

## ABSTRACT

Title of Document: Development and Validation of the Behaviors  
Toward Gays and Lesbians Scale (B-GAL)

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This thesis discusses the current state of research regarding attitudes and behaviors toward lesbians and gay men and outlines the development and testing of the Behaviors Toward Gays and Lesbians Scale (B-GAL). Establishment of internal consistency reliability and construct validity (convergent, discriminant, and predictive validity, as well as factor analysis) was determined on a sample of 175 female and male heterosexual college students. Results suggested a highly internally consistent and valid behavioral measure consisting of three factors. The thesis also discusses the use of the B-GAL in providing a preliminary assessment of college students' behaviors toward lesbians and gay men.

DEVELOPMENT AND VALIDATION OF THE BEHAVIORS TOWARD GAYS  
AND LESBIANS SCALE (B-GAL)

By

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## Chapter 1

### Introduction

When Evelyn Hooker conducted research almost 50 years ago demonstrating that the projective test protocols of non-clinical homosexual men could not be distinguished from a comparable group of heterosexual men, nor were there differences in adjustment ratings, she became perhaps the first heterosexual “ally” in existence: a heterosexual person who was willing, despite the risk of criticism or ostracism, to advocate for gay and lesbian people. This was also perhaps the first evidence of the possibility of positive reactions toward lesbian and gay people: Hooker’s work demonstrated that heterosexuals were capable of stretching the continuum of their attitudes and behaviors toward gay and lesbian people beyond only a negative range into a positive realm.

Despite Hooker’s pioneering work, research is still lacking in the positive realm. While theoretical literature and research studies regarding gay-affirmative therapy are emerging (e.g. Garnets et al., 1991; Liddle, 1996), almost no research literature exists to explain the nature and correlates of day-to-day personal contact and relationships between heterosexual people and gay and lesbian people. Many studies focus on heterosexuals’ attitudes toward the gay and lesbian population, but most of these do not investigate people’s actual contact, and they tend to be focused on negative attitudes; for example, negative attitudes are correlated with high religiosity (VanderStoep & Green, 1998; Fisher, Derison, Polley, Cadman, & Johnston, 1994). A few studies that do involve positive attitudes are qualitative and thus have limited generalizability (Geasler, Croteau, Heineman, & Edlund, 1995; Broido, 2000).

At a time when violence against gays and lesbians is a serious problem (Burlew, 2001), and gays and lesbians are denied basic rights such as marriage in most states, it is crucial to focus on fostering positive relationships between heterosexual and gay people. A specific emphasis on behaviors of heterosexual people toward gay and lesbian people is crucial, because those behaviors have a direct effect on gay and lesbian people's mental and physical health. For example, a heterosexual person's attitude toward gay and lesbian people might be meaningless if no one knows about it; however, when that person behaves in a certain way, gay and lesbian people are affected directly. The social psychological literature has shown that people are more likely to discriminate against group members for whom they have more negative attitudes (Jellison, McConnel, & Gabriel, 2004). Herek (2000a) defines sexual prejudice as encompassing heterosexuals' negative attitudes toward homosexual behavior, toward people with a homosexual or bisexual orientation, and toward communities of gay, lesbian, and bisexual people, and he states that sexual prejudice contributes to antigay behaviors such as hate crimes.

Measurement inadequacies exist in this area. For example, most scales regarding heterosexuals' attitudes do not assess positive attitudes (Worthington, Dillon, & Becker-Schutte, 2003). Measures that do inquire about specific positive behaviors have focused narrowly on counseling behavior (Ponterotto, 1994; Sadowsky, 1994). No existing scale appears to measure behaviors that might be considered "ally" or "advocacy" behaviors, that is, positive behaviors that are supportive or affirming of gay and lesbian people. There is a need for the development and validation of measurement in this area. More specifically, there is need for a measure of the behaviors of heterosexual people in



relation to gay and lesbian people. The overall purpose of the current study was to develop and validate a measure of these types of behaviors.

An additional purpose of the study was to explore and describe the range of behaviors that a sample of heterosexual college students exhibits toward gay and lesbian people. Using the developed measure, this study explored how heterosexual college students engage in specific actions regarding gay and lesbian people, such as using particular vocabulary or advocating in defined ways. Further, the study examined the relationship between behaviors and attitudes as well as the relationship of demographic variables (such as age and gender) to college students' behaviors toward lesbians and gay men.

