadvantage
concerns the MacNeil (1974) model, which postulates that different cognitive complexity
measures – those measuring dimensional integrative complexity – may not measure what
they intend and may have problems with face validity and construct validity. Hageseth
(1983) supported this concern by comparing the correlations of four different measures of
cognitive complexity, only two of which had significant correlations. Many more recent
studies have examined the validity and reliability of different cognitive complexity
measures with varying results (Allen & Mabry, 1991; Allen, Mabry, Banskí, Stoneman,
& Carter, 1990; Angell, 2000; Burleson & Applegate, 1991; Feixas, López Moliner,
Gender and Counselor Cognitive Complexity

Gender has not been studied extensively among the cognitive complexity literature. However the relevance of examining this variable can be linked to the Personal Construct Theory. Bannister and Mair (1968) wrote of Kelly’s (1955) modified “Commonality Corollary” of the Personal Construct Theory, which states, “[t]o the extent that one person employs a construction of experience which is similar to that employed by another, his processes are psychologically similar to those of the other person.” (p. 23). The emphasis is on making comparisons between individuals. Similar people may not experience the same event or the same testing of their construction of the event, and yet come to the same conclusions (Bannister & Mair). To study the similarity of individuals based on this corollary means to also study the possible similarities and differences between people, such as males and females, who are often different in their process of constructing experiences.

Gender differences among counselor’s cognitive complexity are difficult to determine because studies that identify gender differences among counselor trainees also used samples with uneven gender groups. The study that did not find differences between gender groups also did not have even group representation. Like the study of gender and counselor self-efficacy, studies of cognitive complexity and gender lack appropriate sample composition for such analyses.

Duys and Hedstrom (2000) studied counselor trainees’ cognitive complexity related to basic counselor skills training. They found a gender difference between female and
male participants. Females had larger pre-/post-test difference scores on the cognitive complexity measure. However, these results could not be further analyzed due to the uneven number of male and female participants (17 and 55 respectively).

Steward, Boatwright, Sauer, Baden, and Jackson (1998) studied gender in relation to cognitive complexity and white racial identity. When the five levels of white racial identity development were examined, only the lowest level, which can reflect a negative attitude toward racial interactions, revealed a significant relationship between gender and cognitive complexity. Women scored lower in dualistic thinking at this level of racial identity than men. Dualistic thinking is characteristic of the lowest level of cognitive complexity based on Perry’s (1970) model of cognitive development. This sample, like the above study, consists of an uneven number of male and female participants (23 and 59 respectively).

Granello (2002) also used a measurement based on Perry’s (1970) model of cognitive development and found no gender effects among counseling students’ cognitive complexity levels. Like the above studies, however, there were more females (82%) in this sample than males (18%).

Gender is a way to examine differences and similarities between individuals who may have cognitively different ways of experiencing events or others. The limited studies that have included gender are inconclusive because of inadequate group sample sizes. These concerns can be addressed by using gender as a grouping variable with an equal number of male and female participants.
**Attitudes and Counselor Cognitive Complexity**

Attitudes have been studied in relation to counselors judging clients, which is a cognitive process (Spengler & Strohmer, 1994). Attitudes are therefore cognitive processes that are used to form constructs involved in making judgments about others. Cognitive complexity is based on the idea that differentiation and integration are used in the process of forming our beliefs about others. How counselors view others, in simple or complex ways, may be related to how they make judgments about those who are different.

No studies were found that included the relationship between counselors’ attitudes toward clients from particular groups and counselors’ cognitive complexity levels. These variables were studied separately with other counselor processes, like clinical judgment. Even so, review of these studies can provide some assistance in reasons for examining these variables together.

Few studies have hypothesized a relationship between cognitive complexity and attitudes in the way of preferences or impressions. Counselors’ attitudes toward clients can encompass counselors’ impressions of clients (Lee, Barak, & Uhleman, 1999), as well as counselors’ preferences working with clients from a particular client characteristic group (Spengler & Strohmer, 1994). These studies examined clinical judgments or diagnostic bias in relationship to counselors’ cognitive complexity.

Studies with counselor or counselor trainee samples concerning clinical judgments and cognitive complexity are limited (Cranford, 2000; Lee et al., 1999; McLennan, 1995; Spengler & Strohmer, 1994; Strohmer et al., 1983). Lee et al. (1999) studied counselor trainees’ initial clinical impressions of a client, the consistency of that judgment later in
the session, and counselors’ cognitive complexity, using Spengler and Strohmer’ (1994) version of the repertory grid (Bieri et al., 1966). Results revealed no relationship between cognitive complexity and clinical judgment. Their results, however, are limited in generalizability, since they did not utilize actual experiences by the participants.

Spengler and Strohmer (1994) used a sample from practicing counselors or psychologists to examine clinical judgmental bias, particularly diagnostic overshadowing. An example of diagnostic overshadowing is when a client with low intellectual functioning is diagnosed with a DSM-IV axis II diagnosis related to mental functioning and that diagnosis then overshadows any other applicable co-existing diagnosis. Other clients with the same symptoms who are not low in intellectual functioning are diagnosed with the applicable axis I diagnosis. Using a 4 x 6 version of Bieri et al’s (1966) 10 x 10 repertory grid to measure cognitive complexity, it was found to influence counselors toward bias in clinical judgment in that lower cognitive complexity levels were associated with higher biases in clinical judgment.

Conway, Schaller, Tweed and Hallett (2001) studied the impact culture has on cognitive complexity. They reviewed literature and identified a difference between the cognitive complexity levels of westerners and East Asians, one they attribute to an interaction effect of the person and the situation. They propose that the process of complexity is similar within different cultures, but the different outcomes are due to differences in experiences and values. Considering the origin of these differences, then values of counselors from the United States may have an impact on cognitive complexity.

Cranford (2000) studied the role of cognitive complexity and clinicians’ diagnosis of racially different clients. He found no significant differences between clinicians’
cognitive complexity, client race, and clinicians’ accurate diagnostic ability. In a similar
study, Strohmer et al. (1983) examined counselors’ diagnostic judgment toward clients
with and without physical disabilities. They found counselors’ cognitive complexity had
no impact on the quality of counseling hypotheses created and tested among clients.
Therefore, attitudes toward client race and physical disability in terms of clinical
judgments do not appear to be related to counselor cognitive complexity.

Although some studies about counselor attitudes or clinical judgment accuracy found
no relationship with cognitive complexity, it was in the area of clinical diagnostic
overshadowing where differences are seen. Biases in clinical judgment were associated
with low counselor cognitive complexity (Spengler & Strohmer, 1994).

**Measuring Counselor Cognitive Complexity**

Several researchers have reviewed the validity and reliability of the two primary
measures of cognitive complexity: the Repertory GRID (Brook, 1981; Feixas et al., 1992;
H. J. Smith, 2000; Woehr et al., 1998) and the RCQ (Angell, 2000; Burleson & Waltman,
1988; Goldsmith & Nugent, 1984; D. J. O'Keefe, Shepherd, & Streeter, 1982; Daniel J.

Kelly (1955) created the Role Construct Repertory Test (Rep-Test), an instrument
used to measure one’s personal construct system. The Rep-Test is a sorting measure
where a subject thinks of people that fit specific roles (e.g. mother, father, etc.). Bipolar
constructs are then developed by the subject’s judgment of the similarity of two role-
people and difference between those two and a third role-person. The process continues
until all possible bipolar constructs are determined.
Based on the Rep-Test, Bieri et al. (1966) created the repertory grid technique to identify differences in the ability to view behavior from many different aspects. Numerous measures derived from the Repertory grid have been found to have a greater degree of validity and reliability (H. J. Smith, 2000). Smith’s study included three phases and used experienced teachers. She found that the Grid’s test-retest reliability was high for two primary complexity measures. The pattern of construct relationships was also consistent over 12 months.

The Intensity statistic was a way of measuring Kelly’s (1955) construct of looseness or tightness, which was the predictability of marking one construct for one element and marking other constructs for that same element. This could be viewed as a measure of dimensional integrative complexity described earlier. The PVAFF statistic is determined using principal components analysis. The lower the score the greater the complexity for both the Intensity and PVAFF statistics.

Bannister’s Consistency Measure (Bannister, 1960) is a stable system where two sets of elements with the same constructs are rated in similar ways. This could be viewed as a measure of rule integrative complexity and is a test-retest reliability pattern for construct relationships. A high score means a stable pattern of complexity relationships.

Gallifa and Botella, (2000) developed a mathematical method for assessment of cognitive complexity using the repertory grid. The Structural Quadrant Method (SQM), although in its infancy in terms of use, has already demonstrated discriminative validity compared to other measures (Gallifa & Botella, 2000).

Unlike the Repertory Grid, the two-role version of the Role Category Questionnaire, created by Crockett (1965), uses a more qualitative approach to measuring cognitive
complexity. This questionnaire is a paper-and-pencil task. Participants are asked to write a description of two peers well known to them, one they like and one they do not like. They are time limited to five minutes for each description and can include habits, traits, and personality characteristics. There have been concerns about the test-retest reliability of the RCQ and alternate forms (Allen & Mabry, 1991; Allen et al., 1990; Burleson & Applegate, 1991; D. J. O'Keefe et al., 1982). O’Keefe et al. (1982) tested the reliability of the RCQ and found high one month test-retest for a timed version $r=.84$ and for an untimed version $r=.86$. The problem was that they made conclusions about the stability of construct differentiation with adults based on only a one-month test re-test interval.

Angell (2000) considered the convergent validity (using the Paragraph Completion Task) and discriminant validity (using a talkativeness scale) of the RCQ. Using a student sample of 80, he found expected results on one of his hypotheses. Results revealed lack of convergent validity ($r=.37$ between RCQ and PCT) and good discriminant validity ($r=.09$ between TS and RCQ).

There have been no significant correlations found between the RCQ and the Repertory Grid (Allen & Mabry, 1991; Goldsmith & Nugent, 1984; Daniel J. O'Keefe & Sypher, 1981; Satish & Streufert, 1997). This indicates that the measures are either not measuring the same type of complexity (i.e., they have some possible validity problems) or they have different reliabilities for different populations samples.

**Lesbian and Gay Clients**

**Gender Differences and Counselor Attitudes toward Lesbian and Gay Clients**

Although many studies have detected overall overt attitudes of mental health professionals toward this client group (Berkman & Zinberg, 1997; Lilling & Friedman,
few studies have examined gender difference of attitudes toward lesbian and gay clients (Garfinkle & Morin, 1978; Gelso et al., 1995). Furthermore, no studies were found examining how gender difference of counselors’ hidden attitudes toward lesbian and gay clients may be related to counselors’ estimate of their own skill ability.

Attitudes toward lesbians and gay men have been studied using meta-analytical or literature review approaches (Kite, 1984; Kite & Whitley, 1996; Rudolph, 1988; Whitley & Lee, 2000). Studies also have been done using special participant groups such as military personnel (Estrada & Weiss, 1999), social workers with master’s degrees (Berkman & Zinberg, 1997; Wisniewski & Toomey, 1987), Americans with phones (Gregory M. Herek & Capitanio, 1996; G. M. Herek & Capitanio, 1999; G. M. Herek & Glunt, 1993), students at a church-affiliated college (Kerns & Fine, 1994; Piskur & Degelman, 1992) and middle-class and upper-middle-class women at a private college (Basow & Johnson, 2000). Most studies, however, simply use college student populations (G. M. Herek, 1988; LaMar & Kite, 1998; Logan, 1996; Louderback & Whitley, 1997; Millham, San Miguel, & Kellogg, 1976; Nelson & Krieger, 1997; Pratarelli & Donaldson, 1997; Riggle, Ellis, & Crawford, 1996; Whitley & AEgisdottir, 2000). Fewer studies have used samples of graduate counselor education or psychology students (Barrett & McWhirter, 2002; Gelso et al., 1995; Hayes & Gelso, 1993; Rudolph, 1990; Thompson & Fishburn, 1977) or mental health practitioners (Casas, Brady, & Ponterotto, 1983; DeCrescenzo, 1983; Garfinkle & Morin, 1978).

