THE INFLUENCE OF EGO IDENTITY ON HETEROSEXUAL INDIVIDUALS’ ATTITUDES TOWARD LESBIAN AND GAY INDIVIDUALS

By

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To my parents, for being so good at being parents;
   To Rand, for being my everything, always;
   To my brother, for being an example and a guide;
To my sister, for reminding me that it’s good to be just who you are.

Thank you so much for helping me to get to where I am.
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THE INFLUENCE OF EGO IDENTITY ON HETEROSEXUAL INDIVIDUALS’ ATTITUDES TOWARD LESBIAN AND GAY INDIVIDUALS

By

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The purpose of this study was to examine factors related to heterosexual individuals’ attitudes of tolerance versus condemnation toward lesbian and gay (LG) individuals. Factors examined include ego identity commitment, ego identity exploration, authoritarianism, social dominance orientation, gender role attitudes, eroticism, and the number/intimacy of contact experiences with LG people. Using Herek’s theory of attitude function, it is posited that attitudes, including those toward LG individuals, may serve an ego defensive function. Theoretically, according to ego identity development theory, the greater degree to which an individual has explored life options and has committed to those which are a satisfactory match, the greater degree of maturity of one’s ego/ego-defensive functioning. Along these lines, having a more mature and adaptive ego identity might enable an individual to be more tolerant toward others who are different from her or him, especially LG individuals.

Based in data collected from an Internet-based sample, results indicate that higher levels of authoritarianism and social dominance orientation are related to lower levels of ego identity exploration; also, higher levels of authoritarianism are related to high degrees of commitment. Additionally, greater numbers and greater intimacy of LG contact experiences were associated
with higher levels of ego identity exploration. In turn, higher levels of ego identity exploration were related to more tolerant attitudes toward LG people. When considering individuals who demonstrated higher levels of authoritarian traits, ego identity exploration statistically moderated these individuals’ relatively more condemning attitudes toward LG people.

Previous findings in the literature on attitudes toward LG people, many times based in a college-aged sample, were also replicated in the current study, which used an older, non-college-student sample. Such replicated findings include heterosexual males having more negative attitudes toward LG individuals than do heterosexual women; however, this gender difference was eliminated when controlling for the influence of gender-role-based attitudes. Also, statistically significant differences in attitudes toward LG people were found among different races/ethnicities, especially among African American- and Hispanic-identified participants.
CHAPTER 1
INTRODUCTION

In 1998, the murders of Matthew Shepard and Billy Jack Gaither shocked thousands of Americans (Herek, 2000). Shepard was a 21-year-old college student in Wyoming, and Gaither was a 39-year-old factory worker in Alabama. The two had apparently little in common, save the fact that both of them were targeted for attack because they were gay men. If the two murders had not been grounded in anti-gay sentiment, they might not have been so noteworthy as to garner the tremendous amount of attention they did in the mass media. However, due to the hate-based nature of the crimes, they drew attention to the danger and violence faced by lesbian and gay (LG) individuals on a regular basis. In early 2004, the National Coalition of Anti-Violence Program’s report on violent acts based in prejudice stated that more than 2000 violent incidents over the previous year occurred because of the victim’s sexual orientation. Since a great number of these types of crimes may never be reported to the police due to the stigmatized status of the victim, there may be many more such crimes that are never reported (Herek, Gillis, & Cogan, 1999).

Stigmatization of LG individuals is not a new phenomenon (Chauncey, 1994), existing well into the previous century, and likely longer before that. With the rise of the civil rights movement in the 1960s, however, LG individuals’ condemnation was increasingly scrutinized. Eventually, the American Psychiatric Association eventually declared that homosexuality was not a mental illness (American Psychiatric Association, 1980), and the question of what led some individuals to maintain negative perceptions of LG people began to receive closer attention. Perhaps due to this attention and to LG individuals’ increasing presence in visible society, negative attitudes toward lesbians and gay men (hereafter referred to as “negative LG attitudes” or “sexual prejudice”) have decreased over the past 30 years (Loftus, 2001): whereas at least
two-thirds of respondents to the General Social Survey (GSS) considered same-sex sexual behavior “always wrong” in the 1970s and 1980s, that figure declined significantly in the 1990s; by 1996, only 56% of GSS respondents regarded such behavior as always wrong (Yang, 1997).

In addition to sexual behavior between two women or two men, much of the public also holds negative attitudes toward LG individuals themselves (Herek, 2000). In a study conducted using a random national sample, more than half of the heterosexual participants expressed disgust for LG individuals (Herek, 1994). Respondents to the American National Election Studies typically rate lesbians and gay men among the lowest of all social groups on a “feeling thermometer,” in which on a scale of 1 to 101, individuals are asked to rate how they feel about a particular group, issue, or other factor (Yang, 1997). To understand this sexual prejudice (which has sometimes been labeled “homophobia” or “heterosexism”), a growing number of studies have explored various factors that appear to contribute to negative LG attitudes.

Findings from public opinion surveys have revealed higher levels of sexual prejudice among individuals who are older, less educated, living in the U.S. South or Midwest, and living in rural areas (Herek, 1994). Also, heterosexual men generally have more negative attitudes toward LG individuals, especially gay men, than do heterosexual women (Kite & Whitley, 1996). One possible explanation for gender-based differences in LG attitudes rests in a gender role attitudes/beliefs analysis. This point of view states that heterosexuals’ evaluations of gay men and lesbians are grounded in a much larger belief system concerning men and women and their appropriate roles in society (Kite, 1994). Gender roles for men, a class of symbolic beliefs that may be grounded in family-inspired values or in religious or political ideology, appear somewhat more narrowly defined and inflexible than are those for women (Bem, 1993). In this light, a violation of male gender roles is usually considered more inappropriate than violation of
female roles (Herek, 1988), and an individual’s violation of those roles results in a challenge toward concepts of gender appropriateness and a particular individual’s acceptability. An alternate explanation of heterosexual men’s apparently greater sexual prejudice lies in the fact that these men may attribute greater erotic value to sex between two women than to sex between two men, thus rendering a more positive opinion of lesbians (Louderback & Whitley, 1997). In contrast, heterosexual women appear to attribute low erotic value to both forms of sexual behavior (Louderback & Whitley, 1997).

Apart from gender, religious variables are theoretically and empirically supported in predicting attitudes toward LG individuals (Schwartz & Lindley, 2005). Variables such as Allport and Ross’s (1957) classification of intrinsic and extrinsic religious orientations, and fundamentalism have been explored. Within the context of religion, a fundamentalist understanding of religion (i.e., a literal interpretation of religious scripture) is one of the core variables that predict more negative LG attitudes. Interestingly, however, when one includes a consideration of authoritarianism, which is a personality variable extensively studied by Altemeyer (1981, 1996), the significance of fundamentalism is largely eliminated (Laythe, Finkel, & Kirkpatrick, 2001).

Altemeyer’s (1981, 1996) theoretical conceptualization of authoritarianism is characterized by high degrees of submission to authorities, aggressiveness toward outgroups, and adherence to conventions perceived to be endorsed by society and its authorities, suggesting that people with high degrees of authoritarianism would be likely to exhibit anti-LG attitudes. More specifically, these attitudes would be likely since LG persons are explicitly condemned by many religious and political leaders, making LG persons an acceptable target for prejudice and hostility. Additionally, lesbians and gay men represent a socially stigmatized out-group relative...
to heterosexual women and men, and are perceived as advocates for political change in social conventions. A number of studies have found significant positive links between authoritarianism and anti-LG attitudes (e.g., Altemeyer, 1981, 2001; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Laythe, Finkel, & Kirkpatrick, 2001) indicating that persons with high levels of authoritarianism express more anti-LG attitudes than do persons with low levels of authoritarianism.

In addition to authoritarianism, social dominance orientation (SDO) also has been linked consistently with negative attitudes toward lesbians and gay men. Pratto, Sidanius, Stallworth, and Malle (1994) defined SDO as the “extent to which one desires that one’s in-group dominate and be superior to out-groups” (p 724). SDO taps a general attitudinal orientation toward intergroup relations that reflects a preference for hierarchical rather than egalitarian relations. More specifically, the desire to maintain the superior position of their in-groups relative to outgroups motivates people high in SDO to accept hierarchy-legitimizing myths that denigrate members of out-groups and enforce the status quo of their in-groups’ power position. Thus, persons high in SDO tend to have negative LG attitudes because LG persons have lower social status than do heterosexuals (Whitley & Lee, 2000). The empirical literature supports the expected link between SDO and anti-LG attitudes. Across a number of studies, significant correlations have been found between SDO and anti-LG attitudes (e.g., Altemeyer, 1998; Whitley, 1999; Whitley & Lee 2000) such that higher SDO scores are related to higher levels of anti-LG attitudes.

Another variable that seems to predict positive attitudes toward LG individuals fairly consistently is prior contact with a lesbian or gay man (Herek & Capitanio, 1996). Interpersonal contact appears strongly and significantly associated with favorable attitudes toward gay men,
and quantitatively more contact experiences are associated with more favorable attitudes. Intimate contact is more likely than superficial contact to be associated with favorable attitudes, and direct disclosure of another’s LG orientation was more likely than second-hand disclosure to be associated with positive attitudes toward LG people (Herek & Capitanio, 1996).

Unfortunately, in exploring the above variables, almost none of the studies link their hypotheses or findings to a theoretical framework. Rather, one study appears to build on another’s variable-based findings, without providing a way for the findings to be expanded or understood. This is especially surprising when one considers that in 1984, Herek provided a theoretical foundation on which future research could be built. Within this framework, attitudes toward LG people enable individuals to meet a psychological need or serve a psychological function, usually driven by motivation to strengthen one’s personal identity (Kite, 1994). Herek (1984) suggested three functions as most relevant to understanding attitudes toward LG individuals. They are not meant to provide exhaustive explanations of all attitudes, but rather provide the basis for a theory of understanding the sometimes disparate studies in the area of LG attitudes. First, attitudes may be experiential, organizing one’s social reality on the basis of previous experiences and interactions with LG individuals. Second, attitudes may be defensive, or ego defensive, helping a person contain an inner conflict that threatens a stable sense of self by projecting that conflict onto LG individuals. Last, attitudes may be symbolic, embodying abstract ideals or values that are linked to one’s identity, social network, or reference groups (Herek, 1984).

Although the above variables might be classified as symbolic (e.g., gender roles, authoritarianism) or experiential (e.g., previous contact with an LG individual), no recent published research has explored ego defensive options, which would presumably occur due to a
less strongly developed ego identity (Marcia, 1966, 1988, 1993). The present study aims to address this limitation in the literature, by expanding current research on attitudes toward lesbians and gay men through exploration of ego identity as a theoretically relevant predictor of these attitudes. Additionally, as most extant studies employ samples composed of undergraduate college students, the current study aims to incorporate an non-college student, adult population through the use of Internet-based sampling. In doing so, it is anticipated that a greater degree of diversity and external validity might be represented in the findings.

This paper will be structured in the following way: first, the psychosocial background of attitudes toward lesbians and gay men will be examined; second, Herek’s (1984) theory, which frames LG attitudes as serving a psychological function will be reviewed; third, empirical studies that demonstrate the relationship of various variables to LG attitudes will be explored; finally, the subsequent sections will focus on the description of the current study, the methodology that was used to test the study’s hypotheses, the study’s results and a discussion thereon.
CHAPTER 2
LITERATURE REVIEW

In a letter to an American mother, who had written to Sigmund Freud over her concern about her son’s homosexuality, Freud wrote back consolingly by saying that

[Homosexuality] is assuredly no advantage but it is nothing to be ashamed of, no vice, no degradation, it cannot be classified as an illness; we consider it to be a variation of the sexual function produced by a certain arrest of sexual development. Many highly respectable individuals of ancient and modern times have been homosexuals, several of the greatest men among them (Plato, Michaelangelo, Leonardo da Vinci, etc.). It is a great injustice to persecute homosexuality as a crime, and cruelty, too (Freud, 1951, p 787).

Despite Freud’s seeming acceptance of homosexuality as a mere variation in sexual function, certainly no “illness” or “crime,” the psychiatric community labeled lesbian and gay (LG) people as disordered for the majority of the 20th century. During the latter half of the 1960’s, however, the North American gay rights movement began to mature, and LG individuals began to protest their marginalized status. Among other political goals, one of the primary efforts of the movement was the removal of homosexuality from the DSM-II. Beginning with the work of Evelyn Hooker (1957), mental health professionals began to raise the question whether mental disorder was truly a direct result of homosexuality. Hooker found that there were, in fact, normal, healthfully functioning gay men, whose Rorschach test results could not be differentiated from those of a “normal” heterosexual population. Rather, perhaps the increased rate of mental disorders was a result of the burden of social stigma experienced by sexual minorities (Hooker, 1957).

With no small degree of controversy from both within and outside its ranks, the American Psychiatric Association voted to remove the diagnostic category of Homosexuality from the DSM-III in 1973 (American Psychiatric Association, 1980). Even though the stigma of being a sexual minority has eroded significantly since the 1970’s, (Loftus, 2001), there still
remains a significant and pervasive prejudice regarding LG individuals (Herek, 2000). Whether the medical community initially fueled society’s view of homosexuality as deviant and perverse, or vice versa, LG people continue to be socially stigmatized for medical, religious, and other reasons (Boswell, 1980). Apart from the obvious hardships this places on lesbians and gay men, such as social disregard for same-sex intimacy, legal barriers which deny same-sex couples financial and legal rights enjoyed by heterosexual couples, and disenfranchisement from religious and community organizations, stigma and prejudice toward LG people often pose deleterious effects on these individuals’ lives, including their mental health (Meyer, 1995, 2003; Williamson, 2000).

LG people experience violence and discrimination due to their sexual orientation. In November of 2004, the Federal Bureau of Investigation (FBI) released its annual report on hate crimes across the nation. The report, which documented hate crimes across the country in 2003, contained information on 1,239 incidents in which the perpetrators’ motivating factor was victims’ actual or perceived sexual orientation. Such incidents represented 17% of the total number of hate crimes in the FBI’s report (NCAVP, 2004). The FBI’s statistics on anti-lesbian and gay incidents fell short of the number of incidents tracked in the National Coalition of Anti-Violence Programs’ 2003 report on hate violence, which recorded 2,051 incidents in only eleven regions across the nation – more than half of which involved criminal offenses. It is possible that the FBI’s apparent “blind eye” toward anti-LG attitudes and behavior reflects a more general prejudice or stigma toward sexual minorities in the greater United States’ society. Indeed, when one regards the psychological literature on prejudice toward sexual minorities, it appears that such prejudice and lack of regard for LG individuals continues to be a presence in the U.S.’s general culture (Herek, 2000, 2002).
The Motivational and Functional Approach to Understanding Attitudes toward Lesbians and Gay Men

Different theorists have suggested varying functions most often served by attitudes and opinions. For example, opinions and attitudes may be a basis of security in the face of a changing world for one individual, yet for another a goad to revolutionary activity. Attitudes are part of one’s attempt to master the world and life in that world; more simply, they are a way in which one adjusts to the social environment (Smith, Bruner, & White, 1956). Other historically notable attitude functions include (1) an instrumental, adjustive, or utilitarian function, which serve a person in terms of concrete rewards or punishments; (2) an ego-defensive function, in which a person protects her or himself from acknowledging basic truths about one’s self or the external world; (3) a value-expressive function, in which an individual derives satisfaction from expressing attitudes appropriate to her or his personal values and concept of self; and (4) a knowledge function, which is based upon an individual’s need to give structure, organization, and meaning to the world (Katz, 1960).