Results from this study may be considered contributions to multiple goals. First, the study developed and validated a measure of heterosexual behaviors toward gay and lesbian people, a much-needed assessment. Second, the study provides information in a thus far very sparsely researched area—even basic statistics (such as percentages of people who behave in positive versus negative ways) have not been reported previously. Finally, little is known about the relationships between behavior and demographic variables, and the present study provides preliminary data in this area.

## Chapter 2

### Literature Review

The overall purpose of the current study was to develop and validate a measure of the behaviors of heterosexuals toward gay and lesbian people. Secondary purposes were to explore the behaviors of a sample of heterosexual college students toward gay and lesbian people, using the new instrument, and to explore possible relationships between behaviors and other variables. Thus, this review discusses the current literature on interactions between gay and lesbian people. The lack of literature directly relevant to behaviors is apparent throughout. First professional/counseling relationships, which can inform personal relationships and contact, are discussed. Second, those personal relationships and contact are discussed in the context of attitudes, because attitudes are likely predictors of behavior. Finally, existing measures related to behaviors toward lesbian and gay people are reviewed, the need for a new measure is explained, and the framework of the current validation study is presented. Throughout this review, the terms “gay and lesbian people” or “lesbians and gay men” are used; the term “homosexual” is used only when the research under discussion utilizes it.

#### *Contact Between Heterosexual People and Gay/Lesbian People: Therapy*

Very little empirical literature exists regarding gay affirmative therapy, and several authors have commented upon this gap. Coyle and Kitzinger (2002) point out that although commonalities exist regarding recommendations for gay affirmative therapy, discrepancies may exist between the definition of affirmative therapy that therapists believe in and practice by, and that which clients believe themselves to have experienced. The authors posit that this discrepancy may exist partially due the oft-cited gap between

theory and practice, and also due to the fact that gay affirmative therapy is an ongoing area of study such that practitioners' and clients' recent experiences may not yet have reached the professional literature.

Ritter & Terndrup (2002) pointed out that the psychotherapy literature related to lesbian, gay, and bisexual clients is based more on the clinical experience of therapists than on treatment research, and that no systematic approaches to psychotherapy have been created specifically for the gay and lesbian population. This could be due to the fact that virtually no empirical process or outcome studies that measure the effectiveness of conceptual or strategic approaches to therapy, or of treatment methods, exist. Readers, they assert, should not expect to find a research-based, population-specific intervention to use with sexual minorities. These observations all highlight the lack of research in this area. Nevertheless, the counseling literature does provide some of the evidence regarding heterosexual attitudes toward gay and lesbian people.

A few empirical articles regarding gay affirmative therapy do exist. Hayes and Gelso (1993) examined male counselors' discomfort with gay and HIV-infected clients through an analogue study. They chose to focus on counselors of one gender because research has indicated gender as a moderating factor in countertransference, so they wanted to isolate one gender; they selected males because research indicates that men possess higher levels of homophobia than women. Participants were 34 men who were either counseling center psychologists or doctoral students from two large, public universities, one in the East and one in the Midwest.

Participants completed a death anxiety scale and a homophobia scale, whereupon they viewed a videotaped male "client" in one of four conditions: either heterosexual or

gay, and either HIV-positive or –negative. Counselor discomfort was measured with three procedures, designed to capture affective, cognitive, and behavioral components.

A main effect for client sexual orientation on counselor discomfort was not found, and the authors indicate that this is most likely due to the emphasis of multiculturalism at these counselors' universities, and to their low levels of homophobia reported at the start of the study, that is, if the counselors were not homophobic, it makes sense that they would not be uncomfortable with gay clients.

Other results did show that counselors' homophobia predicted their discomfort with gay clients better than their discomfort with heterosexual clients. A significant relationship was found between counselors' homophobia and verbal avoidance behaviors (those that were judged to inhibit, discourage, or divert the client from further exploration), indicating that homophobic counselors experienced greater discomfort with gay male clients. The authors conclude that the findings imply the need for counselors to examine their own beliefs, attitudes, and biases toward gay men. Possible weaknesses in the study include the small sample size of counselor participants (34), lack of diversity (85% of the participants were White), and that the workplace of all of the participants was a university. Therefore, results are not highly generalizable and might differ by counselor setting or race.