Specific gender differences have been identified among attitudes toward lesbians and gay men. More men than women had negative views of gay men (Whitley & AEgisdottir,
When responding to homosexual persons versus homosexual behavior, gender differences were larger when responding to homosexual persons; men still had more negative attitudes than women (Kite & Whitley, 1996). Studies have also identified that people tend to have the most negative attitudes toward homosexual persons who are of the same gender as themselves (Millham et al., 1976). However, some studies found this gender difference to be relevant to gay men and not lesbians (Kite & Whitley, 1996; Whitley & AEGisdottir, 2000). Most of these studies use samples of college students, but studies of gender differences among counselors have similar results.

In 1977, Thompson and Fishburn (1977) were among the first to study graduate counseling students' attitudes toward homosexuality. They surveyed 64 students and found that the students did not hold to myths about homosexuals. However, they did believe counselors are not adequately trained to work with gay or lesbian clients.

When Garfinkle and Morin (1978) investigated psychotherapists' attitudes toward a fictitious vignette client, they found gender differences. Male counselors attributed more negative characteristics to lesbians and gay clients than female counselors. No differences were found related to attitudes toward lesbian clients versus gay clients.

Casas, Brady, and Ponterotto (1983) studied the impact of stereotyping on mental health counselors' processing of information about lesbian or gay clients. Gender differences were found, although this finding was not primary to this study.

Gelso, Fassinger, Gomez, and Latts (1995) also studied counselor gender and attitudes toward a fictitious client regarding counter-transference reactions. They found that sexual orientation did not effect counter-transference reactions. However, gender and sexual orientation of the client interacted with cognitive recall of the number of sexual
words in the client script. With a lesbian client, female counselors had more difficulty with recall of these words than male counselors. The same was not true for the heterosexual client.

A more recent study was conducted by Barrett and McWhirter (2002) examining counselor trainees’ view of clients who have differing sexual orientations. Counselors (n=162) assigned positive and negative adjectives to clients. Results revealed client sexual orientation, counselor gender, and counselor homophobia were all predictors of counselors’ perception of clients.

**Attitudes toward Lesbian and Gay Clients**

Counselors’ attitudes toward lesbian and gay clients can have a powerful effect on client counseling (Rudolph, 1988). Studies have identified overt counselor attitudes toward lesbian and gay clients (Berkman & Zinberg, 1997; Lilling & Friedman, 1995; Wisniewski & Toomey, 1987). These studies have helped to identify a need for researchers to be aware of this client group, from historical attention of the recognition of client bias, to more recent recognition of inadequate counselor training to work with lesbian and gay clients.

The gay rights movement began with the 1969 Stonewall riots and helped to open professional attitudes toward lesbians and gay men. Since the 1973 removal of “homosexuality” from the American Psychiatric Association’s official list of mental disorders, and the eventual 1987 removal of the term from the Diagnostic and Statistical Manual of Mental Disorders (DSM-III-R) third edition, revised (American Psychiatric Association, 1987), counselors no longer diagnose clients who have same-sex
orientations as mentally ill. Research that followed these events reflects the change in counselors’ attitudes.

Study results concerning attitudes toward lesbians and gay men also included an examination of beliefs. Millham et al. (1976) confirmed that people respond to homosexuals in multidimensional ways. They concluded that having a homosexual friend or close relative reduces anxiety and negative beliefs about homosexuals. This contributes to the idea that attitudes toward lesbians and gay men stem from a belief system that includes different interpersonal relationship dimensions.

As there are cognitive factors that contribute to negative attitudes about lesbians and gay men, there are also cognitive factors that are impacted by these attitudes. Clinical judgment is a factor that can be negatively impacted by counselor attitudes toward lesbian and gay clients (Davison & Friedman, 1981), as well as by counselors’ level and quality of training. In the 1970s and 1980s, training for counselors to work with lesbian and gay clients was inadequate (Buhrke, 1989; Thompson & Fishburn, 1977), including a lack of courses in counseling programs that address this client population (Iasenza, 1989). Without appropriate training, not only will counselors lack the competency to work with lesbian and gay clients, they may never have the opportunity to challenge existing biases and hidden attitudes toward these clients.

Measuring Counselor Attitudes toward Lesbians and Gay Clients

Instruments measuring attitudes toward lesbians and gay men have usually included a questionnaire specifically identifying attitude questions about gay people, lesbian people, homosexual behavior, or homosexual civil rights (Kite & Whitley, 1996). Many earlier measures did not separate attitudes toward gay men from attitudes toward lesbians. This
presented a problem since there were differences between these persons when Kite & Whitley examined them in a meta-analysis of attitudes toward homosexuals. These measures are good for most populations, like college students. However, when measuring attitudes of professional counselors, social desirability is a key concern. It is expected that these participants will respond favorably.

Many instruments have been developed to measure attitudes toward lesbians and gay men. The most commonly used are the Index of Attitudes Toward Homosexuals (IAH) (Hudson & Ricketts, 1980), the Modern Homophobia Scale (MHS) (Raja & Stokes, 1998), the Homosexuality Attitude Scale (HAS) (Kite & Deaux, 1986), the Heterosexual Attitudes Toward Homosexuality Scale (HATH) (Larsen, Reed, & Hoffman, 1980), and the Homophobia Scale (Wright, Adams, & Bernat, 1999). The difference between these specific measures and a measure of attitudes in general is the control for socially desirable responses. Studies that provide these questionnaires are also providing information about the purpose of the study. For practicing counselors, socially desirable responses would likely be high if they knew they would be responding to questions about attitudes toward homosexuals. The semantic differential attitude measure provides a way to disguise the assessment of attitudes toward lesbian and gay clients, since the terms are not clearly expressed in this measurement.

Conclusion

Literature concerning counselor practitioners’ self-efficacy, cognitive complexity, and attitudes toward lesbian and gay clients, as they specifically relate to gender, was examined. Based on this review, a possible relationship between attitudes toward lesbian
and gay clients and the cognitive processes of counselor self-efficacy and cognitive complexity was established.

Counselor self-efficacy was defined as how counselors perceive their effectiveness with clients. Self-efficacy and cognitive complexity have been described as stable cognitive characteristics. However, their possible effects on self-efficacy toward a lesbian or gay client have not been considered in previous studies.

The hypotheses of this study – that there may be a gender effect on counselor attitudes toward lesbian and gay clients and counselor self-efficacy when controlling for counselor cognitive complexity – will be tested using a different way to measure attitudes that will help to mask the true meaning of the study. A vignette design and semantic differential attitude measure, used especially to test attitudes, will be used (Osgood et al., 1957).
CHAPTER THREE

Methodology

Introduction

This study investigated a possible relationship between client gender and sexual orientation, and counselor gender, attitude, self-efficacy, and cognitive complexity. Gender and sexual orientation, two characteristics of a fictitious client vignette, distinguished the four experimental groups.

Participants

The sample consisted of 278 licensed or certified professional counseling practitioners in the United States. They were licensed or certified by an established professionally recognized counseling licensure certifying organization and were members of the American Counseling Association (ACA). Their primary employment was identified as practicing counselors.

Sample Size

The desired sample size of this study was 280 counselors, who were randomly assigned to one of four groups, identified by which experimental condition they received in their packet of questionnaires. The desired sample size was determined by first identifying a desired power and effect size. Statistical power is the probability of finding true statistically significant differences among variables. The desired power to detect statistically significant differences was at least .80. This is a power level common in social science research (Cohen, 1977). Effect size for multivariate analyses is the degree of difference between the variables’ mean vectors in standard deviation terms. In other words, effect size reveals the size of the effect of the variables on each other. Effect sizes
for multivariate analyses in social science research ($D^2$) vary from small (.25) to medium (.64) to large (1.00) to very large (2.25) range (Cohen, 1977; Stevens, 1996). A desired effect size of .64 was sufficient for this study. Effect sizes for the univariate analyses ($\eta^2$) tend to vary from small (.01) to medium (.06) to large (.14) range (Cohen, 1977; Stevens, 1996).

An estimation of power and effect size can be used to determine an adequate sample size needed to detect statistically significant differences between variables (not due to chance), if there are any. Alpha level is also used to estimate adequate sample size. The alpha level for two-tailed tests is generally .05. This study used a .05 alpha level for the multivariate test and an adjusted alpha level for the univariate post-hoc analyses to control for multiple tests. According to Stevens (Stevens, 2002, p. 7), “We define the overall $\forall$ for a set of tests as the probability of at least one false rejection when the null hypothesis is true.” The adjusted alpha depends on how many post-hoc analyses are computed.

The statistical program SPSS was used to calculate the number of participants needed in order to get sufficient statistical power to detect statistically significant group differences with a medium effect size. D’Amico, Neilands, and Zambarano (2001) identified a way to determine sample size from SPSS MANOVA procedures using a syntax program based on actual means and standard deviations of a researcher’s pilot study. Some modifications to the MANOVA syntax sample programs were made to accommodate a three-way MANOVA analysis. This program was run with different group sizes to determined the adequate group size for power at .80 or higher. The results
were statistically significant (over .80 power and medium effect size) for multivariate analysis at sample size of 280 total or 35 per cell group.

Sampling Selection Plan

Participants were randomly selected from a list of ACA professional clinical members. The American Counseling Association is a national professional organization consisting of some active members who are counseling practitioners. Their members represent counselors from every state in the United States. The sample was gender stratified, meaning half the randomly selected participants were male and the other half were female.

A request was made to the ACA to randomly draw 566 names from their member database who report working in community counseling or private counseling agencies. They were members who work in direct counseling services. They were not expected to be students or primarily educators (J. Gaskins, personal communication, September 4, 2003). Half of the names requested were female and the other half were male.

The desired return rate of the questionnaires for this study was at least 50 percent. The average return rate for studies published in two counseling journals was approximately 52% (Erwin & Wheelright, 2002). Statistically, adequate return rates are necessary because as response rates increase, sample size increases, thus statistical power increases, sampling error decreases, and generalizability to the larger population increases (Gore-Felton, Koopman, Bridges, Thoresen, & Spiegel, 2002). In order to acquire the needed number of respondents (280) with a 50% or better return rate, 566 packets of questionnaires were mailed.
Follow-up postcard mail reminders and an additional copy of questionnaires have been shown to make an impact on return rates (Futrell & Lamb, 1981; Gore-Felton et al., 2002; Swan, Epley, & Burns, 1980; Yammarino, Skinner, & Childers, 1991). Gore-Felton et al. (2002) studied return rates of a mail survey study with a sample of psychologists in clinical practice who were members of a professional organization. A vignette design was used in this study. They obtained a high return rate (68%). The initial mailing on a Tuesday produced a 40% return rate. A follow-up postcard mailing 2 weeks later increased the return rate by 16%. A complete mailing to non-respondents three weeks later increased the return rate by an additional 12%.

Type of follow-up contact, as well as the timing of following up contact, is important. Swan et al. (1980) studied whether response rates to mail surveys increase with an additional questionnaire sent as part of the follow-up contact. They found that there was a statistically significant difference between the letter-with-questionnaire group and the letter only group at the second follow-up mailing ($\chi^2=3.2$, $p<.05$). Results were not significant for these two groups at the first follow-up mailing. Futrell and Lamb (1981) support these findings, emphasizing the importance of more than one follow-up to the initial mailing and the inclusion of another questionnaire.