In attempting to understand and organize the variables that gird an individual’s prejudice or tolerance toward LG individuals, it is helpful to bear in mind the premise that different people can express similar attitudes toward any number of social objects (LG individuals, racial ethnic minorities, individuals with perceived social status) due to different attitudinal functions (Herek, 1984). For example, two heterosexual individuals may view LG individuals negatively: one individual may be deeply religious and hold Christian fundamentalist views, and her or his negative attitudes toward LG individuals might be accordingly motivated by a value-expressive function; the other individual may have developed an ontology that organizes individuals into traditional and “perverse” gender roles, and this person condemns LG individuals as a result of the knowledge function. Within this functional approach, attitudes toward LG people enable
individuals to meet a psychological need, usually driven by motivation to strengthen one’s personal identity (Kite, 1994).

With specific regard to attitudes toward LG people, Herek (1984) suggested three functions as most relevant to understanding attitudes toward LG individuals. They are not meant to be an exhaustive taxonomy, but they do provide a parsimonious framework for understanding the sometimes disparate studies in the area of LG attitudes. First, attitudes may be *experiential*, organizing one’s social reality on the basis of previous experiences and interactions with LG individuals. Second, attitudes may be *ego* defensive, helping a person contain an inner conflict that threatens a stable sense of ego or self by projecting that conflict onto LG individuals. Last, attitudes may be *symbolic*, embodying abstract ideals or values that are linked to one’s identity, social network, or reference groups (Herek, 1984). Each of Herek’s (1984) three attitude functions will now be explored in turn.

**Experiential Attitudes**

Experiential attitudes arise when one has had prior experience with LG individuals, and has emotions and cognitions associated with those experiences (Herek, 1984). For example, a person who has had positive interpersonal contact with an LG person is more likely to hold favorable attitudes toward other LG individuals on the basis of that contact. Similarly, negative interpersonal contact will likely inspire negative attitudes toward LG individuals. Experiential attitudes do not arise simply from contact per se, but importantly, the contact must provide adequate basis for the formation of attitudes (Allport, 1954). Permitting further understanding of experiential attitudes and contact between “in” and “out” groups is the contact hypothesis (Allport, 1954). This hypothesis focuses on the change of an individual’s prejudiced attitude in a
social situation, and proposes several conditions necessary for the contact to result in reduced negative attitudes and greater tolerance:

1. support by authority figures and voluntary participation by the participants in the experience;

2. equal perceived status of participants in the encounter;

3. cooperation and interdependence among participants across groups;

4. individualized contact with the potential for further friendship across groups;

5. behavior that disconfirms stereotypes that the groups hold of each other (Wittig & Grant-Thompson, 1998).

According to the theory behind “experiential attitudes” in Herek’s theory, heterosexuals who know or have met LG individuals may be better able than others to recognize negative stereotypes as inaccurate, and would be also more likely to hold tolerant attitudes. Similarly, interpersonal contact with an LG person that has not met any one of the above requirements is less likely to result in a tolerant attitude. As only a minority of individuals in the United States have attitudes based on first-hand experience, it is likely that many people’s attitudes are based either in negative stereotype (Herek, 1984) or function according to a different motivational principle.

**Defensive Attitudes**

Defensive attitudes, or ego-defensive attitudes, are those in which a person protects herself or himself from acknowledging basic truths about the self or the external world. In one sense, ego defense mechanisms are adaptive in that they temporarily remove the harshness of internal conflict, and save the individual from psychodynamic disaster. In another sense, however, such mechanisms may not always be adaptive in that they potentially handicap the
individual in her or his social adjustment, and prevent the acquiring of maximum satisfactions from the external world (Katz, 1960).

According to Marcia’s theory of ego identity (Marcia, 1966, 1988, 1993), if an individual has not sufficiently explored various personal domains (gender roles, sexual attraction) and committed oneself to particular aspects of those (and other) domains, the result is a less stable ego identity. A less stable identity translates into less optimal defenses, leaving an individual more vulnerable to incoming threats. Theoretically, greater anxiety, depression, and other maladies could be the result (Marcia, 1993).

The theory of defensive attitudes toward LG individuals would suggest that heterosexual men and women who are genuinely secure in their own gender identity and sexual orientation, having explored various options in those domains and having committed to personally appropriate options, would feel less threatened by homosexuality than would those who are less secure (Herek, 1984). Without such a stable identity, feelings of personal threat may more easily bring about strong negative attitudes toward LG people. This idea appears to have some basis in empirical truth. In one study (Adams, Wright, & Lohr, 1996), the role of homosexual arousal in exclusively heterosexual men who admitted negative affect toward homosexual individuals was investigated. Participants consisted of a group of homophobic men \( n = 35 \) and a group of nonhomophobic men \( n = 29 \), assigned to groups on the basis of their scores on a measure of homophobia (or, negative attitudes toward gay men). The men were exposed to sexually explicit erotic stimuli consisting of heterosexual, male homosexual, and lesbian videotapes, and changes in penile circumference were monitored. Both groups exhibited increases in penile circumference to the heterosexual and female homosexual videos, but only the homophobic men showed an increase in penile erection to male homosexual stimuli. The authors of the study concluded that
homophobia is likely associated with homosexual arousal of which the homophobic individual is either unaware or denies. In support of this finding and of the link between negative LG attitudes and ego development, other work focusing on college students has found a small but significant correlation between higher levels of ego identity development and more positive attitudes toward homosexuality (Weis & Dain, 1979).

Attitudes thus may serve a defensive function when an individual perceives some analogy between an LG persona and her or his own unconscious conflicts (Herek, 1984). Subsequently, that inner conflict is projected onto the external source of the conflict (i.e., the lesbian or gay man), thereby reducing the experience of internal anxiety. This strategy permits an individual to externalize conflict regarding sexual orientation, attraction, or gender role by rejecting the lesbians and gay men who exemplify the forbidden, unconscious desire; in doing so, the person is never forced to recognize the urges as her or his own.

**Symbolic Attitudes**

Whereas defensive attitudes have the function of preventing the revelation of one’s true nature to oneself or to others, symbolic attitudes have the function of giving positive expression to one’s central values and the type of person she or he would like to be (and, perhaps the type of person by which she or he would like to be accepted). For example, an individual might consider her or himself to be politically liberal and open-minded, and as such, may express values that are dominant in liberal political circles. The function is not to gain public reward, but to maintain a stable sense of self in relation to valued others, and to enjoy intrinsically the expression of that self (Katz, 1960).

Whether symbolic attitudes are favorable or not favorable, prejudiced or tolerant, they are derived from past and present socialization experiences (Katz, 1960; McConahy & Hough,
1976). They express attitudes and values that are important to one’s sense of self, thereby helping individuals to establish their identity and affirm their notion of the sort of person they perceive and desire themselves to be. Simultaneously, these attitudes mediate the person’s relation to other important individuals and reference groups, forming part of a continuing social exchange: one defines a sense of self and through reinforcement of one’s attitudes and values by others in the relevant group, and also establishes the interpersonal relations that support that self. Sexual attitudes tend to be consistent with a larger ideology typically found in socially significant reference groups (religions, political parties, geographic moral climate, etc.) (Herek, 1984). With so many and varied opinions regarding the appropriateness of a lesbian or gay orientation in society, depending on one’s religion (Schulte & Battle, 2004), political preference (Herek, 2000), geographic area (Herek, 1994), and family attitudes (Negy & Eisenman), symbolic attitudes likely play a role in many individuals attitudes regarding LG people.

Symbolic attitudes toward minority groups may be seen as the expression by a dominant group (i.e., White individuals) that racial or ethnic minorities are violating important societal or religious values and demanding illegitimate changes in the status quo (McConahay and Hough, 1976). Along these lines, one may consider this third category of attitudes to serve a similar function for heterosexuals regarding lesbians and gay men. Symbolic attitudes toward LG individuals express the feeling that important personal or society values are being violated, and that unreasonable demands are being made to change the status quo (Herek, 1984).

In recent years, relatively scant research has been completed on attitudes toward LG people, focusing on disparate personal variables that are correlated with tolerant or prejudicial attitudes (such variables are discussed in the following section). The attitudinal framework outlined above is not intended to classify all the various variables that come to play in an
individual’s forming an attitude toward LG individuals. Rather, the framework begins to illustrate that individual personal variables (gender, religion, political affiliation, etc.) can serve any number of attitudinal functions, and can play any number of roles in an individual’s understanding of her or his self.

**Research on Attitudes toward Lesbian and Gay (LG) Individuals**

Fairly consistent findings from national surveys reveal that higher levels of negative LG attitudes exist among those who are older, less educated, living in the U.S. South or Midwest, and living in rural areas (Herek, 1994). Various other personal characteristics and traits, such as gender (Herek, 2002; Kite & Whitley, 1998), gender role beliefs and attitudes (Sakalli, 2002; Sirin, McCreary, & Mahalik, 2004), previous contact with a lesbian or gay man (Anderssen, 2002; Liang & Alimo, 2005), authoritarianism (Altemeyer, 1996, 2001), religious orientation and other religious variables (Herek & Capitanio, 1996; Plugge-Foust & Strickland, 2000), and attributions of the etiology of sexual orientation (Landen & Innala, 2002; Oldham & Kasser, 1999), have been explored empirically. There is little research regarding attitudinal differences among racial and ethnic minority groups, with the exception of scant empirical research regarding African Americans’ attitudes toward LG people (Negy & Eisenman, 2005; Schulte & Battle, 2004).

**Previous Contact with LG Individuals**

The variable that seems to predict positive attitudes toward LG individuals most consistently is one’s prior contact with a lesbian or gay man. Using racial issues as an example, if a White individual encounters an African American individual, she or he is likely to encode information about that Black person in terms of the person’s minority status. In other words, the apparent and visible “stigma” of being dark-skinned acts as a filter through which otherwise
unremarkable statements or actions are interpreted as indicative or stereotypical of the Black community (Biernat, 2003). The minority person is thus evaluated solely in terms of her or his minority status (Biernat, 2003). In contrast, for someone with a successfully concealed stigma, such as a gay or lesbian person, there is no filter through which actions or statements would be interpreted. For all intents and purposes, the LG person’s behavior may be indistinguishable from a heterosexual person’s, and thus appears “normal” and acceptable. When LG individuals disclose their stigmatized status to a heterosexual person after positive regard has already been formed, the heterosexual person may respond to the information by individuating and personalizing the minority group’s members, resulting in reduced prejudice and increased tolerance. This factor would appear to help form the “experiential attitudes” component of Herek’s (1984) theory of attitude functions.

In a national telephone survey (Herek & Capitanio, 1996), a sample of adults in the United States indicated their attitudes toward gay men and lesbians (n = 538; 45.9% male and 54.1% female; 81% White, 10.4% Black, 5% Hispanic, 2.8% Asian, and less than 1% not using any of those labels; mean age 43.8 years; median income = 30,000 and 40,000; median level of education was “some college”; 35.3% self-labeled as “Democrat”, 31.6% “Republican”, and 24.5% “Independent). Most respondents expressed negative attitudes toward gay men, with a majority believing that “Sex between two men is just plain wrong” and that “I think male homosexuals are disgusting” (69.8% and 54.1%, respectively). Interpersonal contact was strongly and significantly associated with favorable attitudes toward gay men, and more contact experiences with more individuals was associated with more favorable attitudes. Intimate contact was more likely than superficial contact to be associated with favorable attitudes, and direct disclosure of another’s LG orientation was more likely than second-hand disclosure to be
associated with positive attitudes toward LG people. The number of relationships with an LG person accounted for a small but significant amount of variance in attitudes toward lesbians (6.3%) and gay men (6.2%). The level of contact intimacy with an LG person (immediate family member, distant relative, close friend, or acquaintance) also accounted for 9.5% of the variance in attitudes toward lesbians, and 9.3% of the variance in attitudes toward gay men.

Liang and Alimo (2005) conducted a longitudinal study of heterosexual college students’ contact experiences with lesbian, gay, and bisexual individuals and the resulting attitudes toward those individuals. Using 401 White heterosexual students (70% women and 30% men), the effects of gender, pre-college attitudes and LGB contact, and college LGB contact were explored. The authors believed that, based on previous literature, gender would influence the attitudes and contact that the participants would have in LGB relationships. Additionally, based on previous literature and on Allport’s (1957) contact hypothesis, the authors’ expected that interpersonal contact with LGB individuals prior to and while in college would have a positive affect on prejudicial attitudes of the study participants. The effects of gender were relatively small (β = .078 to .200), with women reporting somewhat more positive attitudes than men, and having somewhat more contact with LGB individuals prior to and while in college (β = .192, p < .01, and β = .106, p < .05, respectively). Attitudes toward LGB individuals prior to college were predicted by pre-college contact (β = .426, p < .001); attitudes toward LGB individuals while in college were predicted by pre-college attitudes (β = .190, p < .001) and LGB contact prior to college (β = .320, p < .001); and, in-college attitudes were most strongly predicted by pre-college attitudes and in-college LGB contact (β = .563, p < .001 and β = .166, p < .001, respectively). In regarding these statistics, it is important to recognize that pre-college contact with LGB individuals most strongly influenced later attitudes through both direct and indirect paths (i.e.,
through forming pre-college attitudes which influenced the formation of later attitudes), and that LGB contact while in college had a direct influence. Among college students, similar patterns of contact-based influence appears to hold in countries other than the U.S. as well (i.e., Norway, Turkey) (Anderssen, 2002; Sakalli, 2002).

The analyses in most LG-attitude studies are univariate and correlational in nature, and despite Herek’s (1984) theory of motivation and functional attitudes, it is uncommon to find studies that make use of mediational or moderation-based analyses. One interesting exception (Mohipp and Morry, 2004) investigated the relationship of symbolic beliefs and prior contact on heterosexual attitudes toward LG people. The study demonstrated that positive symbolic beliefs concerning LG individuals were associated with positive attitudes toward both lesbians ($\beta = -.52, p < .001$) and gay men ($\beta = -.31, p < .05$); and, that when separated from other predictors, prior contact was associated positive attitudes toward both lesbians and gay men ($\beta = .19, p < .05$). In line with Herek’s theoretical ideas, the authors expected to find that symbolic beliefs would statistically mediate the relation between prior contact and attitudes (Baron & Kenny, 1986). However, no such relationship was found.

**Contact with LG individuals in the African American community.** It is commonly assumed that African American communities, and especially the men of those communities, have significantly less tolerance of homosexuality than do White communities (Battle & Lemelle, 2002). To a certain extent, it appears that a marginally higher degree of intolerance may actually exist in the African American community despite having had contact with an LG individual. For example, Herek & Capitanio (1995) conducted a national telephone survey, and found that gender differences in LG attitudes among African American individuals were very similar to those of White individuals. More tolerant attitudes were predicted by being highly educated,
unmarried, politically liberal, registered to vote, nonreligious, and included being Black in their concept of gay men. Having contact with an LG individual also predicted more favorable attitudes, but when other variables were controlled, having such contact lost any significance. This may be due to 25% more of the African American sample than previous White samples reporting that their contact with an LG person consisted of knowing a distant LG friend, acquaintance, or distant LG srelative. This is congruent with Herek’s (1984) theory regarding experiential attitudes, as well as Allport’s (1957) contact hypothesis, which states that less intimate contact is less likely to lead to a reduction in prejudice.

**Gender-Based Differences in Attitudes toward LG Individuals**

Heterosexual men appear to hold more negative attitudes toward lesbians and gay men than do heterosexual women (Kite & Whitley, 1996; Kite & Whitley, 1998). This balance is not yet fully understood, due in part to empirical work that is not solidly grounded in theory, and in part due to a fairly narrowly constructed empirical base that is formed largely of college students’ attitudes to the exclusion of other populations (Kite & Whitley, 1998). In order to understand the basis for possible gender-based differences in attitudes toward LG people, an exploration of possible reasons based in the theory of attitude function (Herek, 1984) will be beneficial. The most relevant aspects of that theory for gender-based attitude differences lie in symbolic attitudes about gender (i.e., gender roles) and ego defensive attitudes.