Gelso and colleagues also published a study regarding countertransference reactions to lesbian clients (Gelso, Fassinger, Gomez, & Latts, 1995). Counselors viewed videotaped client actresses who posed as either lesbian or heterosexual. The study examined counselors' countertransference reactions, in this case defined as reactions that implicate the therapists' own conflicts and issues. They examined reactions to lesbian

versus heterosexual client actresses, reactions of female versus male counselors, and the relationship between counselors' countertransference and homophobia. Contrary to what past research suggested, no significant differences were found in counselor reactions to lesbian versus heterosexual client actresses; the authors point out, however, that the counselors' average homophobia score was near two standard deviations lower than a random sample of the population (non-counselors). Homophobia was related to avoidance, however: the greater the counselor's homophobia, the more likely the counselor was to exhibit avoidant responses toward a lesbian client discussing sexual difficulties with her partner. The cognitive measure of countertransference supported the authors' hypothesis that female counselors would have greater countertransference reactions than male counselors to the lesbian clients.

The authors point out several limitations of their research. First, the experimental setting limited external validity, though an attempt was made to create the videotape as realistically as possible. Second, the sample size was relatively small, especially when broken into subgroups (i.e., males and females). Still, the results of the study lend support to theoretical arguments that counseling competence regarding lesbian and gay clients requires specific skills and areas of attention on the part of the counselor. This research also calls attention to the importance of gender in attitudes toward gay and lesbian people.

Liddle (1996) conducted a study examining 13 therapist behaviors as they related to two outcomes: client ratings of therapist helpfulness, and client return to a subsequent session. A national sample was acquired by sending surveys to faculty and students in 29 states and Canada and asking them to distribute them to gay and lesbian volunteers. The

decentralized method of obtaining volunteers prevented gaining knowledge of the response rate, but enabled a national sample to be obtained for a very elusive population. Participants responded to the question, “How helpful was this therapist?” by selecting one of four available options: destructive, not at all helpful, fairly helpful, or very helpful. The 13 dimensions on which the participants rated their therapists were derived from previous research. The author’s process of operationalizing themes from past research resulted in nine negative and four positive items.

Of the 13 items tested, eight of the nine negative items (e.g., “Your therapist indicated that he or she believed that a gay or lesbian identity is bad, sick, or inferior”) were significantly related to receiving an unhelpful rating, and clients reporting that their therapists exhibited these behaviors were as much as four times more likely to indicate the therapist was unhelpful and as much as five times as likely to terminate after only one session. All four of the positive items (e.g., “Your therapist was not afraid to deal with your sexual orientation when it was relevant”) were significantly inversely related to being rated unhelpful, and therapists who exhibited these positive behaviors were 6 to 12 times more likely to be rated as fair or very helpful than the therapists who did not exhibit these behaviors.

Liddle suggests that these findings may be useful in guiding therapeutic practice with gay and lesbian clients. The inappropriate practices which were significant included, “Your therapist indicated that he or she believed that a gay or lesbian identity is bad, sick, or inferior,” “Your therapist blamed your problems on your sexual orientation or insisted on focusing on sexual orientation without evidence that your sexual orientation was relevant to our problems,” “Your therapist lacked the basic knowledge of gay and lesbian

issues necessary to be an effective therapist for you and/or you had to be constantly educating him or her about these issues,” and “Your therapist apparently did not understand the problems of societal prejudice against gay men and lesbians and/or internalized homophobia.” The exemplary practices found to be significant included, “Your therapist was quite knowledgeable about the lesbian and gay communities and other resources (so that he or she could have put you in touch with useful books or important community resources),” “Your therapist never made an issue of your sexual orientation when it was not relevant,” and “Your therapist was not afraid to deal with your sexual orientation when it was relevant.” Liddle identifies a theme that the therapists to whom the participants found helpful appear to be those who are knowledgeable about issues of concern to lesbian and gay clients, including societal prejudice, internalized homophobia, relationship issues, and community resources.