Based on the above supporting literature, post cards served as a reminder and were sent to non-respondents 14 days after the packets had been sent to assist in response compliance. Another packet was sent to continued non-respondents 3 weeks after the post cards were sent. For convenience, a self-addressed, stamped envelope was provided in each packet.
Participation was voluntary. A letter inviting participation was included in the packet of questionnaires. The letter included contact information and a brief description of the study; however, some information was not included in order not to reveal the true purpose of the study with regard to attitudes toward lesbian and gay clients (Appendix A). A consent form was included in the packet as well. It included information about the risks and benefits of this research (Appendix B). A different cover letter was sent to the non-responders in the follow-up mailing (Appendix H). A postcard with a website address that contains a debriefing letter about the true purpose of the study and a summary of the results of the study will be mailed to those who return the questionnaire packet (Appendix I). This will be provided to the respondents in a follow-up mailing at the conclusion of the study.

Studies have determined a small monetary incentive can increase return rates (Erwin & Wheelright, 2002; Oden & Price, 1999; Yammarino et al., 1991). Oden and Price (1999) surveyed 600 people comparing the effectiveness of a monetary incentive of $1.00 and no monetary incentive. Half the surveys in the sample were sent the money. The return rates were 81% for the monetary incentive group and 66% for the control group, a significant difference ($\chi^2=4.40, p<.05$).

Among mental health counselors, monetary incentives have been underutilized when conducting survey research (Erwin & Wheelright, 2002). Erwin and Wheelright consider an adequate amount of monetary incentive at the initial mailing to be more successful than any other method to increase response rates. Although they discuss the benefits of using monetary incentives, they also caution mental health researchers to treat
participants fairly. Even when money is offered as an incentive, participation is voluntary. A small amount of money, such as less than $5.00 is not considered coercive.

These studies supporting the use of monetary incentives were convincing. Two incentives, therefore, were used to encourage participation. One incentive was that participants were provided with an option to receive the study results in summary form via post-mail or e-mail. The second incentive was a monetary one. Participants received a crisp $1.00 bill in their packet of questionnaires. The dollar was theirs to keep regardless of their choice to participate.

*Independent and Dependent Variables*

There were three main independent variables in this study: gender of the vignette client, sexual orientation of the vignette client, and gender of the participant. All of these variables were dichotomous and had a nominal scale of measurement. Each consisted of two possible values (i.e. Female/Male). Other independent variables included age, years of counseling experience, highest degree obtained, and geographical region of counseling practice. They were not used as covariates in the primary analysis, since they did not correlate strongly with the dependent variables. These variables were obtained through a Demographics Questionnaire (Appendix C).

There were a total of four dependent variables in this study: Attitude Measure using the evaluative scale of the semantic differential technique and three of the five subscales of the COSE (Appendix F). They all resulted in an interval scale of measurement.
Measures

Demographic Questionnaire

A Demographic Questionnaire was constructed for this study to gather demographic information about the participants. Gender, age, years of counseling experience, highest degree obtained, and geographical region of counseling practice, was the information requested in this questionnaire (Appendix C).

Client Vignette

Many studies related to attitudes toward clients use a vignette-type design (Barrett & McWhirter, 2002; Garfinkle & Morin, 1978; Gelso et al., 1995; Hayes & Gelso, 1993). A client vignette was used in this study. The vignette was of a fictitious client intake session. The design of this vignette was developed from a sample vignette provided in the DSM-IV Casebook in a section titled “Mental Disorders in Adults” (Spitzer, Gibbon, Skodol, Williams, & First, 1994). Attempts were made to find a client vignette that could be modified slightly to accommodate the experimental conditions of this study (Appendix D).

Since the vignette information differentiated the experimental groups and disguised the purpose of the study, subtle indicators were used that identified the client as Male/gay, Male/heterosexual, Female/lesbian, Female/heterosexual (i.e., using gender specific names for partners). The vignettes were identical except for this variant. A pilot test was conducted in order to identify if the vignette created for this study was realistic enough to portray a real client intake situation (Appendix G).
Attitude Measure

Attitude Measure is a semantic differential scale used to measure counselors’ attitudes toward the intake client portrayed in the vignette. Paired adjectives with opposite meaning are placed in polar positions on a 7-point scale. A semantic differential scale has three primary dimensions: Evaluative, Potency, and Activity. Osgood, Suci, and Tannenbaum (1957) formulate these dimensions from 50 adjective pairs that were factor analyzed. The evaluative factor has been identified as the one that is most often used for attitude measurement (Osgood et al., 1957).

A criterion that has been recognized by Osgood, Suci, and Tannenbaum (1957) was used to select adjective pairs for use in semantic differential technique in this study. The factorial composition, meaning the items load heavy on one factor and light on other factors was how adjective pairs were selected. The following 15 pairs loaded .75 or higher on factor I, the evaluative dimension, and were not found to load significantly on other factors: happy-sad, honest-dishonest, beautiful-ugly, sweet-sour, clean-dirty, tasty-distasteful, valuable-worthless, kind-cruel, pleasant-unpleasant, sweet-bitter, good-bad, sacred-profane, nice-awful, fragrant-foul, and fair-unfair (Osgood et al., 1957).

The semantic differential technique has been used to measure attitudes toward vignette clients (Rieger, 1997). Osgood et al. (1957) established content validity and construct validity of the semantic differential technique using factor analysis. The factor loadings for the evaluative items are happy-sad (.76), honest-dishonest (.85), beautiful-ugly (.86), sweet-sour (.83), clean-dirty (.82), tasty-distasteful (.77), valuable-worthless (.79), kind-cruel (.82), pleasant-unpleasant (.82), sweet-bitter (.80), good-bad (.88), sacred-profane (.81), nice-awful (.87), fragrant-foul (.84), and fair-unfair (.83) (Osgood et
Factor I accounted for 33.78% of the variance between items. Factor II only accounted for 7.62% of the variance.

*Counseling Self-Estimate Inventory (COSE)*

The Counseling Self-Estimate Inventory is a 37-item measure of counselor self-efficacy (Larson et al., 1992). It contains five subscales (Appendix F) all having moderate-to-strong reliability. Internal consistency correlation coefficients range from .82 to .88. Convergent validity was significant; the subscales significantly correlated with the Tennessee Self-Concept Scale (correlations ranged from .31 to .51.) and the State-Trait Anxiety Inventory (correlations ranged from -.27 to -.45). Discriminant validity was acceptable since the subscales were uncorrelated or minimally correlated with GRE scores (correlations ranged from .05 to .18.) and GPA scores (correlations ranged from -.10 to .36.). Reliability was measured by a three-week test-retest measure. The correlations ranged from .68 to .83.

This study used a modified form of the COSE instrument. Subscale items were identified for use if they could be linked to the client vignette. Participants were asked to answer questions based on their perceptions of skill ability to work with the client described in the vignette. These items were all part of three subscales of the COSE (Microskills, Process, and Values). The remaining two subscales (Difficult Clients and Cultural) were used to measure general self-efficacy, and they were used as covariates in the study. Permission was granted from the author of the COSE instrument to make these modifications for use with this study (L. Larson, personal communication, July 13, 2003).
Repertory GRID test (three different measurement variables)

The Repertory GRID test was used to measure cognitive complexity. This study used the original standardized grid that is made up of 10 elements and 10 constructs (Bieri et al., 1966). An element is a role figure, such as “mother.” Elements used in the original grid were: Yourself, Person you dislike, Mother, Person you’d like to help, Father, Friend of same sex, Friend of opposite sex, Person with whom you feel most uncomfortable, Boss, Person difficult to understand. A construct is a descriptive adjective with a polar opposite term that is used in rating the element in the grid. The original Repertory GRID constructs used were: Outgoing—Shy, Adjusted—Maladjusted, Decisive—Indecisive, Calm—Excitable, Interested in others—Self-absorbed, Cheerful—Ill-humored, Responsible—Irresponsible, Considerate—Inconsiderate, Independent—Dependent, Interesting—Dull. Grids are usually presented in a grid format with elements on the horizontal axis at the top of the grid and constructs on the vertical axis at the left and right sides of the grid (opposite terms on either side). The original grid used a 6-point rating scale for each construct.

There are two different methods of presenting the Repertory GRID test: range (or construct-by-construct) and focus (or element-by-element). Both of these methods can be presented in a grid format with specific instructions for which type of method to use (see Appendix E for instructions using the focus method). For the range, or construct-by-construct method, the participant is instructed to work across each row of constructs, rating each element for the first row and then proceeding to the next construct. Each square gets a rating on a scale from 1 to 6. Instead of the grid format, the element-by-
element method can be presented in an alternative way. Each element is presented alone with a set of constructs below each element, instead of using a grid format.

Neimeyer, Neimeyer, Hagans, and Van Brunt, (2002) studied different methods and found that there was no difference in the PVAFF scores or intensity scores between the range and focus methods of grid administration. There were significant differences on Bieri’s cognitive complexity score (Mean=.29 for range method and Mean = .23 for the focus method). When using the element-by-element (focus) method, the cognitive complexity score resulted in higher differentiation than using the construct-by-construct method. The current study used the GRID element-by-element rating method for two reasons. First, the GRID saved on paper, rather than using each element followed by 10 constructs to be rated. Second, although the element-by-element method has higher ratings for one cognitive complexity score, this study used that score and two other measures as well that are not impacted by this rating method.

As part of the instructions for this test, participants were asked to think of someone they know in each of the role types when completing this test and place their initials near the role type (Appendix E). A 6-point scale was used to rate each element-by-construct square. The constructs and elements were provided, not elicited, based on the original repertory grid construct set (Bieri et al., 1966; Neimeyer et al., 2002).

Three measures of cognitive complexity were used in this study. Each measures a different aspect of cognitive complexity. The first measures cognitive differentiation where matches are counted and the lower the matches, the higher the cognitive complexity. The second and third measures are concerned with both cognitive
differentiation and integration. Higher scores reflect more conceptual integration complexity, while lower scores reflect more differentiation complexity.

*Cognitive Complexity (Bieri, 1955).* The sum of all of the perfect matches in rating elements divided by the maximum possible matches served as the first measure of counselor cognitive complexity (Bieri, 1955). The fewer matches mean more cognitive complexity. Test-retest reliability for this measure was .87 after 1 hour, .89 after 1 week, and .80 after 1 month (Feixas et al., 1992).

*Intensity Score (Fransella & Bannister, 1977).* Intensity score measures the degree of interrelatedness between the grid constructs. According to Feixas et al. (1992), “Intensity is calculated by summing the absolute values of the Pearson correlations between ratings performed on all possible pairs of constructs and then multiplying by 100.” (p. 27). The higher scores reflect more integration complexity; the lower scores reflect more differentiation complexity. Test-retest reliability for this measure was .95 after 1 hour, .95 after 1 week, and .94 after 1 month (Feixas et al., 1992).

*Percentage of Variance Accounted for by the First Factor (PVAFF) (Daniel J. O'Keefe & Sypher, 1981).* The percentage of variance accounted for by the first factor (PVAFF) (Daniel J. O'Keefe & Sypher, 1981) is defined as, “The amount of variance attributed to the first factor derived from a principal components analysis of the grid ratings is the second possible index of differentiation. This index assumes that the larger the first factor, the more unidimensional the underlying structure of the grid.” (Daniel J. O'Keefe & Sypher, 1981, p.27). Higher scores reflect more conceptual integration complexity, while lower scores reflect more differentiation complexity. Test-retest
reliability for this measure was .61 after 1 hour, .72 after 1 week, and .67 after 1 month (Feixas et al., 1992).