**Symbolic attitudes toward gender and gender roles**

One possible explanation for gender-based differences in LG attitudes rests in a gender role attitudes/beliefs analysis. This point of view states that heterosexuals’ evaluations of gay men and lesbians are grounded in a much larger belief system concerning men and women, and their appropriate roles in society (Kite, 1994). First, gender-associated beliefs appear to be
linked to one another; in other words, if one has stereotypically masculine traits, then it is assumed that stereotypically masculine behaviors and characteristics are part and parcel of that person’s gender role. If any one aspect of that gender role is violated, such as a gay man having a stereotypically masculine physical appearance, but more stereotypically feminine behaviors, prejudice against that individual will likely be the result (Kite & Whitley, 1998). Gender roles for men, a class of symbolic beliefs that may be grounded in family-inspired values or in religious or political ideology, appear somewhat more narrowly defined and inflexible than are those for women (Bem, 1993). A violation of male gender roles is usually considered more inappropriate than violation of female roles (Herek, 1988). An individual’s violation of those roles results in a challenge toward concepts of gender appropriateness, and thus toward the particular individual’s acceptability.

In a meta-analysis of gender-based differences in LG attitudes (Kite & Whitley, 1996, 1998), gender role attitudes had a mean correlation of \( r = .44 \) with scores on measures of attitudes toward lesbians and gay men. Interestingly, when sex differences in gender role attitudes were controlled, the average partial correlation between gender role attitudes and attitudes toward lesbians and gay men fell to \( r = .02 \). These results indicate that sex differences in LG attitudes are related to differences in gender role attitudes.

Clarifying further gender differences in symbolic beliefs, Herek (2002) conducted a national telephone opinion survey and reported a number of factors on which gender-based differences were found. Part of the sample was composed of previously polled respondents from an survey that was completed two years prior (\( n = 666 \); 57% female, 43% male; 81% non-hispanic White; mean age = 47, with an age range of 20-91; median education level = “some college”; and, median income = $40,000 - $50,000). The newly recruited respondents had a very
similar demographic composition with the exception of age, which was an average of two years younger than the previously polled respondents. This reflects the period of time elapsed between surveys. The findings were split into three major areas: (1) women generally hold more favorable and less condemning attitudes toward LG people – they were more supportive of employment protection and adoption rights, were more willing to recognize same-sex relationships as valid, were less likely to hold stereotypical beliefs, and displayed less negative affective reactions; (2) both heterosexual men’s and women’s attitudes tended to be more hostile toward gay men than lesbians, with gay men more likely than lesbians to be regarded as mentally ill and to be perceived as child molesters, and with adoption rights more strongly supported for lesbians than for gay men; (3) although heterosexual individuals expressed more negative attitudes toward LG people of their same sex, this pattern was strongest among men (i.e., heterosexual men rated LG individuals more negatively than women, and rated gay men more negative of all).

An additional interesting finding from the study (Herek, 2002) that replicated the findings of the first telephone survey mentioned above (Herek & Capitanio, 1999), was a significant effect on heterosexual men’s attitudes determined by the order in which the survey questions were posed. When questions concerning lesbians were asked first in a series, thus not casting them in the context of attitudes toward gay men, heterosexual men were less hostile toward lesbians than gay men – in some cases, their attitudes toward lesbians were at least as favorable as those of heterosexual women. This suggests that heterosexual men’s attitudes toward lesbians are cognitively organized in a way that differs from attitudes toward gay men. In contrast, heterosexual women’s attitudes toward LG people are relatively unaffected by contextual variables (question order in the survey). This may be due to findings in previous studies that
suggest heterosexual men’s tendency to sexualize interactions with the opposite sex more often than do heterosexual women (DeLamater, 1987). Presenting a potentially sexualized image of lesbians before gay men may “prime” the respondents to exhibit more positive attitudes.

A study by Louderback and Whitley (1997) clarified the above suggestions regarding the role of (a) gender role attitudes and (b) heterosexual men’s perception of sex between lesbians as erotic on attitudes toward lesbians and gay men. In a sample of 58 male and 109 female college students (age range = 17 – 25 years, mean age = 18.7), the sex-based differences in perceptions of LG people mentioned above were replicated. Additionally, men attributed more erotic value to sex between two women than to sex between two men, whereas women attributed low erotic value to both forms of sexual behavior. The authors posited a mediated model, in which sex differences in attitudes toward lesbians and gay men would be mediated by the perceived erotic value of homosexuality and sex-role attitudes. This hypothesis was supported. Whereas the perceived erotic value of lesbian/gay sex previously accounted for 11.9% of the variance in heterosexuals’ LG attitudes, any differences between men’s attitudes toward lesbians versus gay men was eliminated when perceived eroticism was controlled. Men’s LG attitudes, though, were still significantly more negative than those of women, with this sex of participant by sex of attitude target accounting for 8.3% of the variance in LG attitudes. When sex role attitudes (which accounted for 17.3% of variance in LG attitudes) was also controlled, the remaining gender-based differences in attitudes toward lesbians and gay men was eliminated. No main effect remained for the sex of the participant or the sex of attitude target, and neither were there any interaction effects of these two factors (Louderback & Whitley, 1997).
African American-based gender differences in LG attitudes

As previously mentioned, attitudes among African American and White individuals are generally similar. For example, similar to large national samples, African American men appear to hold less positive attitudes toward LG individuals than do African American females. The etiology of this sex-based difference appears, though, not to lie in the gender/sex role attitudes that predict White individuals’ LG attitude differences (Lemelle & Battle, 2004). In data provided by the National Black Politics Study in 1993, representing approximately 6.5 million African American households, variables measured included age, church attendance, education, household income, urban residency, and attitudes toward gay men (age = 40.97 years, SD = 15.86; Education = 13.07 years, SD = 2.98; Household income = 4.74, SD 2.42 [from a possible 9 categories that ranged from “under $10,000” to “over $75,000]; Urban Residency = .55, SD = .50; and for religious attendance, 87% attended Church at least once a month). Whereas age, income, education level, and urban residency were all significantly related to LG attitudes for women in the study ($p < .05$), the only variable that was significant for men’s LG attitudes was the frequency of church attendance ($p < .05$). For these men, more frequent church attendance was related to less favorable LG attitudes. Although significant, the effect size of church attendance, even when combined with other the other predictors in one regression, was relatively small (Adjusted $R^2 = .005$ for men, and .033 for women).

Religion and Religious Variables

The popular media often discusses the controversy in religious circles regarding individuals of a lesbian or gay orientation. For example, according to a Catholic encyclical, the Church regards homosexual behavior to be "not a normal condition, the acts being against nature [and] objectively wrong" (p 272, Broderick & Broderick, 1990). In this light, a number of
studies have regarded the importance of religion and religious values in attitudes toward LG individuals. Allport & Ross (1967) defined two different religious orientations: extrinsic, a self-serving, instrumental approach conforming to social conventions; and intrinsic, in which religion provides a meaning-endowed framework in terms of which all life is understood. Allport & Ross’s (1967) suggested that extrinsic individuals would likely be more prejudiced, and that intrinsic individuals would be more tolerant toward non-dominant groups. Although previous research has found intrinsically religious individuals to hold fewer racist attitudes and fewer racial prejudices than do extrinsically religious individuals (Donahue, 1985), Herek (1987) surprisingly found that intrinsically religious college students were more prejudiced against LG individuals than their extrinsic counterparts. He suggested that an intrinsic orientation does not foster an unequivocal acceptance of others, but rather encourages tolerance toward those that are accepted by traditional religious teachings (Herek, 1987).

Further research on religious orientation revealed that the motivating factors behind negative LG attitudes are more complex. In a sample of 257 college students at a conservative Christian school in California (110 females and 66 males, all White; age range = 18 – 24, mean age = 18.5; years of college experience range = 0 – 3, mean experience = 1.5), findings similar to Herek’s (1987) regarding Intrinsic-Extrinsic religious orientation were initially found, with Intrinsic individuals endorsing more negative LG attitudes. However, when the influence of the variable Fundamentalism was controlled, High Intrinsics were more accepting of LG individuals than Low Intrinsics. As such, Fundamentalism appears to be the motivating force behind some religious individuals’ anti-LG sentiment. Later research supports this suggestion, stating that among other factors, Fundamentalism accounts for a significant portion of the variance in predicting individuals’ negative LG attitudes ($\beta = .44, p < .001$) (Schwartz & Lindley, 2005).
African American religious service attendance & LG attitudes. As mentioned in the previous section on gender differences, Lemelle and Battle (2004) found that attendance at religious services was the single distinguishing factor between African American men’s and women’s LG attitudes. Another study affirmed that religious service attendance may indeed play a unique role in African American individuals’ perception of LG people (Schulte & Battle, 2004), although religious service attendance was not examined by participant gender. When predicting attitudes toward lesbians, ethnic differences were present in the absence of religious attendance; however, when religious attendance was entered into the model, ethnic differences disappeared entirely (see also Negy & Eisenman, 2005). Somewhat similarly, regarding attitudes toward gay men, although there were no racial differences in attitudes toward this group, religious attitudes were always significant. The authors concluded that LG attitudes do not necessarily vary as a function of ethnicity, but rather may be a function of religious attendance in African American churches (Schulte & Battle, 2004). Race and religious attendance alone explained variance in LG attitudes ranging from approximately 5 to 10%; when other factors of sexual orientation, marital status, geographic region, and religion were entered in the model, the variance explained in LG attitudes was approximately 20 to 23%.

Personality-Based Factors

Altemeyer (1981) defined the overarching concept of authoritarianism as comprised of three attitudinal clusters. The first component, authoritarian submission, is defined as a “high degree of submission to authorities who are perceived to be established and legitimate in the society in which one lives” (p. 148). The second component is authoritarian aggression and reflects “general aggression, directed at various persons, which is perceived to be sanctioned by established authorities” (p. 148). Aggressiveness in this context is the predisposition to do
physical, psychological, economic, or social harm to others. Persons with high levels of authoritarianism tend to be aggressive or support aggressiveness toward targets that they believe are socially stigmatized. For example, persons high in authoritarianism might support police violence against suspects in order to obtain confessions. The final component of Altemeyer’s authoritarianism is conventionalism defined as a “high degree of adherence to the social conventions which are perceived to be endorsed by society and its established authorities” (p. 148). Altemeyer (1981) described “established and legitimate authorities” to include individuals in society who are usually considered to be legal or moral authorities such as parents for younger persons, religious officials, heads of government, police officers, judges, and military officials.

Altemeyer’s (1981, 1996) theoretical conceptualization of authoritarianism is characterized by high degrees of submission to authorities, aggressiveness toward outgroups, and adherence to conventions perceived to be endorsed by society and its authorities, suggesting that people with high degrees of authoritarianism would be likely to exhibit negative LG attitudes. More specifically, this is likely because of LG persons (1) being explicitly condemned by some religious and political leaders, making LG persons an acceptable target for prejudice and hostility, (2) representing a socially stigmatized out-group relative to heterosexual women and men, and (3) being perceived as advocates for political change and challenging social conventions of traditional gender roles. Indeed, a number of studies have found significant positive links between authoritarianism and anti-LG attitudes (e.g., Altemeyer, 1981, 2001; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Laythe, Finkel, & Kirkpatrick, 2001) indicating that persons with high levels of authoritarianism express more anti-LG attitudes than do persons with low levels of authoritarianism.
An interesting study examined negative LG attitudes as predicted by authoritarianism and religious fundamentalism (Laythe, Finkel, & Kirkpatrick, 2001). Their sample consisted of college students from a Midwestern university ($n = 140$; 91 females and 47 males; age range = 18 to 48, mean age = 21.2, SD 6.94; 35% of the sample reported regular, once-weekly church attendance, and 9.2% labeled themselves as atheist or agnostic; on a seven-point scale of religiosity [$1 = \text{not religious, } 7 = \text{strongly religious}$], the mean was 3.9, SD = 1.7).

Authoritarianism ($\beta = .37$, $p < .01$) and fundamentalism ($\beta = .21$, $p < .05$) emerged as significant predictors, each accounting for variance in LG prejudice above and beyond the prediction afforded by the other. Together, the two predictors accounted for 28% of the variance (adjusted $R^2$). To explore further the relationship between fundamentalism and authoritarianism, the authors completed a secondary post hoc analysis of data provided by previous Canadian studies (Altemeyer & Hunsberger, 1992; Wylie & Forest, 1992). Demographic information for these samples was not provided, beyond the fact that one study’s participants were parents of college students (247 women and 244 men), and a random sample of Canadian residents in Manitoba (43 women and 32 men). In both data sets, authoritarianism was a significant positive predictor of negative LG attitudes ($\beta = .69$ and $\beta = .67$ for the two samples, both at $p < .01$). However, fundamentalism was not a significant predictor in either data set apart from authoritarianism. The authors point out that even though their own data found fundamentalism to predict negative LG attitudes significantly, its actual effect in doing so was relatively small ($\beta = .21$). As such, fundamentalism appears to predict very little if any variance beyond authoritarianism’s relatively strong predictive power (Laythe, Finkel, & Kirkpatrick, 2001).

In addition to authoritarianism, social dominance orientation (SDO) also has been linked consistently with negative attitudes toward lesbians and gay men. Pratto, Sidanius, Stallworth,
and Malle (1994) defined SDO as the “extent to which one desires that one’s in-group dominate and be superior to out-groups” (p 724). SDO taps a general attitudinal orientation toward intergroup relations that reflects a preference for hierarchical rather than egalitarian relations. More specifically, the desire to maintain the superior position of their in-groups relative to outgroups motivates people high in SDO to accept hierarchy-legitimizing myths that denigrate members of out-groups and enforce the status quo of their in-groups’ power position. Thus, persons high in SDO tend to have negative LG attitudes because LG persons have lower social status than do heterosexuals (Whitley & Lee, 2000). The empirical literature supports the expected link between SDO and anti-LG attitudes. Across a number of studies, significant correlations have been found between SDO and anti-LG attitudes (e.g., Altemeyer, 1998; Whitley, 1999; Whitley & Lee 2000) such that higher SDO scores are related to higher levels of anti-LG attitudes. For example, in one study using a sample of 266 college students (122 men, 131 women; age range = 18 – 24, mean age = 19.2; 91% White, 4% African American, 2% Hispanic, 2% “other ethnicity/race,” and 1% Asian), SDO contributed significantly along with authoritarianism, gender role beliefs, and gender in predicting attitudes toward LG individuals (Whitley & Aegisdottir, 2000). When entered jointly in a regression, authoritarianism and SDO accounted for 38.6% of the variance in attitudes toward lesbians, and 39.5% of the variance in attitudes toward gay men (p < .001).

Although authoritarianism and SDO both include an element of prejudice toward outgroups, Altemeyer (1988) argued that the two constructs are distinct in that SDO “does not have the same psychological roots that previous studies have unearthed in right-wing authoritarians” (p. 61). More specifically, a person high in authoritarianism is very accepting of traditional values and institutional authorities and is likely to follow the instructions of those in
positions of power and influence. By contrast, an individual high in SDO is not motivated by a sense of duty or morality (Heaven & Bucci, 2001). Thus, although authoritarianism and SDO both can explain significant, unique and prejudicial variance in negative LG attitudes, they do so in a complementary but not redundant fashion (Altemeyer, 1998). Indeed, empirical evidence indicates that authoritarianism and SDO are only minimally correlated with each other, if at all, (Altemeyer, 1998; Pratto et al., 1994) and the relationship of SDO to prejudice is not accounted for by a joint relationship with authoritarianism (Altemeyer, 1988; Whitley & Lee, 2000).