Heterosexual attitudes toward lesbian and gay people are clearly important in a therapy setting. These studies demonstrate that attitudes affect counselor behavior and that counselors are rated more or less helpful when displaying more or less positive attitudes. Specifically, homophobia was correlated with discomfort, especially as displayed by verbal avoidance (Hayes & Gelso, 1993; Gelso, Fassinger, Gomez, & Latts, 1995). Counselors were rated helpful when they demonstrated knowledge of gay and lesbian resources, communities, and prejudice; when they did not focus on sexual orientation when it was not relevant; and when they did deal with sexual orientation issues when they were relevant. Factors related negatively included conveying that the client was bad, sick, or inferior; focusing on sexual orientation when it was not relevant;

and lacking knowledge, including failing to understand the prejudice that gay and lesbian clients faced (Liddle, 1996).

Counseling is one major area upon which the study of heterosexual attitudes toward gay men and lesbians has been focused. The current validation study used a non-counselor population, however, so the following section examines research on this population.

*Contact Between Heterosexual People and Gay/Lesbian People: Non-Therapy Settings*

Research generally shows a positive correlation between positive attitudes of heterosexual people towards gay and lesbian people, and contact (both its mere existence as well as the strength of the relationship) with people who are gay or lesbian. The type and level of contact is defined in various ways, depending on the study.

Herek (1988) examined correlates of heterosexuals' attitudes toward lesbians and gay men by conducting multiple studies. First, Herek administered surveys to a sample of undergraduate students; these included the Attitudes Toward Lesbians and Gay Men (ATGL) scale and an assessment of "Personal contact," consisting of asking respondents how many of their close female friends during the past two years were lesbian and whether their past interactions (if any) with lesbians were generally positive or generally negative; the items were repeated in reference to gay men. The author recognized lack of generalizability in this first study due to the use of a convenience sample of college undergraduates who all were taking introductory psychology courses. Results showed that favorable attitudes toward lesbians were associated with reporting positive experiences with lesbians; this same effect was marginally significant in terms of gay men.



In the second portion of his research, the author administered the same items as the previous study to 405 student volunteers at six different universities. Respondents were included in the sample only if they reported exclusively heterosexual behavior since age 16. In these results, the variable of positive experiences with gay men was correlated with positive attitudes toward both lesbians and especially gay men, while negative experiences with lesbians contributed to unfavorable attitudes toward both, especially lesbians. While even the second study is limited to college and university students, it does indicate a correlation between attitudes toward and contact with gay and lesbian people.

In 1995, Herek and Capitanio conducted a national telephone survey concerning AIDS-related attitudes among adults in the United States. Both Black and White samples were included in the analysis of attitudes toward gays and lesbians. Both samples were based on forms of random-digit dialing. Respondents were required to be at least 18 years of age, Black or White, and English-speaking household residents. The response rate was 67.4% from the Black sample and 70% from the White sample. Sexual orientation was self-reported so some straight participants might actually have been gay—they may not have self-identified as gay either because they did not consider themselves gay or because of the stigma attached to that label. The data were collected in the course of a two-wave survey concerning AIDS-related attitudes among adults in the United States; data reported here are from the second wave of that study, and respondents who were unemployed or in the lowest household income category were disproportionately likely to be lost to attrition.

Measures included the short form of the Attitudes Toward Lesbians and Gay Men (ATGL) scale, shown to be reliable and valid by Herek (1988, 1994). Personal contact

was assessed through a series of questions, including whether respondents had any friends, relatives, or acquaintances who are gay; if yes, how many; and the gender of that person and relationship to them (maximum of two). Respondents who knew someone gay had significantly lower ATLG scores (i.e., more positive attitudes) than those who did not know someone, and the effect was more pronounced when the respondents had more than one contact. Respondents with three or more contacts were significantly different from those with no contacts. The pattern was comparable in Blacks and Whites.

Herek and Capitanio (1996) conducted another analysis focused primarily on intergroup contact. Their sample was drawn from a population of English-speaking adults residing in households with telephones within the 48 contiguous states, again with random-digit dialing. Their measures were the same as the previous study; that is, the ATLG scale and specific questions regarding contact. The measures were found to be reliable, but a possible error rate problem exists because quite a few ANOVAs were conducted at the .05 level, presenting the problem of Type I error. However, the sample was very large and diverse in terms of gender, age, race, and geographical area.