Procedures

Data Collection

Packets of questionnaires were mailed to 566 counselors. Packets contained ten pages (six pages, some double-sided) and included the following: A cover letter, an informed consent letter, a demographic questionnaire (5 questions), a client vignette followed by the modified COSE inventory (37 questions), the Attitude Measure (15 questions), and the GRID test (100 square grid). There were a total number of 157 questions. The cover letter included an estimate of time required to complete the packet of questionnaires. This was approximately 15–45 minutes, according to the pilot study (see Appendix G). It also included a statement assuring confidentiality of the respondents’ responses.

Participant Anonymity and Confidentiality

Questionnaires were coded prior to mailing. This was used to help maintain confidentiality. Coding the questionnaires began by randomly assigning every potential respondent to a comparison group. Male and female potential responders were divided equally among the four groups. Only the return questionnaires and return envelopes were marked with the identification code. When questionnaires were returned, the identification code was recorded by the principal investigator. The return address on the reply envelope had the principal investigator’s designated address. The principal investigator kept the questionnaires for data entry and data management. When a follow-up mailing was sent to non-responders, identification numbers were used on the
questionnaires. A list of the names and corresponding codes were kept separately from the returned questionnaires. Upon completion of the study, this list will be destroyed.

Research Design

The research design of this study was an experimental design with random assignment of participants to one of four experimental groups differing only by the gender and sexual orientation of the vignette client. The primary analysis considered the gender of the respondent as a factor. Interaction effects of the above variables on attitude toward the vignette client and counseling self-efficacy of the respondent were examined. Cognitive complexity and general self-efficacy were covariates in this analysis. Effects of other data gathered about the participants (e.g. age, years of counseling experience, highest degree obtained, and geographic region of practice) were explored.

Research Question

What are the effects of counselor gender (male or female), client gender (male or female), and client sexual orientation (homosexual or heterosexual) on counselors’ attitudes toward clients (as measured by scores on the Attitude Measure: a semantic differential rating scale) and counselor self-efficacy (as measured by three subscales of a modified version of the Counseling Self-Estimate Inventory; Micro skills, Process, and Awareness of Values) with general counselor self-efficacy (as measured by two subscales of the modified version of the Counseling Self-Estimate Inventory; Difficult Client Behaviors and Cultural Competence) and counselor cognitive complexity scores (as measured by three different differentiation scores derived from the Repertory GRID test: Beiri’s cognitive complexity score; intensity score; percentage of variance accounted for by the first factor) as covariates?
Data Analysis

The research design of this study included a 3-way MANCOVA analysis. The three independent variables were gender of respondent, gender of the vignette client, and sexual orientation of the vignette client. Each of these variables had two levels. The four dependent variables for the MANCOVA analysis were the total scores on three of the five subscales of the COSE inventory and the average score of the semantic differential attitude measure. The three scores of the GRID test and total scores on two of the five subscales of the COSE inventory were the covariates for this analysis.

There are several reasons to do multivariate analysis rather than a greater number of univariate analyses. First, multivariate analysis better controls type I error rate. Second, the dependent variables (the attitude measure and COSE subscales) were conceptually correlated. This analysis gives us a correlation matrix that will help determine if they are statistically correlated. Third, the combined analysis of both of these dependent variables reveals group differences, even when separate analyses of the same dependent variables may not.

Multivariate Analysis with more than two independent variables and two or more dependent variables is designed to examine the combined effect of the independent variables on the dependent variables. SPSS was used for all statistical analyses. The MANCOVA procedure provided an F statistic, the Wilk’s Lambda, for the overall multivariate analysis. This procedure tests for interaction effects with three possible outcomes. There may be no interaction effects, meaning one group’s scores are higher than the other groups on the dependent variables to the same degree. There may be an ordinal interaction, meaning one group always has higher scores than the other groups on
the dependent variables but to a different degree. There may be a disordinal interaction, meaning different groups may score higher on the dependent variables across different levels of the other independent variable.

When no significant ordinal and/or disordinal interaction effects in the analysis are found, then main effects are examined. When significant interaction effects are found between the independent variables, then visual representation of these interactions are provided and main effects are examined in light of these interactions. When main effects are analyzed and found to be significant, then post-hoc analyses are performed.

There are five assumptions that must be met when using MANCOVA analyses; independence of the observations, multivariate normality of the dependent variables within each group, homogeneity of the covariance matrices, linear relationships between the dependent variables and the covariates, and homogeneity of the regression hyperplanes (meaning there is no interaction effects between the covariates and the dependent variables). Statistical tests were performed to see if the data met these assumptions (see Chapter Four). Violations of these assumptions are less seriously impacting the results of the study when the sample is randomly assigned to groups, as in this study.
CHAPTER FOUR

Results of the Study

Sample Description

Participants were randomly selected among members of ACA and randomly assigned to one of four groups, identified by which experimental condition they receive in their packet of questionnaires. Packets were sent to 566 potential responders. Desired return rate was 50% or 283 respondents.

Mailing Response Rate

Total response rate for the study was 52% or 296 responses. Response rate was 24% or 135 responses after the first mailing. After two weeks, a follow-up post-card reminder to non-respondents resulted in an increase return rate by 16% or 91 responses. Three weeks later, another complete packet of questionnaires was mailed to non-respondents, increasing the return rate by an additional 12% or 70 responses. Data that were not useable due to return of blank questionnaires totaled 6% of the total returned responses or 18 questionnaire packets. Over half of these responders gave reason for their nonparticipation (see Appendix J). The percentage of usable data from respondents was 49% or 278 responses. The desired number of participants was 283 (50%) or approximately 35 per cell group (participant gender by client gender by client sexual orientation). Group quantities consisted of between 24 and 40 participants (24, 30, 32, 37, 38, 38, 39, and 40).

Some of the counselors unexpectedly returned the $1.00 bill. Thirteen of those who completed the questionnaire packet returned the money. Seventeen of those who
returned blank questionnaires also returned the money. Five packets were undeliverable and returned unopened with the money enclosed.

Demographic Characteristics

The sample was comprised of 278 professional counseling practitioners in the United States. They were all members of the American Counselors Association (ACA), who were employed primarily as practicing counselors. A Demographic Questionnaire was used to gather information regarding participants’ gender, age, years of counseling experience, highest degree obtained, and geographical region of counseling practice.

Participant demographic characteristics were generally as expected. Gender of participants included 149 females (53.6 %) and 129 males (46.4 %) (see Table 1). Age of participants ranged from 26 years old to 83 years old, with a mean of 51.64 and a median of 52 (N=277) (see Table 2). Years of counseling experience ranged from 1 year to 50 years with a mean of 16.96 years and a mode of 20 years (N=276) (see Table 3). Highest degree obtained ranged from BA to PhD. Most participants’ (210) highest degree obtained was a masters’ degree (76.9 %) and some (58) had earned doctorate degrees (21.2 %) (see Table 4). Participants counseled in different regions with most practicing in the Midwest Region (35.4 %). However, there was a balance of other regions represented (see Table 5).
<table>
<thead>
<tr>
<th>Gender</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Female</td>
<td>149</td>
<td>53.6</td>
</tr>
<tr>
<td>Male</td>
<td>129</td>
<td>46.4</td>
</tr>
<tr>
<td>Total</td>
<td>278</td>
<td>100.0</td>
</tr>
</tbody>
</table>
Table 2

Participants’ Age

<table>
<thead>
<tr>
<th>AGE (in years)</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Median</th>
</tr>
</thead>
<tbody>
<tr>
<td>26 to 83</td>
<td>51.64</td>
<td>10.20</td>
<td>52</td>
<td></td>
</tr>
</tbody>
</table>

Note: N=277. One person’s data for this item was coded as missing
Table 3

*Participants’ Years of Counseling Experience*

<table>
<thead>
<tr>
<th>Counseling Experience (in years)</th>
<th>Range</th>
<th>Mean</th>
<th>SD</th>
<th>Mode</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 to 50</td>
<td>16.96</td>
<td>10.16</td>
<td>20</td>
<td></td>
</tr>
</tbody>
</table>

Note: *N*=276. Two person’s data for this item were coded as missing
Table 4

*Participants’ Highest Degree Obtained*

<table>
<thead>
<tr>
<th>Degree</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelors</td>
<td>1</td>
<td>.4</td>
</tr>
<tr>
<td>Masters</td>
<td>210</td>
<td>76.9</td>
</tr>
<tr>
<td>Doctorate</td>
<td>58</td>
<td>21.2</td>
</tr>
<tr>
<td>Other</td>
<td>4</td>
<td>1.5</td>
</tr>
<tr>
<td>Total</td>
<td>273</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: *N*=273. Five persons’ data for this item were coded as missing
Table 5

*Participants’ Region of Counseling Practice*

<table>
<thead>
<tr>
<th>Region</th>
<th>Number</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>North Atlantic</td>
<td>48</td>
<td>17.5</td>
</tr>
<tr>
<td>Southern</td>
<td>75</td>
<td>27.4</td>
</tr>
<tr>
<td>Midwest</td>
<td>97</td>
<td>35.4</td>
</tr>
<tr>
<td>Western</td>
<td>54</td>
<td>19.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>274</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Note: N=274. Four persons’ data for this item were coded as missing
Instrument Reliability Analysis

Attitude Measure

The Attitude Measure with 15 semantic differential items was examined for internal consistency. Results support a high degree of internal consistency (Cronbach’s Alpha = .88, N=265), similar to the reliability analysis for the pilot study (Cronbach’s Alpha = .93). A principal components analysis (PCA) was also performed to assess the validity of these evaluative items that formed one evaluative factor in the original design of this measure (Osgood et al., 1957). The PCA resulted in only one factor extracted using Horn’s (1965) method of Parallel Analysis. This analysis method uses multiple iterations of analysis to determine, based on number of item and sample size, what is the minimum eigenvalue to be used to help determine the number of factors (Kaufman & Dunlap, 2000). The one factor extracted accounted for 40.64% of the total variance. Therefore, this measure demonstrates internal validity.

Counseling Self-Estimate Inventory (COSE) Subscales

The COSE subscales were used to measure counselor self-efficacy toward the vignette client (subscales Microskills, Counseling Process, and Awareness of Values), and a general measure of counselor self-efficacy (subscales Dealing with Difficult Client Behaviors and Cultural Competence). Reliability statistics to determine internal consistency of the COSE scales were performed. Results for each subscale ranged from .44 to .82 (see Table 6). These results were similar to the pilot study reliability results. Although the total COSE score was not used in this study, the reliability of all of the subscales together was high (Cronbach’s Alpha = .89). Larson et al. (1992) reported the internal consistency was .93 for the original COSE instrument.
Reliability analysis was performed to further determine if any items on the subscales were flawed. All corrected item-total correlations were positive for all subscales. The Awareness of Values subscale contained one item (#13) that if deleted would cause the alpha for that scale to be .46 instead of .44. The item concerns the confidence that the counselor has resolved conflicts in his/her personal life so they will not interfere with counseling abilities. This item shows the most inconsistency of all the items on the questionnaire (subscale item to total correlation = .14). The Awareness of Values subscale may also be weaker in reliability since it only consists of four items.
Table 6

Measures of Internal Consistency: Cronbach’s Alpha Statistics for the Five Subscales of the Counseling Self-Estimate Inventory

<table>
<thead>
<tr>
<th>Subscale</th>
<th>Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microskills</td>
<td>.82</td>
<td>12</td>
</tr>
<tr>
<td>Counseling Process</td>
<td>.79</td>
<td>10</td>
</tr>
<tr>
<td>Awareness of Values</td>
<td>.44</td>
<td>4</td>
</tr>
<tr>
<td>Dealing with Difficult Client Behaviors</td>
<td>.64</td>
<td>7</td>
</tr>
<tr>
<td>Cultural Competence</td>
<td>.67</td>
<td>4</td>
</tr>
</tbody>
</table>
Repertory GRID test (three different measurement variables)

Generally the reliability statistics used to test internal consistency of the Repertory GRID is a test-retest of the grid with the same sample. This is not possible to do in this study; therefore factor scores of each participant’s grid were analyzed. This revealed between one and four components, averaging about two or three for most of the grids. The PVAFF (Daniel J. O'Keefe & Sypher, 1981) ranged from 28 percent to 91 percent with a mean of 54 percent and a normal distributions of percentages among the sample participants.