**Defensive Attitudes with a Possible Basis in Gender**

Psychodynamically inspired defensive attitudes are associated with perceptions of one’s own prized dissimilarity from gay men and lesbians, and with the previously mentioned projection of internal conflict. Empirically speaking, heterosexual males consistently hold more negative attitudes toward LG individuals than do heterosexual females; and, heterosexual males’ attitudes toward gay men are more negative than toward lesbians (Herek, 1988). Heterosexual females also tend to regard LG people negatively, but their attitudes do not differ significantly according to the gender of the target (Herek, 1988). Dynamically speaking, if an object in the external world recalls undesired traits one fears or dislikes in oneself, and if men’s gender roles are more rigid than are those for women, the projection of a proportionately greater negative attitude from men toward other men makes theoretical sense (Kite & Whitley, 1998).

Regarding the concept of a well developed or strong ego, it is useful to recall Erickson’s (1968) stages of lifespan development. In one of the stages, Erikson posited that an individual must endure an “identity crisis” or struggle within her or himself to develop a consistent view of the world, and how one fits into that world. In this way, there is a consistent picture of oneself as belonging in the world, and knowledge of how the world is structured for one’s self. Marcia
(1964, 1966, 1988, 1993) elaborated on this concept, suggesting that a well developed or “achieved” ego structure must have completed phases of development that he called “exploration” and “commitment,” which is necessary across many different domains (e.g., occupation, religion, sex roles). In terms of exploration, an individual with a well developed ego will have explored options for herself/himself in various domains (i.e., for the domain of gender roles: “Do I believe that women should remain at home to raise children? Do I believe that men could be adequate ‘stay-at-home’ fathers?”). For commitment, an individual may have explored various options and come to accept one in particular (i.e., “I really believe that both men and women should be in the work place”); or, the individual may not have explored options, but still committed to a particular one (i.e., “My father worked, and my mother stayed at home – it worked for them, and it should probably work for everyone”).

Studies occasionally suggest that a lack of self-exploration or self-awareness may contribute to attitudes toward LG individuals. For example, heterosexual male college students in one study completed measures that identified that importance ascribed to traditional masculine attributes, the perceived self-discrepancy between one’s own attributes versus masculine attributes, and homophobia ($n = 85$; 32% Protestant, 28% Catholic, 13% Jewish, 13% “Other religions”, 14% “No religion; 87% were White, 8% were African American, Asian American, or Hispanic, and 5% identified as having “other” ethnicities) (Theodore & Basow, 2000). Interestingly, participants who valued highly masculine attributes yet perceived themselves as not having those attributes, and who did not value feminine attributes, had the highest scores on the global measure of homophobia. In predicting homophobia, an interaction effect of Masculine Attribute Importance x Self-discrepancy Along Masculine Traits significantly predicted homophobia ($\beta = .67, p < .001$). Also, an interaction effect of Feminine Attribute
Importance x Self-discrepancy Along Masculine Traits significantly predicted homophobia ($\beta = - .51, p < .01$). When viewed through a lens of ego identity development, these findings could suggest that there may be some heterosexual college students who have “committed” to the importance of stereotypically masculine attributes, but have not yet explored how their own differing personal attributes could or could not also be of value. If one does not explore one’s own personal characteristics and traits, but instead commits to an ideal without exploring its personal significance, it is likely that rigid ego boundaries (i.e., high scores on homophobia), may result to defend these beliefs.

No recently published studies have explicitly regarded the role of ego development in attitudes toward lesbian and gay individuals. This is surprising, considering Herek’s (2000) research directive which stated that “relatively little research has been devoted to understanding the dynamic cognitive processes associated with antigay attitudes” (p 21). In a study published over 25 years ago that utilized a sample of 200 homosexual and heterosexual White, Protestant college students, there was a significant correlation between higher levels of ego development and more positive attitudes toward homosexuality (Weis & Dain, 1979). Also, in another more recent sample of 440 undergraduates found in an unpublished dissertation, there existed a significant but complex relationship between ego identity statuses and attitudes toward LG people (Tureau, 2004). Specifically, among individual students who were either high or low on the trait of absolutism, attitudes toward LG people were more similar in those who had an “achieved” status. Due to the unavailability of that study’s complete findings, further information concerning contemporary correlations between ego identity and LG attitudes is unknown. Regardless, it appears that there may be a relationship between more advanced or “achieved” ego identity statuses, and positive attitudes toward LG individuals.
Purpose of the Study

According to Herek’s (1984) theory, attitudes toward LG individuals can fall into three categories: symbolic, experiential, and ego defensive. Previous LG attitude research has explored symbolic concepts including those found in authoritarian and socially dominant personality styles/beliefs, religious beliefs, and also gender roles for men and women. In terms of experiential beliefs, the concept of previous contact with an LG person has also been explored. Each of these variables, in addition to other demographic information previously mentioned (education level, urban/rural residence, gender, age), has been shown to be related conceptually or empirically to attitudes toward lesbians and gay men. The role of ego development, which may fuel Herek’s (1984) defensive attitude function, has yet to be explored in any published research.

This study served to explore the role of ego identity development in the context of individual demographic information (including gender), authoritarianism, social dominance orientation, and gender roles. It also served to replicate and extend findings from previous studies by using an adult, non-college student population in collecting data. It was expected that ego identity would be correlated with aspects of the contact experience with an LG person, and would play a moderating role in the relationship between such contact and the resulting attitudes. It was also expected that authoritarianism and social dominance would predict levels of ego identity, which would in turn predict attitudes toward LG individuals. This study examined the following hypotheses:

(1) Higher levels of Authoritarianism and Social Dominance Orientation will predict higher levels of Ego Identity Commitment and lower levels of Ego Identity Exploration.

(2) A higher number of LG contact experiences and greater intimacy in the contact experience with an LG person will predict higher levels of Ego Identity Exploration.
(3) Higher levels of Ego Identity Exploration will predict more positive attitudes toward LG individuals, and lower levels will predict more negative attitudes toward LG individuals.

(3a) Ego Identity Exploration will moderate the relationship between Authoritarianism and LG attitudes; it will also moderate the relationship between SDO and LG attitudes.

Additional Research Questions:

(1) Previous findings regarding gender and LG attitudes in college students will be replicated, but using a non-college student population.

(1a) Males will have more negative attitudes toward LG individuals than will women; this difference will be eliminated when controlling for gender role values.

(1b) Less condemning attitudes toward lesbians (as measured by the Attitudes toward Lesbians subscale of ATLG-S) and more condemning attitudes toward gay men (as measured by the Attitudes toward Gay Men subscale of ATLG-S) will be associated with a male gender; however, when erotic values of LG sexuality are controlled, they will account for gender-based difference in attitudes toward lesbians and gay men.

(2) Authoritarianism, Social Dominance Orientation, and Church Attendance will significantly predict negative attitudes toward LG individuals.

(2a) When controlling for the above variables, race will not be a significant predictor of LG attitudes.
CHAPTER 3
METHOD

Participants

Considering that the majority of the literature regarding attitudes toward LG individuals is based on data gathered from college students, it is unknown how the results from those data might generalize to a larger, non-college student sample. As such, there is a need for studies of sexual prejudice within different subsets of the population, including differently aged people (Herek, 2000). Participants in this study were adult participants recruited not from a college student population, but by means of advertisements on various e-mail listservs and Internet discussion groups. A variety of sampling sources were chosen based on individuals’ possible interest in LG issues (e.g., The American Psychological Association’s Division 44 listserv); individuals’ likelihood of endorsing interest in social/political issues that are relevant to ethnic/racial minorities, thus possibly providing a racially/ethnically diverse sample (e.g., Google’s “Black Focus” discussion group, and newsgroups such as alt.culture.african.american.issues); and, individuals’ likelihood of having a defined attitude toward other issues explored in this survey, such as gender-issues and nationalism-based issues (e.g., Yahoo!’s Republican and Democrat discussion groups). An advertisement was posted on each of these groups with the relevant Internet-link to the survey, so that individuals could easily access the informed consent page and survey questionnaires. Demographic information was collected, including age, sex, race/ethnicity, socio-economic status (education level and income level), urban/suburban/rural residence, and geographic region of residence (e.g., Northeast, South, Midwest), number and intimacy level of LG contact experiences, and frequency of religious service attendance. The participant’s sexual orientation was assessed to in order to locate data only from self-identified heterosexual individuals. This was done by asking
respondents to identify as one of the following: bisexual, gay, heterosexual, or lesbian. Further, to ensure consistency among respondents’ choice of sexual orientation, individuals were further asked to respond to a scale that rated their sexual attraction to others, ranging from “1 = exclusively the opposite sex” to “7 = exclusively the same sex.” It was expected that heterosexual respondents would endorse responses that indicate more attraction to the opposite sex than the same sex.

To determine the necessary sample size for this study, a multiple regression using all possible predictors to predict LG attitudes was considered, as this exploratory analysis will be the most comprehensive analysis in the study (in that it would conceivably employ all predictors simultaneously). Tabachnick and Fidell’s (2001) formula for sample size with multiple regressions was employed: \( n \geq 104 + m \), where “m” equals the number of independent variables. With measured predictor variables (authoritarianism, social dominance orientation, gender role attitudes, ego identity commitment and exploration, erotic value of same-sex intimacy, and social desirability) and demographic information mentioned above all being possible independent variables, “m” in the equation is equal to 17 (104 + 16 = 121). As such, the total number of participants required for this study was 121. This is relatively conservative, as all independent variables will be used simultaneously only for the purposes of non-hypothesized exploratory analysis.

At the end of data collection, which lasted approximately 2 months, the final number of participants was 235. After deleting 54 participants who identified as lesbian, gay, or bisexual, the total number of participants was 181; one additional female participant’s responses were deleted, as she identified as “heterosexual” but endorsed being attracted to “usually the same sex, and sometimes the opposite sex.” After searching for respondents who did not respond correctly
to two questions designed to indicate random responding (i.e., “Please choose ‘disagree’ from
the items below”), 19 response sets were further deleted.

The final sample was composed of 162 individuals (114 females, 48 males; mean age = 32.6, SD = 12.0; 1 participant identified as Native American [.6%], 28 identified as Asian or Asian American [17.3%], 17 identified as African or African American [10.5%], 18 identified as Hispanic [11.1%], no participants identified as Hawaiian/Pacific Islander [0%], and 20 identified as Other [12.3%]. (The percentages listed above add to more than 100% due to participants being allowed to check more than one category.) 71 participants endorsed living in an urban setting, 80 endorsed a suburban setting, and 9 endorsed a rural setting (2 participants did not respond to this question). The mean income level was 4.4 (SD = 2.2), with level 4 being between $25,000 and $34,999, and level 5 being between $35,000 and $49,000. The mean education level was 7 (SD = 2), indicating that some graduate study, but no graduate degree was the average level of education; also, when considering standard deviations, the majority of participants indicated having earned at least an associate’s degree or higher.

**Design and Procedure**

The weblink to the survey was posted on various listservs and Internet discussion groups so that individuals who were interested in participating in the study could easily access it. Particular effort was exerted to have the weblink circulated to listservs or Internet groups that could promote the ethnic and racial diversity of the sample. Participants were also encouraged to circulate the weblink to others who may have been interested in participating in the research. Prior to completing the survey, participants read about the purpose and the methods of the study and electronically endorsed a consent form. Participants were informed that if they chose to
participate they would have the freedom to withdraw from the study at any time without any penalty.

Instruments

Attitudes Toward Lesbians and Gay Men Scale, Short Form (ATLG-S)

The ATLG-S was used to measure attitudes toward LG individuals. Herek’s (1988) scale is one of the more commonly used measures of anti-LG attitudes and assesses the affective component of anti-LG attitudes referred to as “condemnation-tolerance.” The ATLG-S uses a 5-point Likert scale from 1 = disagree strongly to 5 = agree strongly. The scale has 10 items: 5 items assess attitudes toward lesbians (ATL-S), and 5 items assess attitudes toward gay men (ATG-S). Sample items include “Homosexual behavior between two men is just plain wrong” and “Female homosexuality is a sin.” With this scale, separate scores for attitudes toward lesbian persons and attitudes toward gay persons can be computed by averaging or adding ATL-S or ATG-S items, respectively. Item ratings were added to yield an overall ATLG-S score, with higher scores indicating more negative attitudes. Construct validity for full ATLG scores has been demonstrated through consistently high correlations with variables associated conceptually with anti-LG attitudes such as dogmatism, conservative political ideology, and lack of personal contact with LG persons (Herek, 1988, 1994; Whitley & Lee, 2000). Each short version of the scale correlates highly with its longer counterpart (ATG with ATG-S, \( r = .96 \); ATL with ATL-S, \( r = .95 \); and ATLG with ATLG-S, \( r = .97 \)) (Herek, 1994). ATLG-S scores have yielded satisfactory levels of internal consistency with community-sampled scores on the combined scale (ATLG-S), ATL-S subscale, and ATG-S subscale, having Cronbach’s alphas of .92, .85, and .87, respectively (Herek, 1994). The Cronbach’s alphas for the scale in the current study were .94, .85, and .93, respectively.
Right-Wing Authoritarianism Scale, Short Version (RWA-S)

The RWA-S, developed by Zakrisson (2005), assesses Altemeyer’s concept of authoritarianism (1981, 1996). It is a 15-item, 7-point Likert-type scale with item ratings ranging from 1 = strongly disagree to 7 = strongly agree as recommended by Altemeyer (1996), and item content was derived from the original RWA scale (Altemeyer, 1981, 1996). Higher scores indicate higher authoritarian attitudes and beliefs. Sample items include, “The ‘old-fashioned ways’ and ‘old-fashioned values’ still show the best way to live,” and, “Our country needs a powerful leader in order to destroy the radical and immoral currents prevailing in today’s society.” With regard to validity, Zakrisson (2005) demonstrated that RWA-S scores are correlated moderately and positively with scores on measures of racism and sexism, as does the original RWA scale (Altemeyer, 1981, 1996), and is not significantly correlated with social dominance. The RWA-S has been shown to have adequate reliability, yielding Cronbach’s alphas of approximately .80 (Zakrisson, 2005). The Cronbach’s alpha for the scale in the current study was .89.

Social Dominance Orientation Scale, Abbreviated (SDO-A)

The SDO-A, developed by Pratto et al. (1994), was used to measure social dominance orientation, or respondents’ preference for inequality among social groups. The SDO is an 8-item, 7 point Likert-type scale and participants rate their responses on a range from 1 = very negative to 7 = very positive. A scale score was computed by adding item ratings, with higher scores indicating greater levels of SDO. Sample items include, “Some groups of people are simply inferior to other groups,” and, “It’s OK if some groups have more of a chance in life than others.” With regard to validity, SDO-A scores have been shown to correlate positively with cultural elitism, ethnic prejudice, sexism, political-economic conservatism, and a desire to end
affirmative action, thus demonstrating a high degree of construct validity (Pratto et al., 1994). Additionally, SDO-A scores have yielded high reliability estimates with an average Cronbach’s alpha of .86 across multiple samples (Pratto et al., 1994). The Cronbach’s alpha for the scale in the current study was .92.

**Attitudes toward Women (ATW) Scale**

The ATW (Spence & Hahn, 1997) was used to assess traditional gender role attitudes. The ATW was created to assess people’s beliefs about the responsibilities, privileges, and behaviors in a variety of spheres that have traditionally been divided along gender lines, but could, in principle, be shared equally by men and women. The scale’s authors state that the title of the scale is something of a misnomer, in that the scale taps beliefs about appropriate responsibilities and rights for women versus appropriate responsibilities for men (Spence & Hahn, 1997). As responsibilities for both genders are included in the scale, and it has been used previously to determine gender role attitudes as they are related to LG attitudes (Louderback & Whitley, 1997), it remains an appropriate measure for use in this study.