Cognitive Complexity (Bieri, 1955) scores were derived by the number of numeral matches in the grid, with lower numbers of matches meaning greater cognitive complexity. The number of matches ranged from 36 to 385 (out of a possible 450) with a mean of 152. The scores were normally distributed among the sample.

The Intensity Scores (Feixas et al., 1992) were also computed from the grids. The higher the scores the more integration complexity; the lower scores reflect more differentiation complexity. Scores ranged from 12.74 to 40.56 with a mean of 21.61 and median of 20.29. The distribution of scores was skewed to the right, with approximately 10% of the participants with scores above 30.00. This indicates that more participants were scoring with differentiation complexity than with integration complexity.

The cognitive complexity scores, the intensity scores and the PVAFF scores, derived from the same Repertory GRID data, were found to be positively correlated with each other, as would be expected. Cognitive complexity score was significantly correlated with intensity score ($r = .607$, $p=.000$) as well as the PVAFF score ($r = .534$, $p=.000$).
Also, Intensity score was significantly correlated with PVAFF score \( (r = .954, p = .000) \).

**Analysis of Research Hypothesis**

**Research Hypothesis**

What are the effects of counselor gender (male or female), client gender (male or female), and client sexual orientation (homosexual or heterosexual) on counselors’ attitudes toward clients (as measured by scores on the Attitude Measure: a semantic differential rating scale) and counselor self-efficacy (as measured by three subscales of a modified version of the Counseling Self-Estimate Inventory; Micro skills, Process, and Awareness of Values) with general counselor self-efficacy (as measured by two subscales of the modified version of the Counseling Self-Estimate Inventory; Difficult Client Behaviors and Cultural Competence) and counselor cognitive complexity scores (as measured by three different differentiation scores derived from the Repertory GRID test: Beiri’s cognitive complexity score; intensity score; percentage of variance accounted for by the first factor) as covariates?

**Statistical Hypothesis**

**Null Hypothesis.** \( H_0: \mu_i^* = \mu_j^* \)

*adjusted mean vectors are equal, \( i = j \)

**Assumptions when using MANCOVA Analysis**

There are five assumptions that must be met when using MANCOVA analyses; 1) independence of the observations, 2) multivariate normality of the dependent variables within each group, 3) homogeneity of the covariance matrices, 4) linear relationships between the dependent variables and the covariates, and 5) homogeneity of the regression
hyperplanes (meaning there is no interaction effects between the covariates and the dependent variables). Statistical tests were performed to see if the data met these assumptions. Violations of these assumptions less seriously impact the results of the study when the sample is randomly assigned to groups, as in this study.

Assumption #1, Independence of observation, was met by making sure that the groups were made up of unique individuals (i.e., no one person belonged to more than one group). The multivariate normality of the dependent variables within each group, assumption #2, was determined by a visual representation of a scatter plot of data for pairs of dependent variables within each of the 8 groups. They were judged to be normal with unimodal distributions. Homogeneity of covariance matrices, assumption #3, was determined using Levene’s statistic that revealed no rejection of the null hypothesis that the covariance matrices are equal for all four dependent variables. Therefore, this assumption was met.

Assumption #4 concerns the correlations between the dependent variables and the covariates. Covariates are used when there may be possible impacts of these variables on the dependent variables. Significant correlations were anticipated, however, the cognitive complexity factor score covariate was not correlated significantly with any of the dependent variables with correlations ranging from -.006 to .081. The cognitive complexity score and the intensity score were significantly correlated only with the COSE Microskills dependent variable. These variables, after examination of these correlations, did not expect to contribute to mean variations in the primary study analysis.

The two scales of the COSE, dealing with difficult client behaviors and cultural competence, used as covariates, were statistically significantly correlated with three of
the four dependent variables. The cultural competence subscale was correlated with the Attitude Measure. However, dealing with difficult client behaviors was not correlated with this variable (see Table 7).

Assumption #5, homogeneity of the regression hyperplanes (meaning there is no interaction effects between the covariates and the dependent variables), was determined by an interaction design of the MANCOVA analysis where all the covariates by the three factors were together used to assess any effects on the dependent variables. Results determined that there was a significant interaction effect between the two covariates and the dependent variables (see Table 8). This means that this assumption was not met and there is caution when interpreting the results, since the interaction of the covariates with the dependent variables by the groups may not reveal possible significant differences. However, since this study used random assignment to groups, the violation of this assumption may not be as serious to the results of the study.
Table 7

**Correlations Between Dependent Variables and Covariates**

<table>
<thead>
<tr>
<th>Covariates</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult Client Behaviors</td>
<td>.317** (.000)</td>
<td>.524** (.000)</td>
<td>.270** (.000)</td>
<td>-.103 (.089)</td>
</tr>
<tr>
<td>Cultural Competence</td>
<td>.378** (.000)</td>
<td>.429** (.000)</td>
<td>.318** (.000)</td>
<td>-.125* (.038)</td>
</tr>
<tr>
<td>Cog. Complexity PVAFF</td>
<td>.081 (.180)</td>
<td>-.002 (.973)</td>
<td>-.006 (.921)</td>
<td>.009 (.876)</td>
</tr>
<tr>
<td>Cog. Complexity Score</td>
<td>.147* (.014)</td>
<td>.098 (.103)</td>
<td>.069 (.250)</td>
<td>-.116 (.053)</td>
</tr>
<tr>
<td>Cog. Complexity Intensity</td>
<td>.122* (.042)</td>
<td>.029 (.626)</td>
<td>.042 (.488)</td>
<td>-.026 (.664)</td>
</tr>
</tbody>
</table>

Note: Dependent Variables 1= COSE: Microskills 2= COSE: Counseling Process 3= COSE: Awareness of Values 4=Attitude Measure (low scores = positive attitudes)

* sig. at p<.05

** sig. at p<.001 or p<.01
Table 8

*Test of Parallelism of Regression Hyperplanes (multivariate tests of interaction effects: covariates and dependent variables by groups*) MANCOVA

<table>
<thead>
<tr>
<th>Effects or covariates by groups</th>
<th>Wilks Lamda</th>
<th>$F^{1}$</th>
<th>$P$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Difficult Client Behaviors$^b$</td>
<td>.572*</td>
<td>4.394*</td>
<td>.000</td>
</tr>
<tr>
<td>Cultural Competence$^b$</td>
<td>.667*</td>
<td>3.116*</td>
<td>.000</td>
</tr>
<tr>
<td>Cognitive Complexity PVAFF</td>
<td>.860</td>
<td>1.125</td>
<td>.292</td>
</tr>
<tr>
<td>Cognitive Complexity Score</td>
<td>.900</td>
<td>.783</td>
<td>.801</td>
</tr>
<tr>
<td>Cognitive Complexity Intensity</td>
<td>.879</td>
<td>.962</td>
<td>.529</td>
</tr>
</tbody>
</table>

$^a$ Design: Group Variable 1 by Group Variable 2 By Group Variable 3 by Covariate 1 + Group Variable 1 by Group Variable 2 By Group Variable 3 by Covariate 2 + Group Variable 1 by Group Variable 2 By Group Variable 3 by Covariate 3 + Group Variable 1 by Group Variable 2 By Group Variable 3 by Covariate 4.

$^b$ between subject effects are significant for all four dependent variables.

$^1$ df = 32 and error df = 860.857

* sig. $p < .001$
Interaction and main effects

MANCOVA analysis revealed no significant interaction or main effects among the independent variables (3 groups) on the dependent variables when any effects of general self-efficacy (two subscales of the COSE) and cognitive complexity (three scores) were controlled (see Table 9). Descriptive statistics were obtained for each dependent variable (see Table 10). When the MANCOVA was performed without the covariates, one interaction effect was found to be significant (client gender by client sexual orientation) for counselor self-efficacy for the vignette client (see Table 11). A visual representation of this disordinal interaction effect reveals a tendency for counselors to rate their self-efficacy (on all three self-efficacy dependent measures) higher for lesbian clients than for gay clients. However, counselors rate their self-efficacy working with male heterosexual clients higher than female heterosexual clients (see Appendix K).

When analysis was performed using three different methods of addressing missing data concerns the results did not differ. These were mean replacement, mean estimation, and expectation-maximization (EM). The trend method of missing data replacement was used in this analysis. This method is based on a regression model of mean estimation.

Correlations between the dependent variables were performed (see Table 12). The subscales of the COSE that were dependent variables all correlated with each other. The Attitude Scale variable did not correlated with Microskills and Process, but did correlated with Awareness of Values variable.
Table 9

Multivariate Tests Results of a 3-way (Client Gender, Client Sexual Orientation, Counselor Gender) MANCOVA when Controlling for the Effects of the Covariates

<table>
<thead>
<tr>
<th>Grouping Variables</th>
<th>N*</th>
<th>Wilks Lamda</th>
<th>F</th>
<th>P</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Gender (CG)</td>
<td>133 (143)</td>
<td>.992</td>
<td>.520</td>
<td>.721</td>
</tr>
<tr>
<td>Client Sexual Orientation (CSO)</td>
<td>138 (138)</td>
<td>.989</td>
<td>.728</td>
<td>.574</td>
</tr>
<tr>
<td>Counselor Gender (CoG)</td>
<td>149 (127)</td>
<td>.984</td>
<td>1.065</td>
<td>.374</td>
</tr>
<tr>
<td>CG X CSO</td>
<td></td>
<td>.984</td>
<td>1.061</td>
<td>.377</td>
</tr>
<tr>
<td>CG X CoG</td>
<td></td>
<td>.995</td>
<td>.352</td>
<td>.842</td>
</tr>
<tr>
<td>CSO X CoG</td>
<td></td>
<td>.990</td>
<td>.647</td>
<td>.629</td>
</tr>
<tr>
<td>CG X CSO X CoG</td>
<td></td>
<td>.979</td>
<td>1.396</td>
<td>.236</td>
</tr>
</tbody>
</table>

Note: All multivariate interaction and main effects were non-significant at α=.05.