The ATW is a 15-item scale, with items scored on a response scale whose extremes are labeled *agree strongly* and *disagree strongly*. Whereas in previous years Spence and Hahn recommended using a 4-point scale, they currently recommend used a 5-point response scale as this has been shown to produce a wider range of scores and less skewness (Hahn, 1993). Approximately half of the items presents an egalitarian point of view and the remainder presents a traditional point of view. The egalitarian items are reverse-scored. The item scores, which range from 1 to 5, are summed to obtain a total scale score, with higher scores indicating more egalitarian attitudes. Sample items include, “Under modern economic conditions, with women active outside the home, men should share in household tasks such as washing dishes and doing
laundry,” and “There are many jobs in which men should be given preference over women in
being hired or promoted.” With regard to validity, Spence and Hahn (1997) conducted a
longitudinal study, comparing scores of college students on the ATW since the early 1970’s.
Findings revealed that as more women have entered the labor force in greater numbers, and as
legislation barring gender discrimination has come to pass, attitudes have shifted over time to
become more egalitarian as measured by the ATW. Additionally, ATW scores appear
unifactorial across genders, and have yielded high reliability estimates, with Spence and Hahn
(1997) reporting Cronbach’s alphas in the mid-80’s or higher. The Cronbach’s alpha for the
scale in the current study was .91.

**Ego Identity Process Questionnaire (EIPQ)**

The EIPQ (Balistreri, Busch-Rossnagel, & Geisinger, 1995) is a 32-item scale that was
used to obtain continuous measures of participants’ levels of exploration and commitment. Items
are rated on a 6-point Likert scale on subscales of exploration and commitment, which will be
separately added and averaged, with higher scores suggesting higher degrees of exploration or
commitment. Use of this scale is appropriate given that the measure provides greater
interpretability (on continuums of exploration and commitment) than do other measures which
generally use complex scoring techniques to assign one overall status to a participant. Sample
items include “My ideas about men’s and women’s roles have never changed as I became older;”
and, “I have definite views regarding the ways in which men and women should behave.” With
regard to validity, Balistreri et al. (1995) report convergent validity with other measures of ego
identity, as well as a satisfactory item-loading on relevant factors. Cronbach’s alpha values for
the exploration and commitment scales reported by the authors were .76 and .75, respectively;
one-week test-retest reliability was .90 for commitment, and .76 for exploration (Balistreri,
Busch-Rossnagel, & Geisinger, 1995). The Cronbach’s alpha for the scale in the current study was .87 for exploration, and .81 for commitment. Scores were transformed into z-scores, so that higher (positive) scores indicated an above-average score, while lower (negative) scores indicated a below-average score.

**Social Desirability**

A short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982) was used to assess the tendency to provide socially desirable responses and thus to detect a common source of response bias. Items, which are rated using a “true–false” format, were constructed so that the socially desirable response would be unlikely to be true for most people. Sample items include, “No matter who I’m talking to, I’m always a good listener,” and “It is sometimes hard for me to go on with my work if I am not encouraged.” High scores on this scale reflect a tendency to offer socially desirable responses. The original form of this measure has been shown to be unrelated to measures of psychopathology and related to measures of underreporting symptoms (Crowne & Marlowe, 1960). The short form used in this study consisted of the 13 items that had the highest loading in an exploratory factor analysis of the original 33-item measure. The short form has been found to be highly correlated with the original scale, and the internal consistency reliability was estimated to by .76. The Cronbach’s alpha for the scale in the current study was .79.

**Eroticism**

Eight items used by Louderback and Whitley (1997) were employed. Four items referred to gay male sexuality, and four parallel items referred to lesbian sexuality: “I find the idea of a man (woman) making love to another man (woman) erotic,” “I find the idea of a man (woman) making love to another man (woman) repulsive” (reverse scored), “I think that I would be
sexually aroused by watching two men (women) make love,” and “I have viewed pornographic materials involving male homosexual (lesbian) acts.” The first item was originally used by Nyberg and Alston (1977, as cited by Louderback & Whitley, 1997); the other items were composed as variations on that theme. All statements will be rated on nine-point scales; the first three items will be rated on scales ranging from strongly disagree (1) to strongly agree (9), and the last item on scales ranging from never (1) to frequently (9). The perceived erotic value of lesbianism scale had a reported reliability of .88, and the perceived erotic value of male homosexuality scale had a reported reliability of .65. To maintain consistency with the only previous study that examined eroticism with regard to gender and LG attitudes (Louderback & Whitley, 1997), these items were interspersed with items from the ATW scale. The Cronbach’s alpha for the scale in the current study was .79 for the scale of gay erotic value, and .86 for the scale of lesbian erotic value.

**Analytic Strategies**

To ascertain associations suggested in hypotheses 1-3 (excluding 3a) and research question 2/2a, multiple regression analyses were employed, using the relevant EIPQ score or ATLG score as the criterion variable, while entering the relevant predictor variables in one step. Separate analyses were conducted for each individual hypothesis. For example, in hypothesis two, Ego Identity Exploration was specified as the criterion variable, while LG contact experiences and the degree of those experiences’ intimacy was specified as predictor variables.

To evaluate the moderation-based relationships in hypothesis 3a, statistical strategies frequently outlined in the literature was employed, and hierarchical multiple regressions were used (Frazier, Tix, & Baron, 2004). Before proceeding, the predictor and the moderator variables were standardized, thus reducing problems associated with multicollinearity among predictor and
moderator variables and the interaction terms created from them. To test the moderation effects, variables were entered in the regression equation in a stepwise manner: the variable to be controlled for (Social Desirability) was entered in the first step, followed by the standardized predictor and moderator variables in the second step, followed by the product (interaction) terms in the third step (Aiken & West, 1991; Holmbeck, 1997). Finally, all remaining possible interactions with the controlled variable, Social Desirability, were checked in the final step to ascertain no unexpected significant interactions. The significance of the moderation interaction effect was then tested.

To evaluate research questions #1a-b, a dummy variable was assigned to all participants, with “0” indicating a male gender, and “1” indicating a female gender, and regressions were employed to analyze the data. Following the guidelines for mediational analyses that have been detailed in the literature (Frazier, Tix, & Baron, 2004), the variables for question 1a were entered stepwise in a hierarchical regression.
CHAPTER 4
RESULTS

Order of Presentation Effects and Preliminary Analyses

Prior to the main component of the study being posted on the Internet, a pilot study was run to determine if there were order-based effects of the above measures. If the order of the measures had affected the responses of participants on the Ego Identity Process Questionnaire (as the central measure in this study), that questionnaire would have been placed first in the survey to prevent influence from other measures, and the remaining measures would have been placed following it in a random order.

The pilot test resulted in two pools of data \( (n = 22 \text{ for Group } 1, \text{ and } n = 21 \text{ for Group } 2) \). To analyze the results for the two groups on scores of Ego Identity exploration and commitment, independent samples \( t \) tests were employed to determine if any significant difference between the two groups’ means existed. For the individuals who completed the ego identity measure at the beginning of the survey, exploration \( (M = 69.4, SD = 11.5) \) was not significantly different from individuals who completed the measure at the end of the survey \( (M = 67.9, SD = 12.2) \), \( t(41) = .40, p = .69 \) (two tailed). Similarly, for the individuals who completed the ego identity measure at the beginning of the survey, commitment \( (M = 66.2, SD = 9.0) \) was not significantly different from individuals who completed the measure at the end of the survey \( (M = 69.3, SD = 7.1) \), \( t(41) = -1.3, p = .20 \) (two tailed). Due to the lack of significant difference on ego identity scores in the above pilot test, the ego identity measure was placed at the beginning of the survey for all future participants. Data from the pilot study were incorporated into the main sample’s data, and were included in the above sample description.
All measures were assessed for internal consistency. Cronbach’s alphas were determined to be adequate for the current study, and were consistent with other studies using the same measures; values ranged from .79 to .94, and are summarized with measure intercorrelations in Table 4-1. None of the correlations met the generally accepted standard of being greater than .80 to signify that two variables are significantly collinear (Lewis-Beck, 1980), and thus analyses by multiple regression remained plausible. Data were further checked for multivariate normality through assessment of skewness and kurtosis. All variables’ values for skewness and kurtosis fell between -2 and 2, with the exception of SDO (skewness = 1.8; kurtosis = 2.9) ATW (skewness = -2.5; kurtosis = 7.4), and Number of LG People Known (skewness = -2.76, kurtosis = 7.27). A square-root transformation was applied to the values for SDO, due to its values being positively skewed. This resulted in acceptable levels of skewness (1.3) and kurtosis (1.0). Due to the values for ATW and Number of Known LG People being negatively skewed, the values were reflected (each score subtracted from the highest score, producing a “mirror” of the original data), and the square root of each value was taken. For ATW, this resulted in acceptable levels of skewness (1.0) and kurtosis (1.5). It is important to note that inverting the ATW values reversed the meaning of the scores, with lower values now indicating more tolerant attitudes toward women. For the Number of LG People Known, square root transformations were not effective at reducing the skewness and kurtosis, and nor were log-based transformations. This is likely due to the participants’ frequent endorsement of relatively high levels of known-LG individuals. However, an inversion transformation (in which the minimum scale value was increased to 1 to avoid division by zero, and each value of the variable was divided into 1) resulted in marginally acceptable levels of skewness (-1.9) and kurtosis (2.1), while approximately preserving the original pattern of value distributions of the original data.
Analyses

Hypothesis Tests

Hypothesis 1 predicted that participants who had higher scores on authoritarianism (RWA) and social dominance orientation (SDO) would predict higher levels of commitment and lower levels of exploration. To examine the influence of the predictor variables (RWA and SDO) on the two factors of ego identity, those variables were entered in a single block in two separate regressions, with commitment as the criterion variable in the first regression, and with exploration as the criterion variable in the second regression. Social Desirability was also entered in the equation as a predictor, to control for its effects.

The regression with commitment as the dependent variable was significant, $F(3, 158) = 19.73, p < .001$, explaining a moderate amount of the variance ($R^2 = .27, \text{adj } R^2 = .26$) (Cohen, 1988). The $R^2$ and the adjusted $R^2$ in this regression were almost identical, suggesting that the adjustment in these cases was very small because a fairly large sample size was utilized. Tests of standardized partial regression coefficients revealed that higher levels of RWA were significantly associated with higher levels of commitment ($\beta = .44; p < .001$), but that SOD was not significantly associated with commitment ($\beta = .03; p = .68$). Social Desirability was also significantly related to commitment scores ($\beta = .15; p < .05$). The regression with exploration as the dependent variable was similarly significant, $F(2, 159) = 36.60, p < .001$, explaining a relatively large amount of the variance ($R^2 = .41, \text{adj } R^2 = .40$) (Cohen, 1988). Tests of standardized partial regression coefficients revealed that higher levels of RWA were significantly associated with lower levels of exploration ($\beta = -.54; p < .001$), and that higher levels of SOD were also significantly associated with lower levels of exploration ($\beta = -.15$;
Social desirability was also significantly related to exploration scores ($\beta = -.19$; $p < .05$). Hypothesis 1 was partially supported (Table 4-2).

Hypothesis 2 predicted that higher number of LG contact experiences and greater closeness/intimacy in the contact experience with LG people would predict higher levels of exploration. To examine the influence of the predictor variables (Number of Known LG People and Closeness) on exploration, those variables were entered in a single block. Social Desirability was also entered in the equation, to control for its effects on exploration. The overall regression was significant, $F(3, 158) = 21.14$, $p < .001$, explaining a moderate amount of the variance ($R^2 = .29$, adj $R^2 = .27$) (Cohen, 1988). Tests of standardized partial regression coefficients revealed that knowing greater numbers of LG individuals was significantly associated with higher levels of exploration ($\beta = .29$; $p < .001$), as was the degree of closeness in the relationships with those individuals ($\beta = .18$; $p < .05$) (Table 4-3). Social Desirability was also significantly related to exploration ($\beta = -.31$; $p < .001$).

Hypothesis 3 predicted that higher levels of Ego Identity Exploration will predict more positive attitudes toward LG individuals, and lower levels will predict more negative attitudes toward LG individuals. To examine the influence of the predictor variable (exploration) on the criterion variable (Attitudes toward LG People), both variables were entered in a regression. The overall regression was significant, $F(2, 159) = 36.66$, $p < .001$, explaining a moderate-to-large amount of the variance ($R^2 = .32$, adj $R^2 = .31$) (Cohen, 1988). Tests of the standardized partial regression coefficient revealed that a higher level of ego identity exploration was significantly associated with more tolerant attitudes (lower scores on the ATLG-S) toward LG people ($\beta = -.54$; $p < .001$) (Table 4-4). Social Desirability was not significantly related to ATLG-S scores ($\beta = .05$; $p = .50$).
Hypothesis 3a predicted that Ego Identity Exploration would moderate the relationship between authoritarianism and LG attitudes; it was also predicted to moderate the relationship between SDO and LG attitudes. However, when a regression was carried out using ATLG-S scores as the criterion variable, and RWA and SDO were entered as predictor variables to gauge their main effects, SDO was not a significant predictor of Attitudes toward LG individuals ($\beta = .03; p = .64$). Due to this finding, no further analyses for this hypothesis were executed using SDO as a predictor variable.

To test the hypothesis regarding the moderation of authoritarianism by exploration, Frazier, Tix, and Baron’s (2004) recommendation to use hierarchical multiple regression procedures was followed. The variables were standardized to reduce multicollinearity between the interaction term and the main effects when testing for moderator effects. In the first step of the regression, social desirability was entered, in order to control for its effects throughout the remainder of the steps. In the second step, the main effects (authoritarianism and exploration) were entered. In the third step, the interaction (authoritarianism x exploration) was entered; at this step, a significant change in $R^2$ for the interaction term would indicate a significant moderator effect. For the final step, all possible interactions were added to ascertain any further effects (social desirability x authoritarianism, social desirability x exploration, social desirability x authoritarianism x exploration). As shown in Table 4-5, there was a significant moderator effect, indicating that exploration moderated the link of authoritarianism to attitudes toward LG individuals. As indicated by the adjusted $R^2$ for the regression equation, the main interaction effects accounted for 57% of the variance in ATLG-S scores. The interaction term of authoritarianism and exploration accounted for an additional 3% of the variance in ATLG-S scores.
To explore patterns underlying this significant interaction effect, an Excel spreadsheet program (at http://www.jeremydawson.co.uk/2-way standardized.xls) was used to plot the interaction effects of authoritarianism and exploration, and to provide exact values according to the moderator effects. In Figure 4-1, it may be seen that for individuals with low levels of authoritarianism, there is little difference on ATLG-S scores between individuals with high versus low levels of ego identity exploration. However, for individuals who endorsed high levels of authoritarianism, negative or condemning attitudes toward LG individuals were moderated to a significant degree by higher levels of ego identity exploration. In other words, ego identity exploration appears to allow greater tolerance versus condemnation in attitudes toward LG people, moderating the effects of even a high level of authoritarianism.

**Additional Research Questions**

As previously noted, the vast majority of research on LG attitudes has been conducted using samples of college students. In addition to the above hypotheses, it was questioned whether a sample that was older than a typical college-student-aged population would have similar attitudes toward LG individuals. The first set of research questions (1a and 1b) were based in the relationship between gender and LG attitudes.