Note: df=4 and error df=260 for multivariate comparisons

*Between Subject Factors: Female (Male); Gay/Lesbian (Heterosexual); Female (Male)
Table 10

Descriptive Statistics for Dependent Variables by Client Gender, Client Sexual Orientation, and Counselor Gender

<table>
<thead>
<tr>
<th>Variable</th>
<th>N</th>
<th>Unadjusted Means</th>
<th>Adjusted Means</th>
<th>SD</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Microskills:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female CO, Female CL, Lesbian CL</td>
<td>39</td>
<td>60.21</td>
<td>59.90</td>
<td>5.74</td>
</tr>
<tr>
<td>Gay CL</td>
<td>40</td>
<td>58.60</td>
<td>58.81</td>
<td>9.38</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>38</td>
<td>60.32</td>
<td>60.69</td>
<td>7.20</td>
</tr>
<tr>
<td>Gay CL</td>
<td>32</td>
<td>59.47</td>
<td>58.76</td>
<td>7.47</td>
</tr>
<tr>
<td>Male CO, Female CL, Lesbian CL</td>
<td>24</td>
<td>62.08</td>
<td>61.91</td>
<td>8.43</td>
</tr>
<tr>
<td>Gay CL</td>
<td>30</td>
<td>58.60</td>
<td>58.48</td>
<td>5.76</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>37</td>
<td>57.73</td>
<td>58.28</td>
<td>9.12</td>
</tr>
<tr>
<td>Gay CL</td>
<td>36</td>
<td>61.47</td>
<td>61.46</td>
<td>5.90</td>
</tr>
<tr>
<td><strong>Process:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female CO, Female CL, Lesbian CL</td>
<td>39</td>
<td>49.82</td>
<td>49.64</td>
<td>6.04</td>
</tr>
<tr>
<td>Gay CL</td>
<td>40</td>
<td>48.95</td>
<td>49.05</td>
<td>7.29</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>38</td>
<td>48.84</td>
<td>49.30</td>
<td>6.69</td>
</tr>
<tr>
<td>Gay CL</td>
<td>32</td>
<td>49.66</td>
<td>48.87</td>
<td>7.05</td>
</tr>
<tr>
<td>Male CO, Female CL, Lesbian CL</td>
<td>24</td>
<td>51.17</td>
<td>50.10</td>
<td>7.42</td>
</tr>
<tr>
<td>Gay CL</td>
<td>30</td>
<td>47.93</td>
<td>48.61</td>
<td>8.34</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>37</td>
<td>46.97</td>
<td>47.75</td>
<td>7.98</td>
</tr>
<tr>
<td>Gay CL</td>
<td>36</td>
<td>50.08</td>
<td>49.74</td>
<td>6.54</td>
</tr>
<tr>
<td><strong>Values:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female CO, Female CL, Lesbian CL</td>
<td>39</td>
<td>20.18</td>
<td>20.10</td>
<td>1.73</td>
</tr>
<tr>
<td>Gay CL</td>
<td>40</td>
<td>18.73</td>
<td>18.83</td>
<td>3.90</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>38</td>
<td>19.61</td>
<td>19.75</td>
<td>2.63</td>
</tr>
<tr>
<td>Gay CL</td>
<td>32</td>
<td>19.81</td>
<td>19.58</td>
<td>3.55</td>
</tr>
<tr>
<td>Male CO, Female CL, Lesbian CL</td>
<td>24</td>
<td>19.75</td>
<td>19.50</td>
<td>3.26</td>
</tr>
<tr>
<td>Gay CL</td>
<td>30</td>
<td>18.93</td>
<td>18.95</td>
<td>3.87</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>37</td>
<td>18.03</td>
<td>18.20</td>
<td>4.43</td>
</tr>
<tr>
<td>Gay CL</td>
<td>36</td>
<td>19.03</td>
<td>19.03</td>
<td>3.16</td>
</tr>
<tr>
<td><strong>Attitude:</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female CO, Female CL, Lesbian CL</td>
<td>39</td>
<td>3.22</td>
<td>3.21</td>
<td>.61</td>
</tr>
<tr>
<td>Gay CL</td>
<td>40</td>
<td>3.21</td>
<td>3.20</td>
<td>.48</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>38</td>
<td>3.15</td>
<td>3.13</td>
<td>.51</td>
</tr>
<tr>
<td>Gay CL</td>
<td>32</td>
<td>3.17</td>
<td>3.20</td>
<td>.48</td>
</tr>
<tr>
<td>Male CO, Female CL, Lesbian CL</td>
<td>24</td>
<td>3.14</td>
<td>3.17</td>
<td>.57</td>
</tr>
<tr>
<td>Gay CL</td>
<td>30</td>
<td>3.38</td>
<td>3.41</td>
<td>.82</td>
</tr>
<tr>
<td>Male CL, Lesbian CL</td>
<td>37</td>
<td>3.12</td>
<td>3.12</td>
<td>.60</td>
</tr>
<tr>
<td>Gay CL</td>
<td>36</td>
<td>3.24</td>
<td>3.22</td>
<td>.62</td>
</tr>
</tbody>
</table>
Table 11

Significant interaction results of a 3-way (Client Gender, Client Sexual Orientation, Counselor Gender) MANOVA when Covariates were removed

<table>
<thead>
<tr>
<th>Variable</th>
<th>$F$</th>
<th>$P$</th>
<th>$ES$</th>
<th>$MSE$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude Measure</td>
<td>.093</td>
<td>.761</td>
<td>.000</td>
<td>.033</td>
</tr>
<tr>
<td>COSE: Microskills</td>
<td>5.782*</td>
<td>.017</td>
<td>.021</td>
<td>319.96</td>
</tr>
<tr>
<td>COSE: Counseling Process</td>
<td>6.877**</td>
<td>.009</td>
<td>.025</td>
<td>337.93</td>
</tr>
<tr>
<td>COSE: Awareness of Values</td>
<td>6.796*</td>
<td>.010</td>
<td>.025</td>
<td>73.90</td>
</tr>
</tbody>
</table>

Multivariate Results  

<table>
<thead>
<tr>
<th>Wilks Lambda</th>
<th>$F$</th>
<th>$P$</th>
<th>df</th>
<th>error df</th>
<th>$ES$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Client Gender X</td>
<td>.961</td>
<td>2.692*</td>
<td>.032</td>
<td>4</td>
<td>264</td>
</tr>
</tbody>
</table>

Client Sexual Orientation

* $p<.05$. **$p<.01$. Note: All other interaction and main effects were non-significant.
Table 12

Correlations Among Dependent Variables

<table>
<thead>
<tr>
<th></th>
<th>Process</th>
<th>Awareness</th>
<th>Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>Microskills</td>
<td>.524** (p=.000)</td>
<td>.416** (p=.000)</td>
<td>-.081 (p=.179)</td>
</tr>
<tr>
<td>Counseling Process</td>
<td>.352** (p=.000)</td>
<td>-.072 (p=.233)</td>
<td></td>
</tr>
<tr>
<td>Awareness of Values</td>
<td></td>
<td></td>
<td>-.118* (p=.048)</td>
</tr>
</tbody>
</table>

* sig. at p<.05

**sig. at p<.001
Summary

Data from 278 responses of counseling practitioners across the United States were examined for gender differences between attitudes toward a gay or lesbian vignette client and a male or female heterosexual vignette client. No statistically significant results were revealed when the effects of general self-efficacy and cognitive complexity of the counselor were controlled. Client gender and sexual orientation with counselor self-efficacy of the vignette client was the only significant interaction effect when covariates were removed. Conclusions of these findings, study limitations, and possible implications of these results on practicing counselors are discussed in Chapter 5.
The purpose of this study was to examine gender differences between practicing counselors on their attitudes toward clients of different sexual orientation. The focus of this chapter is a discussion of the results of the study. A review of the research question is discussed in reference to current and previous research findings. Study limitations are identified with their possible impact upon the results. This chapter will conclude with implications of the study and recommendations for further research.

Discussion of the Results

This study examined counselor attitudes toward clients with different sexual orientations using an experimental design. The effects of counselor cognitive complexity and general self-efficacy were controlled. Previous research finds gender differences prevalent when identifying counselor attitudes (Barrett & McWhirter, 2002; Casas et al., 1983; Garfinkle & Morin, 1978). Male counselors, more than female counselors, tend to report more negative attitudes toward lesbian and gay clients (Garfinkle & Morin). Data from the current study did not support these differences. The hypothesis was that there were gender differences among counselors’ attitudes toward male and female, homosexual and heterosexual clients. This hypothesis was not retained. It is unclear why differences were not found among the groups.

The lack of interaction effect among the variables means that counselor gender did not have an impact on attitudes toward clients of difference sexual orientation and gender. Taking a closer look at the statistical results, a significant interaction effect was found in among the COSE variables when covariates were removed. The gender of the
client and sexual orientation of the client have disordinal interaction effects on Microskills, Process, and Values COSE subscales. This result reveals the impact general self-efficacy (covariate) may have on the way counselors in this study responded to each client vignette. When the effects of this covariate were controlled, no interaction effects were found. When the effects were removed, counselors were more likely to report more self-efficacy working with the homosexual female or heterosexual male vignette client than the homosexual male or the heterosexual female vignette client.

The significant interaction effect did not include counselor gender as a significant interaction variable. This result does not support the literature that identifies gender differences among attitudes toward lesbian and gay men (Whitley & AEgisdottir, 2000). Perhaps the influence of general self-efficacy and cognitive complexity play a role in the elimination of the client gender and sexual orientation effects on counselor attitudes.

A variety of explanations for the non-significant findings of this study are plausible. One possible reason is the impact of age and years of counseling experience on the participants of the study. These two variables correlated significantly with each other, as expected ($r = .56, p = .000$). The mean age was 52 years. The mean number of years counseling experience was 17 years. Therefore, participants in the current study were older and more experienced than those of other counselor self-efficacy studies, which often used student samples or counselor trainees (Heppner et al., 1998; Larson & Daniels, 1998; Leach et al., 1997).

Although not part of the primary research hypothesis, counseling experience was examined and may have impacted the study results. Results of studies with more experienced counselors indicate positive correlations between counselor experience and...
self-efficacy (Larson & Daniels, 1998), however, that relationship may plateau after more than two years experience (Larson et al., 1992). When examining total self-efficacy scores in the current study, means for counselors with 2-8 years experience and 9-50 years experience were generally the same (183 and 182 respectively). The four persons having one year counseling experience had lower total self-efficacy scores (168). These results support the above study conclusions related to self-efficacy among experienced counselors. The sample of older, more experienced counselors in the current study was unexpected and may have contributed to the non-significant hypothesis findings.

A second possible reason for these results is that counselors, both male and female, do not have differing attitudes toward homosexual and heterosexual clients. There has been particular focus in the counseling profession toward self-awareness of biases and examining self-competencies related to clients of different cultures (Roysircar, 2003), physical abilities (Sweet & Estey, 2003), age (Danzinger & Welfel, 2000), gender (Danzinger & Welfel), and sexual orientation (Israel, 2003). This emphasis may be helping counselors make changes in their attitudes toward different clients. Those possible changes could be reflected in participants’ responses in the current study.

A third possible reason for the results is that the measures were not clear in measuring the underlying attitudes of study participants, particularly when using vignettes. Perhaps the client in the vignette did not represent the designated groups effectively.

**Limitations of the Study**

The limitations of this study have potential influence on the results. They must be considered among possible reasons for non-significant findings. Methodological concerns
are often found after data has been collected. Only then can possible limitations be fully identified. The study sample and instruments used have possible impacts on the data and may limit the generalizability of the results.

Sample Characteristics

The sample was intended to consist of practicing counselors nationwide. It did not include counselors who are primarily students or educators. The mean and median age of the sample was 52. The highest frequencies of ages were 45, 52, and 56 years old. The range was from 26 to 83. This was not expected. An older sample of counselors with more experience could have biased the sample, because perhaps those experienced professionals fill out study questionnaires more often and have different attitudes toward research participation than younger practicing counselors or those with less counseling experience.

The question of sexual orientation of the counselor was not asked, primarily due to the design and purpose of the study. This would have possibly revealed the true purpose of the study. Participants who self-identify as heterosexual or homosexual could impact the results of the study by having favorable or unfavorable attitudes toward clients with that same orientation (Bieschke et al., 2000). This may have unknowingly impacted the results of the study by not knowing the sexual orientation of those who completed the questionnaires and those who chose not to participate.

Instrument Validity

Several questions are raised when discussing the instruments of the study. The measures may not have been able to detect differing underlying attitudes that could have been present. Previous studies about attitudes toward homosexuals and heterosexuals
used actual attitude measures including items focused on lesbian and gay men (Kite & Whitley, 1996). The attitude measures used in this study have not been used specifically with practicing counselors regarding attitudes toward clients of different sexual orientations. They were, however, used as a measure of underlying attitudes that are not easily obtained from other attitude measures. It is possible that the instruments were not effective as a measure of counselors’ attitudes. There were three instruments used to gather data for analysis of the dependent variables and covariates. Each instrument has possible concerns that may impact the results of the study.

The instructions of the Attitude Measure appeared to be unclear to one participant who made comments in the margins. This participant did not understand if the instrument was to be completed according to his or her own impression of the client in the vignette or what the client in the vignette may have felt. Even though the instructions appeared clear to the researcher, at least one participant did not answer the questions as they were intended. This person’s questionnaire data was not considered in the analysis. Although one participant’s data in a sample size of sufficient magnitude as in this study does not seem significant, it is unknown if others in the study also completed the Attitude Measure incorrectly. Highlighting parts of the instructions in bold type may have helped to alleviate this problem.

Another possible problem with the Attitude Measure was the adjectives used in the instrument. Two participants believed these were “too judgmental” and commented that they refuse to complete this questionnaire. Many responders marked the center of the rating scale in-between two specifically marked rating areas. Scores of “3.5” were used for those who marked the items as such. There were 13 responders who left at least one
item on this instrument blank. There may be a concern about the instrument’s effectiveness with a sample of counselors, although reliability statistics revealed high internal consistency (Alpha = .88).

Few studies have examined attitudes toward clients of different sexual orientations using a counselor self-efficacy measure. The COSE has been used to measure self-efficacy. However, in the current study subscales were used to measure counselor self-efficacy working with the vignette client. Other subscales were used to measure general counselor self-efficacy and control for this effect. This instrument has not been used in this way prior to this study. The possible subscales to identify a general measure of self-efficacy may not have had sufficient construct validity. The method of dividing the subscales to determine which would be used as dependent measures and which used as covariates was decided primarily by the content of the items and which was determined to be appropriate for self-efficacy toward a specific client and for general self-efficacy toward clients. Some items could be linked to the vignette clients and some were not. The Awareness of Values subscale had lower reliability than desired (Alpha=.44). This scale had only four items and may have been a more reliable measure with more items in the scale.

The Repertory GRID was used to measure cognitive complexity of the participants. Analysis of these GRIDs was very complex and yielded helpful information. Some participants left blank spaces within the GRID and that contributed to a difficult analysis process. The resulting variables from this measure did not correlate well with the dependent variables and so were not expected to contribute much variance in the primary analysis. It has been unclear the direct impact of cognitive complexity may have on the
counselors’ attitudes toward clients, however, studies have provided the opportunity to explore further the connections between counselor cognitive complexity and various aspects of the counselor/client relationship.

**Implications of the Study**

The results have implications for professional counselors, counselor trainees, and counselor educators. The results of this study point to the possible validation of counselors’ efforts to self-identify their own attitudes that may get in the way of their effective work with clients of different sexual orientations.

**Implications for Counselor Practitioners**

The results of this study suggest that practicing counselors are possibly heeding the counseling profession’s call to be sensitive to clients of different sexual orientations as evidenced by established counselor competencies for counseling GLBT clients (AGLBIC, n.d.). This is a step toward meeting specific needs of this client population. Rudolph (1988) believes that clients are responding more favorably to those counselors who are open and do not have negative attitudes toward lesbian and gay male clients. The current study may not fully assess the openness of counselors toward clients, but the results do imply counselors perceive high skill ability when working with clients of different sexual orientations.

**Implications for Counselor Trainees**

Implications for Counselor Trainees based on this study are not clear. It may be possible that counselors may, through experience, have more positive attitudes toward clients of different sexual orientations. More importantly, trainees’ cognitive complexity may not impact the development of their attitudes toward clients with different sexual
orientation. More research is needed to identify possible connections between cognitive complexity of trainees and their self-efficacy toward different clients.

**Implications for Counselor Educators**

Counselor educators’ role includes helping students develop attitudes toward clients that are not harmful. This study can contribute to counselor educators’ understanding of what practicing counselors are reporting regarding their own self-efficacy and attitudes toward lesbian and gay clients. Educators can be encouraged by these study results as they continue to build on a foundation of research that impact the practice of counselors and services to their clients.

**Future Research**

More research is needed in the area of exploring counselor attitudes toward clients of different sexual orientations. Particular attention to the underutilized sample of experienced practicing counselors would bring knowledge and understanding that is unique to this population of counseling professionals. Experience and age appear to have impacted counselors’ attitudes toward clients. Although the study of attitude development among counseling students and trainees is important, it may not be the key to the positive impact on counselors self-efficacy when working with clients overtime.

This study did not include attitudes toward bisexual or transgender clients who may have been impacted by counselors with differing attitudes. Research addressing these client groups is needed. Further research using counselor self-efficacy as a way to identify attitudes toward specific client groups is needed. Also, other measures are needed that are not obvious measures of attitudes toward lesbians and gay men.
Perhaps future research to address the contributing factors toward a lack of gender differences found in this study may be helpful. How much is education about these client groups affecting the attitudes of developing counselors? Does cognitive complexity play any role in how counselors develop their own self-efficacy toward different clients? These are only a couple of the many questions that arise from the examination of the variables in this study.

Conclusion

This study’s purpose was to explore gender differences between counselor attitudes toward clients of different gender and sexual orientation. No significant differences were found. The possible reasons for these results may have to do with who participated in the study, particularly since the sample unexpectedly consisted of older counselors with considerable amount of experience. Counselors may be attending more toward self-awareness and self-perceptions of effectiveness with clients.
References


APPENDIX A

COVER LETTER
Dear Colleague,

This study is concerned with counselors’ impressions of clients based on limited written information, counselors’ estimate of their abilities, and counselors’ cognitive complexity. This research is being conducted among a national sample of randomly selected clinical counselors. Your participation is very much desired.

The enclosed questionnaires will require only 15-45 minutes to complete. A stamped, addressed envelope is provided for return of the questionnaire packet (except for this letter and the consent form). To ensure confidentiality of your responses, do not put your name or any other identifying information on the questionnaire materials. Upon completion of the study, you will be notified of a website where you may view a summary of the study results. If you have any questions about completing the questionnaires, please write me at the above address or contact me by e-mail at dlmabd@alltel.net.

We understand that your time is valuable and you may receive other such requests. However, we hope you will take a little time to respond. Enclosed you will also find a one dollar bill. This is yours to keep, regardless of your choice to participate. Thank you.

Sincerely,

Dina L. Miller, M.A., PCC
Primary Investigator

Patricia Beamish, Ph.D.
Faculty Advisor
APPENDIX B

CONSENT FORM
Explanation of Study

The primary purpose of this research is to identify counselors’ impressions of clients based on limited written information and to make gender comparisons related to how counselors estimate their skill abilities and the complexity with which they view others.

Procedures for this study include acquiring participants’ names and addresses from a randomly chosen list of the American Counseling Association members who work primarily as mental health counseling practitioners. After receiving a packet of questionnaires, you are invited to complete them and return the packet of questionnaires in the addressed, postage-paid envelope to the principal investigator. Data will be entered into a statistical computer program and analyzed. Results will be reported in summary form as part of a doctoral dissertation study.

Expected duration of participation will be approximately 15 to 45 minutes long. That is what it will take to complete the packet of questionnaires and put them in an envelope to be returned. Upon completion of the study, you will be notified of a website where you may view a summary of the study results.

This study is an experimental study such that you will be randomly assigned to an experimental group.

Risks and Discomforts: Minimal to no risks are expected to be experienced from participation in this study. Participation is completely voluntary. You are asked to complete the questionnaire without consultation with others.

Benefits: There are no personal benefits to be gained in participating in this study. This study may contribute to literature on attitudes of practicing counselors in relationship to counselors’ self-efficacy and counselors’ cognitive complexity.

Confidentiality and Records: All information received by you will be treated with utmost confidence. Upon identifying participants who returned the packet, the information will be entered into a dataset with only identification numbers as identifiers. No names are used in the data management process. All returned questionnaires will be destroyed at the end of the research project.

Compensation: As a token of my appreciation, you have been sent a $1.00 bill. This is for you to keep regardless.
Contact Information
If you have any questions regarding this study, please contact Dina L. Miller at dlmabd@alltel.net; phone: 740-788-0214 (days) or Dr. Patricia Beamish at beamish@ohio.edu; phone: 740-593-4996 (days).

If you have any questions regarding your rights as a research participant, please contact Jo Ellen Sherow, Director of Research Compliance, Ohio University, (740) 593-0664.

I certify that I have read and understand this consent form and agree to participate as a subject in the research described. I agree that known risks to me have been explained to my satisfaction and I understand that no compensation is available from Ohio University and its employees for any injury resulting from my participation in this research. I certify that I am 18 years of age or older. My participation in this research is given voluntarily. I understand that I may discontinue participation at any time without penalty or loss of any benefits to which I may otherwise be entitled. I certify that I am free to keep this consent form for my records. Completion and return of the questionnaires implies consent to use the data for research purposes.
APPENDIX C
DEMOGRAPHIC QUESTIONNAIRE
Demographic Questionnaire

Please answer the following questions about yourself:

1. Gender: ___ Female   ___ Male

2. Age: ______ (In number of years)

3. Counseling Experience: ______ (In number of years)

4. Highest Degree Obtained: ___ Bachelors  
___ Masters  
___ Doctorate  
___ Other (__________________)

5. Geographical Region of Counseling Practice:

___ North Atlantic Region (CT, DE, DC, ME, MA, NH, NJ, NY, PA, PR, RI, VT, VI)

___ Southern Region (AL, AR, FL, GA, KY, LA, MD, MS, NC, SC, TN, TX, VA, WV)

___ Midwest Region (IL, IN, IA, KS, MI, MN, MO, NE, ND, OH, OK, SD, WI)

___ Western Region (AK, AR, CA, CO, HI, ID, MT, NV, NM, OR, UT, WA, WY)
APPENDIX D

CLIENT INTAKE REPORT
(4 versions – 1 per packet)
Please read the following description of a hypothetical client intake report. Based on the limited information provided, complete the scale below.

Steve, a 35-year-old clerk applied for treatment at a clinic with the complaint that, “My mind wanders. It’s hard for me to keep my attention on one task, and I get distracted so easily.” He also describes himself as disorganized, restless, irritable, and bad tempered. He tended to overreact emotionally and was often depressed for days at a time. His relationship with his longtime lover, James, had begun to unravel. His lover complained, “Problems just never get solved.”

The client stated that his mother always talked about how “hyper” he was as a child. Although Steve’s memories of his childhood were sketchy, he recalled being a disciplinary problem and often being sent to the principal’s office in elementary school. He had no treatment as a child, but at age 20 and again at age 23 saw a counselor because he had difficulty “coping.” His relationship with his previous lover, which had been very stormy, terminated at age 25. He was again briefly in treatment. Finally, 2 years ago he went to a psychiatrist and was put on antidepressant medication, which he took for several months without any noticeable improvement.

Becky, a 35-year-old clerk applied for treatment at a clinic with the complaint that, “My mind wanders. It’s hard for me to keep my attention on one task, and I get distracted so easily.” She also describes herself as disorganized, restless, irritable, and bad tempered. She tended to overreact emotionally and was often depressed for days at a time. Her relationship with her longtime lover, Jill, had begun to unravel. Her lover complained, “Problems just never get solved.”

The client stated that her mother always talked about how “hyper” she was as a child. Although Becky’s memories of her childhood were sketchy, she recalled being a disciplinary problem and often being sent to the principal’s office in elementary school. She had no treatment as a child, but at age 20 and again at age 23 saw a counselor because she had difficulty “coping.” Her relationship with her previous lover, which had been very stormy, terminated at age 25. She was again briefly in treatment. Finally, 2 years ago she went to a psychiatrist and was put on antidepressant medication, which she took for several months without any noticeable improvement.
Please read the following description of a hypothetical client intake report. Based on the limited information provided, complete the scale below.

Becky, a 35-year-old clerk applied for treatment at a clinic with the complaint that, “My mind wanders. It’s hard for me to keep my attention on one task, and I get distracted so easily.” She also describes herself as disorganized, restless, irritable, and bad tempered. She tended to overreact emotionally and was often depressed for days at a time. Her relationship with her longtime lover, James, had begun to unravel. Her lover complained, “Problems just never get solved.”