Question 1a posited that males in the current sample would have more negative attitudes toward LG individuals than will women; but, that this difference would be eliminated when controlling for gender role values (measured by Attitudes toward Women – ATW). In other words, the relationship between gender and ATLG would be fully mediated by ATW scores. A frequently used multi-step process for testing mediation was used (Baron & Kenny, 1986; Frazier, Tix, & Barron, 2004; Holmbeck, 1997). In the first step, the predictor (e.g., social support) should be significantly associated with the outcome (ego identity). In the second step,
the predictor should be significantly associated with the proposed mediator (self-concealment). In the final step, in an equation in which the predictor and mediator are jointly entered to predict outcome, the mediator should be significantly associated with the outcome. Correspondingly, the previously significant effects of the predictor should be non-significant or significantly reduced once the role of the mediator is controlled. In this last step, it is also important to test the significance of the mediated effect (Baron & Kenny, 1986; Frazier et al., 2004; Kenny, Kashy, & Bolger, 1998).

In the first analysis step, recoded gender (0 = males, 1 = females) was entered in a regression equation predicting scores on the Attitudes toward Lesbian and Gay Men, Short Form (ATLG-S). Gender accounted for significant variability in ATLG-S scores ($\Delta R^2 = .04$, $\beta = -.20$, $p < .05$). Thus, gender explained significant variance associated with ATLG-S scores and the direction of this effect indicated that a male gender was significantly associated with less tolerant attitudes toward LG individuals.

In the second step of testing mediation, the regression analysis indicated that gender also accounted for significant variation in scores on the Attitudes toward Women (ATW) scale ($\Delta R^2 = .07$, $\beta = -.26$, $p < .01$). The direction of the effect suggested that a male gender was associated with less egalitarian views toward men’s and women’s gender roles. In the third step of testing the mediated effect, both gender and ATW scores were entered in the regression predicting ATLG-S scores. These results are summarized in Tables 6 and 7. Results revealed that the mediator (ATW scores) was significantly associated with the outcome, while gender, initially significantly associated with ATLG-S scores, ceased being a significant predictor. The results indicated that ATW scores, indicative of gender role attitudes, mediated the relationship between gender and attitudes toward lesbians and gay men. The mediated effect was evaluated for
statistical significance (Baron & Kenny, 1986; Kenny et al., 1998). The mediated effect was statistically significant, \( Z > 1.94, p < .05 \).

Research Question 1b posited that less condemning attitudes toward lesbians and more condemning attitudes toward gay men would be associated with a male gender; however, when erotic values of LG sexuality are controlled, they would account for gender-based difference in attitudes toward lesbians and gay men. Similar procedures to that used in research question 1a were employed. In the first analysis step, recoded gender (0 = males, 1 = females) was entered in a regression as a criterion variable, with Attitudes toward Gay Men (ATG) and Attitudes toward Lesbians (ATL) scores as predictors. Neither predictor was significantly associated with gender, and so analyses were not continued. In this light, the gender of the sexual minority person in question does not appear to play a significant role in a heterosexual person’s developing attitudes toward lesbians or gay men. Rather, the fact that an individual is known to be a sexual minority per se, regardless of gender, appear to be the important factor in attitude development, as demonstrated by Research Question 1a.

Research Question 2 posited that Authoritarianism, Social Dominance Orientation, and Church Attendance would significantly predict negative attitudes toward LG individuals (while controlling for Social Desirability). To examine the influence of the predictor variables (RWA, SDO, Frequency of Religious Service Attendence, and Social Desirability) on exploration, those variables were entered in a single block in a multiple regression, with ATLG-S as the criterion variable.

The overall regression was significant, \( F(4, 157) = 63.89, p < .001 \), explaining a large amount of the variance \( (R^2 = .62, \text{adj } R^2 = .61) \) (Cohen, 1988). Tests of standardized partial regression coefficients revealed that higher levels of RWA were significantly associated with
ATLG-S ($\beta = .73; p < .001$), but that SOD ($\beta = .04; p = .50$), Frequency of Religious Service Attendance ($\beta = .07; p = .20$), and Social Desirability ($\beta = -.01; p = .87$) were not significantly associated with ATLG-S. Maintaining these variables in the equation, all possible dummy-coded race/ethnicity variables were entered in the equation (Native American, Asian/Asian American, African American, Hispanic/Latino, Caucasian, Biracial, and Other). Again, the overall regression was significant, $F(11, 150) = 26.44, p < .001$, explaining a large amount of the variance ($R^2 = .66, \text{adj } R^2 = .64$) (Cohen, 1988). Tests of standardized partial regression coefficients revealed that higher levels of RWA were significantly associated with higher levels of commitment, but to a lesser degree than when not considering race ($\beta = .66; p < .001$). The only racial category that was significant in predicting ATLG-S scores was an African American identification ($\beta = .22; p < .01$). A Hispanic/Latino identification was marginally significant ($\beta = .15; p = .05$). Thus, even when controlling for other relevant variables, including religion, some ethnic/racial categories remained significant in predicting ATLG-S scores.
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<td>0.0</td>
<td>1</td>
<td>-.57**</td>
<td>.81</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. ATLG-S</td>
<td>9.0</td>
<td>45</td>
<td>16.8</td>
<td>9.5</td>
<td>-.49**</td>
<td>-.56**</td>
<td>.94</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. RWA</td>
<td>16.0</td>
<td>99.0</td>
<td>43.5</td>
<td>18.0</td>
<td>.50**</td>
<td>-.60**</td>
<td>.78**</td>
<td>.89</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. GEV</td>
<td>4.0</td>
<td>18.0</td>
<td>9.4</td>
<td>3.9</td>
<td>-.34**</td>
<td>-.50**</td>
<td>-.60**</td>
<td>-.59**</td>
<td>.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. LEV</td>
<td>4.0</td>
<td>20.0</td>
<td>12.2</td>
<td>4.5</td>
<td>-.19*</td>
<td>.27**</td>
<td>-.37**</td>
<td>-.41**</td>
<td>.48**</td>
<td>.86</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Social Desirability</td>
<td>0.0</td>
<td>13.0</td>
<td>4.5</td>
<td>3.2</td>
<td>.29**</td>
<td>-.37**</td>
<td>.25**</td>
<td>.32**</td>
<td>-.31**</td>
<td>-.24**</td>
<td>.79</td>
<td></td>
</tr>
<tr>
<td>8. SDO</td>
<td>2.83</td>
<td>7.48</td>
<td>3.9</td>
<td>1.2</td>
<td>.29**</td>
<td>-.43**</td>
<td>.43**</td>
<td>.53**</td>
<td>-.28**</td>
<td>-.15</td>
<td>.20**</td>
<td>.92</td>
</tr>
<tr>
<td>9. ATW</td>
<td>1.0</td>
<td>7.8</td>
<td>3.1</td>
<td>1.4</td>
<td>.37**</td>
<td>-.54**</td>
<td>.64**</td>
<td>.68**</td>
<td>-.47**</td>
<td>-.17*</td>
<td>.18*</td>
<td>.61**</td>
</tr>
</tbody>
</table>

EIPQ = Ego Identity Process Questionnaire; ATLG-S = Attitudes Toward Lesbians and Gay Men, Short Form; RWA: Right-Wing Authoritarianism; GEV/LEV = Gay/Lesbian Erotic Value Questionnaire; SDO = Social Dominance Orientation; ATW: Attitudes Toward Women. Cronbach’s coefficients alphas appear in bold italics on the diagonal.

Note: N = 162. * p < .05. **p < .01.
Table 4-2. Summary of Multiple Regression Analysis for the Prediction of EIPQ Commitment and Exploration Scores by RWA and SDO

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Commitment</th>
<th>Exploration</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$B$</td>
<td>$SE_{b}$</td>
</tr>
<tr>
<td>RWA</td>
<td>.03</td>
<td>.01</td>
</tr>
<tr>
<td>SDO</td>
<td>.02</td>
<td>.07</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>.05</td>
<td>.02</td>
</tr>
</tbody>
</table>

Note: Overall regression results for Commitment, $F(3, 158) = 19.73$, $p < .001$, $R^2 = .27$; for Exploration, $F(2, 159) = 36.60$, $p < .001$, $R^2 = .41$. RWA = Right-Wing Authoritarianism, SDO = Social Dominance Orientation; * $p < .05$. ** $p < .001$. 
Table 4-3. Summary of Multiple Regression Analysis for the Prediction of EIPQ Exploration Scores by Number of Known LG Individuals and the level of Closeness in those Relationships

<table>
<thead>
<tr>
<th>Predictor</th>
<th>B</th>
<th>SE_b</th>
<th>β</th>
<th>t</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of LG people known</td>
<td>1.31</td>
<td>.33</td>
<td>.29</td>
<td>4.00**</td>
</tr>
<tr>
<td>Closeness</td>
<td>.22</td>
<td>.09</td>
<td>.18</td>
<td>2.50*</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>-.10</td>
<td>.02</td>
<td>-.31</td>
<td>-4.57**</td>
</tr>
</tbody>
</table>

Note: Overall regression results, $F(3, 158) = 21.14, p < .001, R^2 = .29$. * $p < .05$. ** $p < .001$. 
Table 4-4. Summary of Multiple Regression Analysis for the Prediction of ATLG-S Scores by EIPQ Exploration scores

<table>
<thead>
<tr>
<th>Predictor</th>
<th>$B$</th>
<th>$SE_b$</th>
<th>$\beta$</th>
<th>$t$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Exploration</td>
<td>-5.14</td>
<td>.67</td>
<td>-.54</td>
<td>-7.66*</td>
</tr>
<tr>
<td>Social Desirability</td>
<td>.14</td>
<td>.21</td>
<td>.05</td>
<td>.69</td>
</tr>
</tbody>
</table>

Note: Overall regression results, $F(2, 159) = 36.66, p < .001, R^2 = .32. * p < .001.
Table 4-5. Moderating Effect of Ego Identity Exploration on the Relation between Authoritarianism and Attitudes toward Lesbians and Gay Men

<table>
<thead>
<tr>
<th>Step and Variable</th>
<th>B</th>
<th>β</th>
<th>t</th>
<th>Total R²</th>
<th>Adj. R²</th>
<th>R² inc.</th>
<th>F inc.</th>
<th>df</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Desirability</td>
<td>2.38</td>
<td>.25</td>
<td>3.28*</td>
<td>.06</td>
<td>.06</td>
<td>.06</td>
<td>10.73</td>
<td>1, 160</td>
</tr>
<tr>
<td>Step 2</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarianism</td>
<td>6.66</td>
<td>.70</td>
<td>11.54**</td>
<td>.63</td>
<td>.62</td>
<td>.57</td>
<td>120.42</td>
<td>2, 158</td>
</tr>
<tr>
<td>Exploration</td>
<td>-1.43</td>
<td>-.15</td>
<td>-2.43*</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Step 3</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Authoritarianism X Exploration</td>
<td>-1.43</td>
<td>-.20</td>
<td>-3.82**</td>
<td>.66</td>
<td>.65</td>
<td>.03</td>
<td>14.65</td>
<td>1, 157</td>
</tr>
<tr>
<td>Step 4</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Desirability X Authoritarianism</td>
<td>.38</td>
<td>.04</td>
<td>.57</td>
<td>.67</td>
<td>.65</td>
<td>.01</td>
<td>.73</td>
<td>3, 154</td>
</tr>
<tr>
<td>Social Desirability X Exploration</td>
<td>.87</td>
<td>.10</td>
<td>1.42</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Social Desirability X Authoritarianism X</td>
<td>-.09</td>
<td>-.02</td>
<td>-.25</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Exploration</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note: Overall regression results, F(2, 159) = 36.66, p < .001, R² = .32. * p < .05, ** p < .001.
Table 4-6. Direct Effects Regression Analyses of Predictor Variables on Criterion Variables (Gender, ATW Scores, and ATLG-S Scores)

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Criterion</th>
<th>$B$</th>
<th>$SE B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Gender</td>
<td>ATLG-S</td>
<td>-4.18</td>
<td>1.60</td>
<td>-.20*</td>
</tr>
<tr>
<td>(0 = male, 1 = female)</td>
<td>ATW</td>
<td>-.81</td>
<td>.24</td>
<td>-.26*</td>
</tr>
</tbody>
</table>

Note: $N_{male} = 48$, $N_{female} = 114$, * $p < .05$
Table 4-7. Regression Analyses of Attitudes Toward Women Mediating the Effects of Gender on ATLG-S scores

<table>
<thead>
<tr>
<th>Criterion</th>
<th>Predictor</th>
<th>$B$</th>
<th>$SE B$</th>
<th>$\beta$</th>
</tr>
</thead>
<tbody>
<tr>
<td>ATLG-S</td>
<td>Gender</td>
<td>-0.79</td>
<td>1.30</td>
<td>-0.04</td>
</tr>
<tr>
<td></td>
<td>(0 = male, 1 = female)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>(Mediator)ATW</td>
<td>0.420</td>
<td>0.42</td>
<td>0.63*</td>
</tr>
</tbody>
</table>

* $p < .01$
Figure 4-1. Plot of significant Authoritarianism X Ego Identity Exploration interaction, with plotted values for scores on the Attitudes toward Lesbian and Gays (ATLG-S)

<table>
<thead>
<tr>
<th></th>
<th>Low Authoritarianism</th>
<th>High Authoritarianism</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Ego Identity Exploration</td>
<td>9.24</td>
<td>24.44</td>
</tr>
<tr>
<td>High Ego Identity Exploration</td>
<td>10.26</td>
<td>19.70</td>
</tr>
</tbody>
</table>
Hypotheses

Hypothesis 1, which predicted that participants who had higher scores on authoritarianism (RWA) and social dominance orientation (SDO) would have higher levels of ego identity commitment and lower levels of ego identity exploration, was partially supported. RWA predicted higher levels of commitment, and lower levels of exploration; SDO predicted lower levels of exploration, but did not significantly predict levels of commitment. This begins to lend support to the concept that attitudes may help or hinder individual development, or vice versa; more specifically, foreclosure of options (high commitment, low exploration) appears to be related to authoritarian and/or socially dominant values. However, it is important to remember that because this research is correlational in nature, it is uncertain whether more authoritarian or socially dominant attitudes precede high commitment/low exploration of ego identity development, or vice versa. It seems possible that one could embrace a conservative, authoritarian, socially dominant ideology first, and when later confronted with others issues germane to an authoritarian identity, adopt a viewpoint consistent with the larger body of authoritarian views. However, it is also reasonable to conceive of an individual first developing some beliefs and values consistent with an authoritarian viewpoint, and later finding congruency between her/his beliefs and the larger authoritarian group; from that point, the individual could conceivably embrace other beliefs from the authoritarian group out of a feeling of identification or solidarity. Lacking an experimental or longitudinal design, this study cannot begin to postulate whether the “chicken or the egg” came first, but it is clear that identity development and authoritarian/social dominance-based attitudes are related. To carry the finding one step further and to place it more squarely in the language of Herek’s (1984) theory, ego-based
attitudinal functions (including the defensive functions) and symbolic attitudinal functions are related to one another and may influence each other.

Hypothesis 2, which postulated that greater numbers of LG contact experiences and greater intimacy in those contact experiences would predict higher levels of ego identity exploration, was fully supported. Thus, not only do LG contact experiences and greater intimacy therein have a relation to more tolerant attitudes toward LG individuals (Herek & Capitanio, 1996; Liang & Alimo, 2005), but also are related to greater levels of ego identity exploration. Again, since this research is correlational, one cannot reasonable suggest that LG-based acquaintances promote higher levels of exploration, or vice versa. However, it does seem reasonable to imagine that the ego identity exploration, as inspired through interaction with an LG person, could contribute to higher levels of exploration in certain domains of ego identity (i.e., gender roles, relationships). Alternately, if ego identities that are high in exploration levels indicate a certain type of personality (Schwartz, 2001; van Hoof, 1999), (e.g., an “open-minded” or “open-to-experience” type of personality), then that personality might be more amenable to increased exposure to other individuals’ beliefs, values, and ways of living. As with the previous hypothesis, it is difficult to imagine an experimental or longitudinal study that might detangle causation from effect in this scenario.