The client stated that her mother always talked about how “hyper” she was as a child. Although Becky’s memories of her childhood were sketchy, she recalled being a disciplinary problem and often being sent to the principal’s office in elementary school. She had no treatment as a child, but at age 20 and again at age 23 saw a counselor because she had difficulty “coping.” Her relationship with her previous lover, which had been very stormy, terminated at age 25. She was again briefly in treatment. Finally, 2 years ago she went to a psychiatrist and was put on antidepressant medication, which she took for several months without any noticeable improvement.

Please read the following description of a hypothetical client intake report. Based on the limited information provided, complete the scale below.

Steve, a 35-year-old clerk applied for treatment at a clinic with the complaint that, “My mind wanders. It’s hard for me to keep my attention on one task, and I get distracted so easily.” He also describes himself as disorganized, restless, irritable, and bad tempered. He tended to overreact emotionally and was often depressed for days at a time. His relationship with his longtime lover, Jill, had begun to unravel. His lover complained, “Problems just never get solved.”

The client stated that his mother always talked about how “hyper” he was as a child. Although Steve’s memories of his childhood were sketchy, he recalled being a disciplinary problem and often being sent to the principal’s office in elementary school. He had no treatment as a child, but at age 20 and again at age 23 saw a counselor because he had difficulty “coping.” His relationship with his previous lover, which had been very stormy, terminated at age 25. He was again briefly in treatment. Finally, 2 years ago he went to a psychiatrist and was put on antidepressant medication, which he took for several months without any noticeable improvement.
APPENDIX E

REPERTORY GRID TEST DIRECTIONS
**Directions**: Think of a person you know for each of the role titles listed in the columns. Write their initials near the role title (Ex: mother, S.M.). Each role title must be a different person. While keeping this person in mind, work down the column of bipolar terms and rate that person on a scale from 1 to 6. A rating of “1” means they are “Outgoing”. A rating of 6 means they are “Shy”. Ratings of 2, 3, 4, or 5 mean that they are described as in-between these two opposite terms.

**An Example**: If I rate myself as extremely outgoing, I would put a “1” in the first box under “yourself”. Then I would rate myself on “adjusted” versus “maladjusted” (1 – 6). A rating of “3” or “4” would indicate a belief about the person that is toward the middle, between “adjusted” and “maladjusted”.

**Please, complete the entire grid with a number from 1 to 6 in each box.**
APPENDIX F

COSE SUBSCALES
COSE

Rating Scale: 1 = “Strongly Disagree”

2 = “Moderately Disagree”

3 = “Slightly Disagree”

4 = “Slightly Agree”

5 = “Moderately Agree”

6 = Strongly Agree”

SUBSCALES SCORES: sum of the items listed below for each scale

The Microskills subscale (12 items): 1, 3, 4, 5, 8, 10, 11, 12, 14, 17, 32, and 34.

The Process subscale (10 items): 6, 9, 16, 18, 19, 21, 22, 23, 31, and 33.


The Cultural Competence subscale (4 items): 29, 30, 36, and 37.

The Awareness of Values subscale (4 items): 2, 7, 13, and 35.

Reversed scored: Items 2, 6, 7, 9, 16, 18, 19, 21, 22, 23, 24, 26, 27, 28, 31, 33, 35, 36, 37.
APPENDIX G
PILOT STUDY RESULTS
<table>
<thead>
<tr>
<th>Order</th>
<th>Frequencies:</th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>GRID then the COSE</td>
<td>4</td>
<td>36.4%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>COSE then the GRID</td>
<td>7</td>
<td>63.6%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Group</td>
<td>Gender</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male gay</td>
<td>Female</td>
<td>4</td>
<td>36.4%</td>
<td></td>
</tr>
<tr>
<td>Female lesbian</td>
<td>Male</td>
<td>2</td>
<td>18.2%</td>
<td></td>
</tr>
<tr>
<td>Male heterosexual</td>
<td>Female</td>
<td>2</td>
<td>18.2%</td>
<td></td>
</tr>
<tr>
<td>Female heterosexual</td>
<td>Male</td>
<td>3</td>
<td>27.3%</td>
<td></td>
</tr>
<tr>
<td>Gender</td>
<td>Degree</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Female</td>
<td>BA/BS</td>
<td>1</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>MA/MS</td>
<td>7</td>
<td>63.6%</td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>PhD/PsyD</td>
<td>3</td>
<td>27.3%</td>
<td></td>
</tr>
<tr>
<td>Time</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td></td>
<td>3</td>
<td>27.3%</td>
<td></td>
</tr>
<tr>
<td>To complete</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17</td>
<td></td>
<td>1</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>The packet</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>25</td>
<td></td>
<td>2</td>
<td>18.2%</td>
<td></td>
</tr>
<tr>
<td>In minutes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>30</td>
<td></td>
<td>1</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>35</td>
<td></td>
<td>2</td>
<td>18.2%</td>
<td></td>
</tr>
<tr>
<td>40</td>
<td></td>
<td>1</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>45</td>
<td></td>
<td>1</td>
<td>9.1%</td>
<td></td>
</tr>
<tr>
<td>Client vignette realistic?</td>
<td>Yes</td>
<td>9</td>
<td>81.8%</td>
<td></td>
</tr>
<tr>
<td>No</td>
<td></td>
<td>2</td>
<td>18.25</td>
<td></td>
</tr>
<tr>
<td>Were directions clear?</td>
<td>Yes</td>
<td>11</td>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>
Would the Grid be easier to fill out across rows?

- Yes: 5 (45.5%)
- No: 5 (45.5%)
- Missing: 1 (9.1%)

Descriptive statistics:

Number of years counseling experience?
- Mean: 12 years
- Range: 34 years
- Min/Max: 1/35 years
- SD: 10.9

Age
- Mean: 44 years old
- Range: 37
- Min/Max: 30-67

Reliability statistics: Crombach’s Alpha

- Attitude Measure: .93
- Repertory Grid: .67 overall
- Elements:
  - Self: .64
  - Person Dislike: .81
  - Mother: .89
  - Person like to help: .45
  - Father: .53
  - Friend same sex: .22
  - Friend opposite sex: .87
  - Person most: .80
  - Uncomfortable with
  - Boss: .68
  - Person difficult to understand: .85
COSE Subscales: Overall .90
    Microskills .79
    Process .89
    Difficult .64
    Cultural .68
    Values .16

Statistically Significant Correlations:
COSE Microskills with Years Counseling Experience = .74
COSE Difficult Client with Years Counseling Experience = .72
Experience did correlate significantly with 7 COSE items (1,3,5,8,13,15,20)
Age did not correlate significantly with the COSE subscales
Age did correlate significantly with 4 COSE items (10, 13, 15, 20)
Order of the instruments did not correlate with any variables (no order effect)
COSE inter-item correlations ranged from -.53 (#12) to .60 (#26)

Qualitative Data:
The Purpose of the study?
Five people generally identified the purpose of the study related to biases or self-evaluation of skills or judgments. One person incorrectly identified the purpose of the study. Three people did not know. Two people did not answer the question. No one stated the purpose was specifically related to attitudes toward lesbian and gay clients.

Realistic Client?
Two people wanted a more detailed description of the vignette client. Two people did not like the “judgmental” nature of the descriptors on the Attitude Measure.
APPENDIX H

NEW COVER LETTER
Dear Colleague,

Approximately five weeks ago you received a questionnaire packet like this one inviting you to participate in a study concerning counselors’ impressions of clients, counselors’ estimate of their abilities, and counselors’ cognitive complexity. Enclosed is a duplicate set of questionnaires if you would like to participate. This research is being conducted among a national sample of randomly selected clinical counselors. Your participation is very much desired.

The enclosed questionnaires will require only 15-45 minutes to complete. A stamped, addressed envelope is provided for return of the questionnaire packet (except for this letter and the consent form). To ensure confidentiality of your responses, do not put your name or any other identifying information on the questionnaire materials. Upon completion of the study, you will be notified of a website where you may view a summary of the study results. If you have any questions about completing the questionnaires, please write me at the above address or contact me by e-mail at dlmabd@alltel.net.

If you have returned the questionnaires, please disregard this additional packet. Thank you.

Sincerely,

Dina L. Miller, M.A., PCC
Primary Investigator

Patricia Beamish, Ph.D.
Faculty Advisor
APPENDIX I

DEBRIEFING LETTER
Dear Colleague,

This letter is to debrief you about the study you participated in a few months ago concerned with counselors’ impressions of clients based on limited written information, counselors’ estimate of their abilities, and counselors’ cognitive complexity. This research was conducted using a national sample of randomly selected clinical counselors.

The study was concerned with the above areas of interest; however, the client vignette received by participants defined four experimental groups. You were in one of the four groups. Each group participant received the same client intake vignette except for difference in client gender and sexual orientation. The hypotheses of the study intended to examine how specific variables (counselor gender, client gender, and client sexual orientation) affect counselor attitudes toward clients and counselor self-efficacy, controlling for the effects of counselor cognitive complexity. Due to the design of the study and attempts to control for socially desirable responses, some information about the main purpose of the study had to be withheld from the study description at the time you completed the packet.

If you have any questions, please write me at the above address or contact me by e-mail at dlmabd@alltel.net.

Sincerely,

Dina L. Miller, M.A., PCC
Primary Investigator

Patricia Beamish, Ph.D.
Faculty Advisor
APPENDIX J

PARTICIPANT COMMENTS
Participant Comments

Comments from participants who returned blank questionnaires:

- Chose not to participate
- Disabled, Caring for husband
- Don’t do counseling
- No response to call
- Not a practicing counselor
- Out of the country
- Sorry, can’t fill out survey
- Time not allow participation
- Too busy
- Unable to do it
- Unavailable
APPENDIX K

DISORDINAL INTERACTIONS
Interaction effect on COSE: Microskills

Client sexual orientation

Mean MICROSK:

- 61.5
- 61.0
- 60.5
- 60.0
- 59.5
- 59.0
- 58.5
- 58.0

Client gender:

- Female
- Male

Gay/lesbian

Heterosexual
Interaction effect on COSE: Process

Client sexual orientation

Mean PROCESS

50.5
50.0
50.0
50.0
49.5
49.0
48.5
48.0
47.5

client gender
female
male

gay/lesbian heteroseexual
Interaction effect on COSE: Values

Client sexual orientation

Mean VALUES

client gender
- female
- male

gay/lesbian heterosexual
APPENDIX L

IRB LETTERS
The following research study has been approved by the Institutional Review Board at Ohio University for a period of one year. This review was conducted through an expedited review procedure as defined in the federal regulations as Category(ies):

Project Title: The Impact of Male and Female Attitudes Toward Lesbian and Gay Clients on Counselor Self-Efficacy, and Counselor Cognitive Complexity

Project Director: Dina Miller

Faculty Advisor (if applicable): Patricia Beamish

Department: Counseling and Higher Ed.

Jacqueline Legg, M.B.A., Chair
Institutional Review Board

7/30/03
Date
The amendment, detailed below, and submitted for the following research study has been approved by the Institutional Review Board at Ohio University.

**Amendment:** Participant sample from the American Counseling Association instead of from the American Mental Health Counseling Association. Consent form changed accordingly.

**Project:** The Impact of Male and Female Attitudes Toward Lesbian and Gay Clients on Counselor Self-Efficacy, and Counselor Cognitive Complexity

**Project Director:** Dina Miller

**Advisor:** Patricia Beamish

**Department:** Counseling and Higher Ed.

Rebecca Cale, Associate Director, Research Compliance
Institutional Review Board

9/3/03

Date