At the core of this study, hypotheses 3 and 3a explored the role of ego identity development in relation to attitudes toward LG individuals. Namely, the theoretical concept to be tested stated that greater authoritarian/socially dominant attitudes would be related to condemning LG attitudes, but that a more developed ego (namely, with greater levels of ego identity exploration) would temper such condemning beliefs. To begin to test this concept, Hypothesis 3 predicted that higher levels of ego identity exploration would predict more positive
attitudes toward LG individuals, and that lower levels of ego identity exploration would predict more negative attitudes toward LG individuals. This hypothesis was supported. Confirming Herek’s (1984) previous untested theory that one’s ego, namely the defenses embodied therein, could affect attitudes toward LG individuals, this study found that a more developed ego identity was related to greater tolerance in attitudes toward LG individuals. This is interesting because although many domains of identity constitute the concept of ego identity (e.g., career, politics, religion, sex roles), the overall construct was still significantly related to LG-based attitudes. Schwartz (2001) and van Hoof (1999) both suggested that ego identity may be an indicator of overall personality, perhaps having some relation to the “Big Five” construct of “Openness to Experience” in this scenario (McCrae & Costa, 1987). Greater flexibility in one’s ego identity appears to allow greater flexibility and adaptability in encountering differences throughout the lifespan – specifically in this scenario, greater flexibility and tolerance of others who are different from one’s self.

Tying all previous hypotheses together, hypothesis 3a suggested that ego identity exploration would moderate the relationship between authoritarianism and LG attitudes, and that it would also moderate the relationship between social dominance orientation and LG attitudes. However, since SDO was not related to attitudes toward LG individuals, it was not included in the analyses for this hypothesis. Apart from this deletion, the hypothesis was supported.

In order to understand this outcome, it will be important to clarify the nature of statistical moderation. According to Frazier, Tix, and Baron (2004), questions involving moderators address “when” or “for whom” a variable most strongly predicts or causes an outcome variable. More specifically, a moderator is a variable that alters the direction or strength of the relation between a predictor and an outcome (Baron & Kenny, 1986; Holmbeck, 1997; James & Brett,
Thus, a moderator effect is basically an interaction whereby the effect of one variable depends on the level of another. In other words, researchers are interested in moderation when the relation between predictor (here, authoritarianism) and outcome (attitudes toward LG individuals) variables are stronger for some people (i.e., those with lower levels of exploration) than for others (i.e., those with higher levels of exploration).

When considering individuals with low levels of authoritarianism, there is little difference in ATLG-S scores between individuals with high or low levels of ego identity exploration. However, when considering individuals with higher levels of authoritarianism, condemning attitudes toward LG individuals were moderated to a significant degree by higher levels of ego identity exploration. This finding suggests that the degree to which one has explored various domains of her or his life (perhaps demonstrating a degree of intrapersonal adaptivity/flexibility) appears to allow greater tolerance in attitudes toward LG people, even as levels of authoritarian values and attitudes become higher.

In essence, a better developed ego identity, specifically one consisting of higher levels of ego identity exploration, implies less of a need to defensively project negative reactions about a gay or lesbian sexual orientation in the vehicle of condemning attitudes toward such individuals. This would likely be due to a person being more secure through having already explored identity-based options for her/himself. Herek’s (1984) theory that attitudes may serve a variety of functions (in this case, symbolic and defensive), and that the functions may interact with and effect one another in determining a person’s final attitude structure, is supported.

**Research Questions**

Apart from the above hypotheses, one of the aims of the current study was to explore whether previous findings in the literature regarding attitudes toward LG individuals, based
largely in samples of college students, could be replicated in an adult-aged sample. As was demonstrated by this study’s results, only some of the results from previous studies generalized to the present sample.

Research question 1a suggested that, as in previous studies based in college students (Kite & Whitley, 1996, 1998), males would have more negative attitudes toward LG individuals than would females, but that this difference would be eliminated (fully mediated) when controlling for gender role values as measured by ATW. The current findings demonstrate that this statement is true for adults as it is for college-aged individuals. As suggested by Kite (1994), non-LG individuals’ evaluations of gay men and lesbians are at least partly grounded in a larger belief system concerning gender roles. If one has physical or behavioral traits that might traditionally be labeled “masculine,” then according to traditional gender role beliefs and values, stereotypically masculine behaviors and characteristics should be a natural extension of that individual’s gender role. As previously reported, the literature on gender roles suggests that male gender roles are more narrowly defined and inflexible than are those for women (Bem, 1993), and violating male gender roles is more obviously offensive than violation of female roles (Herek, 1988). This study’s finding clarifies that for adults as well as college student-aged individuals, one’s gender does not affect attitudes toward LG individuals, despite men typically endorsing more condemning attitudes. Rather, gender role attitudes and beliefs, which may be more inflexibly espoused by males than by females, are the deciding factor in formation of attitudes toward LG people.

Carrying the above idea forward, and in line with previous findings in the literature (DeLamater, 1987; Herek, 2002; Herek & Capitanio, 1999; Louderback & Whitley, 1997), research question 1b suggested that a male gender in the current sample would be related to less
condemning attitudes toward lesbians and more condemning attitudes toward gay men. Further, and still in line with previous findings (Louderback & Whitley, 1997), the question postulated that the above attitudinal differences on the part of heterosexual males in the sample would be eliminated when erotic values of LG sexuality are controlled. However, when the above question was tested using the current data, a male gender was not significantly related at all to attitudes toward gay men or lesbians (considered separately). This suggests that attitudes toward LG people function as a single construct in the current sample, and the gender of the LG person is not significant in the formation of tolerant/intolerant attitudes. As demonstrated in research question 1a, it is an overall violation of gender roles, rather than a gender (or an object of attitudes, as suggested by this question) that is important in the current sample when regarding attitudes toward LG people.

Research Question 2 tested the suggestion that Authoritarianism, Social Dominance Orientation, and Religious Service Attendance would significantly predict negative attitudes toward LG individuals. Research question 2a posited that when controlling for the above variables, race would not be a significant predictor of attitudes toward LG attitudes. Interestingly, only authoritarianism among the variables listed above was significant in predicting attitudes toward LG individuals. This is similar to previous findings in the literature which suggest that authoritarianism is a motivating force behind some religious-based LG prejudice (i.e., such as that dealing with fundamentalist religious belief, as in Laythe, Finkel, & Kirkpatrick, 2001), and with prejudice again LG people in general (Altemeyer, 1981, 1998, 2001; Ekehammar, Akrami, Gylje, & Zakrisson, 2004; Laythe, Finkel, & Kirkpatrick, 2001; Whitley, 1999; Whitley & Lee 2000); however, it is contrary to other findings which specifically found religious service attendance to predict an individual’s level of tolerance.
toward LG people (Schulte & Battle, 2004). This may be due to the latter study’s focus on African American individuals, whereas the current study included participants of various races and ethnicities.

Lemelle and Battle (2004) reported that if one controls for religious service attendance, ethnicity-based differences in tolerance levels toward LG people are eliminated. Analyses for research question 2a, though, revealed that even when controlling for the influence of religious service attendance, an African American racial identification remained a significant predictor of attitudes toward LG people. While not technically significant, identifying oneself as Hispanic was also nearly significant in this regard (p = .05). In attempting to understand this difference and postulating that it may reside in religious differences among ethnicities/races, it is important to note that this study did not regard all possible religious-based variables that have been used in previous studies, such as fundamentalism or intrinsic versus extrinsic religiosity (Herek, 1987). As such, the motivating religious factors behind racial differences in attitudes toward LG individuals is unknown. It may be that different races’/ethnicities’ understandings of appropriate gender roles (i.e., some Hispanic cultures’ “machismo” and “Marianisma”) are a possible alternative key to understanding the above differences.

**Limitations and Suggestions for Further Research**

A main limitation of the current study is relatively small cell sizes among some racial/ethnic identifications (i.e., Hawaiian/Pacific Islander), thus preventing complete understanding of the role of race/ethnicity in attitudes toward LG people. Although previous studies suggest that when controlling for religious factors, there are no difference among some races/ethnicities, the current study did not replicate those findings. It may be useful to obtain samples composed entirely of a particular racial/ethnic group, and to employ more variables that
may be theoretically relevant to that group’s cultural beliefs and values. The difficulty of this undertaking may be formidable, though, as the effort required to accumulate even moderate diversity in the current sample was significant. Despite such difficulties, gaining further understanding of various races and ethnicities attitudes toward LG people is important, especially as LG individuals continue to openly disclose their sexual/affectional orientations and lobby for greater civil rights. A future study could replicate the current study using a larger sample, or a sample with greater diversity, possibly allowing for such an understanding.

Additionally, noting that the current sample produced significant skewness and kurtosis on some of the variables under study, greater effort could be put forth to gather a more “well rounded” sample with more normally distributed scores.

Another important limitation is that this is a correlational study. The causal direction of the statistically significant findings may only be postulated, and even then, only weakly so. For example, in the test of Hypothesis 1, authoritarianism predicted higher levels of commitment, and lower levels of exploration. It is empirically unjustified to suggest that a conservative or authoritarian attitude is detrimental to aspects of psychological development. Equally unjustified is the suggestion that all individuals with healthy psychological development will develop and open-minded and tolerant stance toward LG individuals. Although the current study demonstrates a clear relationship between the two factors, causation or a directional relationship between them cannot be drawn from the current data. An experimental design, or perhaps a longitudinal study that tracks individuals through a college career, might be useful in clarifying this path.

Another conceivable limitation is the use of an Internet-based sample to the exclusion of a more random sampling method. It is possible that some unexpected findings in the current
study are due to sampling bias generated through a limited arena for data collection. It is also possible that a greater degree of racial/ethnic diversity could have been obtained through more direct recruitment from community-based organizations. However, the empirical grounding for such possibilities is not altogether clear. A significant study which compared Internet versus paper-and-pencil sampling methods found that both means of data collection resulted in approximately equivalent ratios of SES groupings, racial groupings, and response patterns (Gosling, Vazire, Srivastava, & John, 2005). Nonetheless, the results of a future study that replicates the current study, but using more varied methods of data collection, would be interesting.

Other future work might explore the unexpected findings from the current study. For example, although previous work indicated that heterosexual men would hold more condemning attitudes toward gay men than toward lesbians, this study’s results did not replicate that finding. It seems possible that greater exposure of the general population to gay men and lesbians over the past decade may have eliminated differences in attitudes toward them. However, proof that the current findings are not anomalous would be necessary before that hypothesis, or other similar hypotheses, could be put forward.

**Implications for Psychotherapy and Counseling**

As prejudice against LG people sometimes leads to limited civil rights and violence against that population, the present study has important implications for psychotherapy, especially that geared toward ameliorating social injustices and decreasing the intolerance of individuals who are intolerant of LG people. At the center of this study’s findings is that ego identity development, specifically the exploratory aspect of such development, is related to greater tolerance toward LG individuals. Even more interestingly, such ego identity exploration
tempers or moderates the prejudicial aspects of an authoritarian personality. Thus, if an individual expresses negative views toward LG individuals, psychotherapists may promote social justice for the LG community not necessarily by confronting those views directly, but rather by promoting greater exploration of life issues in general. This exploration appears to promote greater tolerance toward LG people in an indirect way.

Additionally, psychoeducation for those in the LG community might focus on promoting tolerance not only by bringing direct conflict against authoritarian political or religious groups, but by allowing LG people to be known more personally to these groups. This study demonstrates that such interpersonal knowledge promotes tolerance in and of itself. If it is true that such exposure promotes ego identity exploration, then this tolerance will be somewhat stable even in the face of the most rigorous authoritarian stance. In this way, the LG community may be its own agent of social justice. Both this idea, as well as the concept of engendering ego identity exploration in non-LG individuals, could be useful in planning outreach projects in community centers or other mental health centers.

In summary, the fact that ego identity, most specifically the exploration aspect of ego identity, is related to tolerance of LG people is a new finding in the literature on both attitudes toward LG individuals and on ego identity. While the correlational nature of this research limits one’s ability to draw causal implications from the study, this study does demonstrate a clear relation among various socially based attitudes and one’s own ego identity development. Most interestingly, a more mature, well explored sense of self is related to one’s ability to tolerate LG people, even in the context of an authoritarian-type personality or set of attitudes. As this type of personality is typically more condemning of societal difference in general, and definitely toward LG people, the fact that a more mature ego can promote tolerance in even such an intrapsychic
context is encouraging. In addition to providing empirical support for Herek’s (1984) theory of
LG prejudice, this study provides empirical grounding for psychotherapeutic and outreach-based
interventions aimed at reducing intolerance, and promoting social justice for LG individuals and
their community.
APPENDIX A
DEMOGRAPHIC QUESTIONNAIRE

(1) What is your current age?______________

(2) What is your race/ethnicity?
_____American Indian/Alaska Native
_____Asian/Asian American
_____Black/African American
_____Hispanic/Latino
_____Native Hawaiian or Other Pacific Islander
_____White/European American
_____Biracial/Multiracial
_____Other (Please specify):_________________________________

(3) Where do you currently live?
_____United States (East Coast)
_____United States (West Coast)
_____United States (Northern Midwest)
_____United States (Southern Midwest)
_____United States (Southern)
_____United States (Alaska)
_____United States (Hawaii)
_____Canada
_____Mexico
_____Central America
_____South American
_____Europe
_____Asia
_____Africa
_____Australia
_____Other (Please Specify):_________________________________

(4) In what type of town or city do you primarily live?
_____Urban
_____Suburban
_____Rural (population of less than 2500)

(5) What is your current yearly personal gross income?
_____Under $4,999
_____Between $5,000 and $14,999
_____Between $15,000 and $24,999
_____Between $25,000 and $34,999
_____Between $35,000 and $49,999
_____Between $50,000 and $74,999
_____Between $75,000 and $99,999
(6) What is your highest level of education?
   _____ Some High School
   _____ High School Graduate/Equivalent
   _____ Vocational Training and/or Certificate
   _____ Some College/University (no degree)
   _____ Associate’s Degree(s)
   _____ Bachelor’s Degree(s)
   _____ Some Graduate Study (no graduate degree)
   _____ Master’s Degree(s)
   _____ Doctorate and/or Postgraduate Degree(s)
   _____ Other (please specify): ________________________________

(7) What is your gender?
   _____ male
   _____ female
   _____ other (please specify) ________________________________
APPENDIX B
THE ATTITUDES TOWARD LESBIANS AND GAY MEN SCALE

Below is a list of statements different people have made about men who are gay (homosexual), or women who are lesbian (homosexual). Please mark a number from 1 (“strongly disagree”) to 5 (“strongly agree”) to describe your degree of agreement with each item.

1 = Strongly disagree
2 = Disagree somewhat
3 = Can’t decide
4 = Agree somewhat
5 = Strongly Agree

(1) Lesbians just can’t fit into our society.
(2) State laws regulating private, consenting lesbian behavior should be loosened.*
(3) Female homosexuality is a sin.
(4) Female homosexuality in itself is no problem, but what society makes of it can be a problem.*
(5) Lesbians are sick.
(6) I think male homosexuals are disgusting.
(7) Male homosexuality is a perversion.
(8) Just as in other species, male homosexuality is a natural expression of sexuality in human men.*
(9) Homosexual behavior between two men is just plain wrong.
(10) Male homosexuality is merely a different kind of lifestyle that should not be condemned.*

(11) How many times have you personally encountered a person (i.e., friend, acquaintance, relative, distant relative) who you knew was a lesbian or gay man?

_____ 0
_____ 1
_____ 2
_____ 3
_____ 4 or 5
_____ 6 to 9
_____ 10 or more
(12) If you have known a lesbian or gay man, how would you rate the relationship in terms of personal closeness?
_____ I’ve never known a lesbian or gay man
_____ very distant, not well known
_____ somewhat distant, not very well known
_____ somewhat close, somewhat well known
_____ very close, very well known

(13) How frequently do you attend a religious service (i.e., church, temple, mosque, or other)
_____ never
_____ once or twice a year
_____ once or twice a month
_____ once a week
_____ more than once a week

(14) On the following scale, with “0” indicating “the opposite sex, and “6” indicating “the same sex,” how would you describe the people to whom you are sexually attracted?
_____ Always the opposite sex from me
_____ Almost always the opposite sex, very occasionally the same sex
_____ Sometimes the opposite sex, occasionally the same sex
_____ About equally the opposite sex and the same sex
_____ Sometimes the same sex, occasionally the opposite sex
_____ Almost always the opposite sex, very occasionally the same sex
_____ Always the same sex as me

(15) How would you describe your sexual orientation?
_____ heterosexual
_____ gay
_____ lesbian
_____ bisexual

*These items are reverse scored.
APPENDIX C
THE RIGHT-WING AUTHORITARIANISM SCALE, SHORT FORM

Below is a list of questions concerning a variety of social issues. You will probably find that you agree with some of the statements, and disagree with others, to varying extents. Please indicate your reaction to each statement by checking the answers according to the following scale:

1 = Strongly disagree
2 = Moderately disagree
3 = Slightly disagree
4 = Neutral
5 = Slightly agree
6 = Moderately agree
7 = Strongly agree

(1) Our country needs a powerful leader, in order to destroy the radical and immoral currents prevailing in society today.

(2) Our country needs free thinkers, who will have the courage to stand up against traditional ways, even if this upsets many people.*

(3) The “old-fashioned ways” and “old-fashioned values” still show the best way to live.

(4) Our society would be better off if we showed tolerance and understanding for untraditional values and opinions.*

(5) God’s laws about abortion, pornography and marriage must be strictly followed before it is too late; violations must be punished.

(6) The society needs to show openness towards people thinking differently, rather than a strong leader; the world is not particularly evil or dangerous.*

(7) It would be best if newspapers were censored so that people would not be able to get hold of destructive and disgusting material.

(8) Many good people challenge the state, criticize the church, and ignore “the normal way of living.”*

(9) Our forefathers ought to be honored more for the way they have built our society, and at the same time we ought to put an end to those forces destroying it.

(10) People ought to pay less attention to the Bible and religion, and instead they ought to develop their own moral standards.*

(11) There are many radical, immoral people trying to ruin things; the society ought to stop them.
(12) It is better to accept bad literature than to censor it.*

(13) Facts show that we have to be harder against crime and sexual immorality, in order to uphold law and order.

(14) The situation in the society of today would be improved if troublemakers were treated with reason and humanity.*

(15) If society so wants, it is the duty of every true citizen to help eliminate the evil that poisons our country from within.

*These items are reverse scored.
APPENDIX D
THE SOCIAL DOMINANCE ORIENTATION SCALE, ABBREVIATED VERSION

Which of the following objects or statements do you have a positive or negative feeling towards? Beside each object or statement, mark a number from ‘1’ to ‘7’ which represents the degree of your positive or negative feeling.

1 = Very positive
2 = Positive
3 = Slightly positive
4 = Neither positive nor negative
5 = Slightly negative
6 = Negative
7 = Very negative

(1) Some groups of people are simply inferior to other groups.
(2) It’s OK if some groups have more of a chance in life than others.
(3) To get ahead in life, it is sometimes necessary to step on other groups.
(4) Inferior groups should stay in their place.
(5) Group equality should be our ideal.*
(6) We should do what we can to equalize conditions for different groups.*
(7) Increased social equality.*
(8) We would have fewer problems if we treated people more equally.*

*These items are reverse scored.
APPENDIX E
THE ATTITUDES TOWARD WOMEN SCALE

Please mark a number from 1 (“Disagree Strongly”) to 4 (“Agree Strongly”) to describe your degree of agreement with each item. (Higher scores indicate more egalitarian attitudes)

1 = Agree strongly
2 = Agree somewhat
3 = Neutral
4 = Disagree somewhat
5 = Disagree strongly

(1) Swearing and obscenity are more repulsive in the speech of a woman than a man.

(2) Under modern economic conditions, with women active outside the home, men should share in household tasks such as washing dishes and doing laundry.*

(3) It is insulting to women to have the “obey” clause still in the marriage service.*

(4) A woman should be as free as a man to propose marriage.*

(5) Women should worry less about their rights and more about becoming good wives and mothers.

(6) Women earning as much as their dates should bear equally the expense when they go out together.*

(7) Women should assume their rightful place in business and all the professions along with men.*

(8) A woman should not expect to go to exactly the same places or to have quite the same freedom of action as a man.

(9) Sons in a family should be given more encouragement to go to college than daughters.

(10) It is ridiculous for a woman to run a locomotive and for a man to darn socks.

(11) In general, the father should have greater authority than the mother in the bringing up of children.

(12) The intellectual leadership of a community should be largely in the hands of men.

(13) Economic and social freedom is worth far more to women than acceptance of the ideal of femininity, which has been set up by men.*
(14) There are many jobs in which men should be given preference over women in being hired or promoted.

(15) Women should be given equal opportunity with men for apprenticeship in the various trades.*

*These items are reverse scored
APPENDIX F
EGO IDENTITY PROCESS QUESTIONNAIRE

Listed below are a number of statements describing different types of behavior. Please indicate how you feel about each statement.

1 = Strongly disagree
2 = Disagree
3 = Slightly disagree
4 = Slightly agree
5 = Agree
6 = Strongly agree

(1) I have definitely decided on the occupation that I want to pursue.
(2) I don’t expect to change my political principles and ideals.
(3) I have considered adopting different kinds of religious beliefs.
(4) There has never been a need to question my values.*
(5) I am very confident about what kinds of friends are best for me.
(6) My ideas about men’s and women’s roles have never changed as I became older.*
(7) I will always vote for the same political party.
(8) I have firmly held views concerning my role in my family.
(9) I have engaged in several discussions concerning behaviors involved in dating relationships.
(10) I have considered different political views thoughtfully.
(11) I have never questioned my views concerning what kind of friend is best for me.*
(12) My values are likely to change in the future.*
(13) When I talk to people about religion, I make sure to voice my opinion.
(14) I am not sure about what type of dating relationship is best for me.*
(15) I have not felt the need to reflect upon the importance I place on my family.*
(16) Regarding religion, my beliefs are likely to change in the near future.*
(17) I have definite views regarding the ways in which men and women should behave.
(18) I have tried to learn about different occupational fields to find the best one for me.

(19) I have undergone several experiences that made me change my views on men’s and women’s roles.

(20) I have consistently re-examined many different values in order to find the ones which are best for me.

(21) I think what I look for in a friend could change in the future.*

(22) I have questioned what kind of date is right for me.

(23) I am unlikely to alter my vocational goals.

(24) I have evaluated many ways in which I fit into my family structure.

(25) My ideas about men’s and women’s roles will never change.

(26) I have never questioned my political beliefs.*

(27) I have had many experiences that led me to review the qualities that I would like my friends to have.

(28) I have discussed religious matters with a number of people who believe differently than I do.

(29) I am not sure that the values I hold are right for me.*

(30) I have never questioned my occupational aspirations.*

(31) The extent to which I value my family is likely to change in the future.*

(32) My beliefs about dating are firmly held.

*These items are reverse scored.
Below is a list of statements different people have made about men who are gay (homosexual), or women who are lesbian (homosexual). Please mark a number from 1 (“very strongly disagree”) to 9 (“very strongly agree”) to describe your degree of agreement with each item.

1 = Very strongly disagree
2 = Strongly disagree
3 = Moderately disagree
4 = Slightly disagree
5 = Neutral
6 = Slightly agree
7 = Moderately agree
8 = Strongly agree
9 = Very strongly agree

(1) I find the idea of a man making love to another man erotic.
(2) I find the idea of a man making love to another man repulsive.*
(3) I think that I would be sexually aroused by watching two men make love.
(4) I have viewed pornographic materials involving male homosexual acts.
(5) I find the idea of a woman making love to another woman erotic.
(6) I find the idea of a woman making love to another woman repulsive.*
(7) I think that I would be sexually aroused by watching two women make love.
(8) I have viewed pornographic materials involving lesbian acts.

*These items are reverse scored.
APPENDIX H
MARLOWE-CROWNE SOCIAL DESIRABILITY SCALE, SHORT FORM

Please indicate either “true” or “false” to describe your degree of agreement with each item.

(1) It is sometimes hard for me to go on with my work if I am not encouraged.
(2) I sometimes feel resentful when I don’t get my way.
(3) On a few occasions, I have given up doing something because I thought too little of my ability.
(4) There have been times when I felt like rebelling against people in authority even though I knew they were right.
(5) No matter who I’m talking to, I’m always a good listener.
(6) There have been occasions when I took advantage of someone.
(7) I’m always willing to admit it when I make a mistake.
(8) I sometimes try to get even rather than forgive and forget.
(9) I am always courteous, even to people who are disagreeable.
(10) I have never been irked when people expressed ideas very different from my own.
(11) There have been times when I was quite jealous of the good fortune of others.
(12) I am sometimes irritated by people who ask favors of me.
(13) I have never deliberately said something that hurt someone’s feelings.
APPENDIX I
EXAMPLE ADVERTISEMENT FOR PARTICIPANT RECRUITMENT

I am a psychology researcher at the University of Florida, and am conducting a study on how various people respond to important social issues. The input of African American participants is often neglected by researchers, and the resulting research doesn't accurately reflect how all people in this country feel or think.

If you are an African American person and would like to contribute to the study, it may be accessed at http://survey.psych.ufl.edu/websocial. The survey takes approximately 20 minutes to complete, and the study has been approved by the University of Florida's Institutional Review Board.

Once you click the consent link at the bottom of the web page above, the survey begins. If you have questions or concerns, please feel free to contact me at the e-mail address above, or using information found at the survey link above.

Thank you to anyone who is willing to participate. Please feel free to forward the link to others who might be willing to participate as well.

Daniel Potoczniak, M.S.Ed.
Ph.D. Candidate, Counseling Psychology Program
University of Florida
APPENDIX J
INFORMED CONSENT

Informed Consent
Protocol Title: The Influence of Ego Identity on Heterosexual Individuals’ Attitudes toward Lesbian and Gay Individuals

Please read this consent document carefully before you decide to participate in this study.

Purpose of the research study:
The purpose of this study is to investigate how individuals regard different types of people, such as women versus men, or lesbians versus gay men. An indicator of human development and of various aspects of personality will be used to examine how various attitudes might be explained. As such, this study involves research.

What you will be asked to do in this study:
You will be asked to complete a series of 102 questions concerning how you feel about a number of topics, such as your ideas on politics, religion, values, family, friends, and significant others, to name a few. You do not have to answer any question you do not wish to answer. You will then be asked to provide some information about yourself, such as your gender, age, race, sexual orientation, and how attracted you are to people of another sex/gender, or of the same sex/gender. You will not be asked for your name or any other information that could identify you.

Time required:
Approximately 20 minutes.

Risks and Benefits:
This study has been approved by the University of Florida Institutional Review Board (IRB). There are no anticipated risks associated with this study, other than the potential minimal to mild discomfort that could potentially arise as a result of being asked personal questions regarding the subject areas described above. The risk of such discomfort should be minimal, if it exists at all.

You may directly benefit through increased self-awareness and self-understanding as you consider appropriate responses in completing the survey. Broader benefits of this study to others include a more comprehensive social understanding of how some types of beliefs or values affect attitudes toward lesbians and gay men. Additionally, through possible publication of the results, this study may inform the fields of personal counseling and career counseling.

Compensation:
You will not be compensated in any form for your participation in this study.

Confidentiality:
You will not be asked to provide any identifying information about yourself, and no record will be kept of your participation in any way.

Voluntary participation:
Your participation in this study is completely voluntary. There is no penalty for not participating.
Right to withdraw from the study:
You have the right to withdraw from the study at any time without consequence.

Technical Requirements:
You may complete this survey on any computer with Internet access using any later version Internet browser with javascript and cookies enabled. Your browser must also be able to display 128-bit encrypted web pages (which most Internet browsers support). If you experience technical difficulties accessing the survey, and you have ensured that javascript and cookies are enabled within your Internet browser, please send an e-mail to danpot@ufl.edu to report your technical difficulties, and try accessing the survey once again the following day. You may want to also try accessing the survey from a different computer.

Handling of data collected in this survey:
• Anonymity of data: You will not be personally identifiable by the data you submit via this Internet-based survey so you are encouraged to answer all items honestly and completely. The data gathered from this study may be presented in a final research paper in aggregate and/or individual response formats, however you will not be personally identifiable by the data presented within the final study.

• The data you submit via this survey is kept secure and private. The collected survey data will be stored on highly secure and firewalled servers, which can only be accessed by the research Investigator via password-protected protocols.

• Survey data submissions cannot be traced back to the original research participant, and although the IP address of the computers on which this survey is accessed for system administration and record keeping purposes, no connection will be made between you and your computer's IP address.

Whom to contact if you have questions about the study:
For questions concerning the study or to request a copy of the results, contact Daniel Potoczniak, M.S.Ed., Graduate Student, Department of Psychology, University of Florida, P.O. Box 112250, Gainesville, Florida, 32611. Phone: (352) 392-0601 x536, E-mail: danpot@ufl.edu; or, Greg Neimeyer, Ph.D., Professor, at the same address as above, phone: (352) 392-0601, x257, E-mail: Neimeyer@ufl.edu.

For questions or concerns about your rights as a research participant, contact the UFIRB office, P.O. Box 112250, University of Florida, Gainesville, FL 32611-2250. Phone: (352) 392-0433.

Agreement:
By completing the following survey, you agree that you have read the above information; that you voluntarily agree to participate in this study; and that you have received a copy of this description either by paper or electronically. Please click on the button below if you agree.
LIST OF REFERENCES


Hahn, E.D. (1993). *Sex-role Attitude Change and the Attitudes toward Women Scale.* Unpublished masters thesis. The University of Texas at Austin, Austin, TX.


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Daniel Joseph Potoczniak was born on April 24th, 1973 in Lakewood, NJ, to Joseph John Potoczniak and Jane Marie Potoczniak. He grew up in Brick, NJ for the first 12 years of his life, at which point his family moved to Brielle, NJ. During his high-school years, he attended Christian Brothers Academy in Lincroft, NJ, where he dedicated his time to the pursuit of all things French, editing the yearbook, and being a “band geek.” After graduating from high school, Daniel attended Georgetown University in Washington, D.C., where he majored in English. Upon graduation, he worked in a number of different jobs, including being an assistant to a pastry chef, copyediting children’s books, selling eyeglasses, and being a supervisor for the 2000 Census. He also performed volunteer work, counseling others on the AIDS/HIV Hotline at the Gay Men’s Health Crisis.

Finding direction and motivation in counseling others, Daniel returned to graduate school in 2001 at the University of Miami. There, he earned a Master of Science degree in Education with a concentration in mental health counseling. In 2003, Daniel matriculated at the University of Florida to begin his Ph.D. in counseling psychology, where he was offered the Marshall Criser Presidential Fellowship. His counseling and research interests further developed there, and included a focus on ego identity development across the lifespan, as well as issues that are relevant to the gay, lesbian, bisexual, and transgender community.

On July 31st, 2007, Daniel completed his one-year pre-doctoral internship in counseling psychology at the University of Pennsylvania’s Counseling and Psychological Services center. After receiving his Ph.D., Daniel will seek employment that allows a balance among clinical work, likely in a counseling center, and more assessment-based activities.