All analyses were restricted to self-identified heterosexuals. Results showed that respondents held progressively more favorable attitudes the more gay people they knew; those who knew three gay people versus those who knew none, one, or two had significantly more positive attitudes. In addition, respondents reporting contact with two gay people had significantly more positive attitudes than those who had contact with none or only one. Among those who reported a relationship with two or more, a significant difference emerged according to the type of relationship: those who reported having a close gay friend held significantly more favorable attitudes than those with a

distant gay family member. In addition, respondents who had been told directly by a friend or relative about his or her homosexuality had significantly more favorable attitudes than those who had guessed or had been told by a third party; the effect was even stronger if respondents had been told directly about homosexuality from two gay men or lesbians (as opposed to only one). Individuals with contact had more favorable attitudes than individuals without contact in every subgroup except African Americans, whose scores were roughly equivalent regardless of contact. Other demographic results included a correlation between parents' educational level and ATLG scores, with higher educational levels correlating significantly more negatively with the ATLG than lower educational levels (lower scores indicated less negative attitudes); a correlation was also found between geographical area and ATLG scores, with people in urban areas demonstrating significantly lower scores (i.e., more positive attitudes) on the ATLG than those from more rural areas. The authors suggest that a reciprocal relationship exists regarding contact: that those who know a gay man or lesbian are likely to develop more positive attitudes toward gay people as a group, and also, that heterosexuals with preexisting favorable attitudes towards gay men and lesbians are subsequently more likely than others to experience contact.

Similar findings were uncovered by Basow and Johnson (2000), though they are not as generalizable as Herek and Capitanio's (1996) national sample; Basow and Johnson's participants were undergraduates at a private liberal arts college and were 97% White. Among other factors, the authors assessed homophobia using the Attitudes Toward Lesbians and Gay Men—Short Form, and assessed personal contact through items included in a demographics questionnaire. Participants were asked if they know or

have known, closely or casually, any lesbians or gay men; a follow-up question asked how many homosexuals they knew of each gender. Consistent with Herek and Capitanio's (1996) findings, Basow and Johnson (2000) found that more favorable attitudes toward gays and lesbians were correlated with multiple contacts with gay and lesbian people, more intimate contacts with gay and lesbian people, and contacts that involved direct disclosure of sexual orientation on the part of the lesbian or gay person.

This study utilized a small and homogeneous sample size, did not assess whether participants themselves were heterosexual or homosexual, and did not assess social desirability, which was of particular importance because participants at this small school may have been aware of the researchers' involvement with lesbian, gay, and bisexual issues. Alone, this study might not be entirely credible, but it does corroborate the findings of Herek and Capitanio's (1996) study that involved a national random sample, that attitudes toward gays and lesbians correlate with contact and, specifically, with the nature of the contact.

A qualitative study by Geasler, Croteau, Heineman, & Edlund (1995), examining student reactions to a panel presentation by lesbian, gay, and bisexual speakers, yielded similar conclusions. Participants were students from five human sexuality and family relationships classes at a large midwestern state university. One weakness is that the student participants were told that the project was studying the effectiveness of such a panel, and were directly asked, "In what ways has this presentation caused changes in your attitudes or feelings about homosexuality?" possibly bringing into play social desirability or experimenter effects. In addition, the sample resulted in a composition that was 70% female and 80% white. However, it was fairly large, consisting of 260 student

participants. Ninety-eight percent of students reported their sexual orientation as heterosexual.

Most panel speakers were from the speakers' bureau sponsored by the lesbian, gay, and bisexual student group on campus; others were gay, lesbian, or bisexual community members who were alumni of the university. Each panel presentation began with members introducing themselves and then answering questions from the class members; no attempt was made to control the content and the discussions followed a natural course. Analysis was conducted by use of Ethnograph, which allowed the authors to identify categories, patterns, or themes; they identified 12 themes, selected code words to represent each of the themes, and then coded blocks of text with these words using Ethnograph. The focus of their report is on the category they labeled "change."

The authors found that change was almost exclusively in a positive direction. They identified two "sub-categories," the first of which they labeled Student-Acknowledged Change, referring to "the manner in which students openly expressed changes in their overall attitudes toward lesbian, gay, and bisexual persons" (p.485). Students indicated that the panel contributed to their dispelling stereotypes, discovering commonality between straight and gay people, increasing understanding and empathy regarding heterosexism and harassment, and increasing self-reflection in areas such as examining personal attitudes, examining one's own sexual orientation, and applying the information to personal experiences (i.e., relating to a gay friend).

The authors also identified a sub-category they labeled "Unacknowledged Change," meaning that the authors recognized a positive change despite the lack of students labeling it as such. Findings included that students with already positive attitudes

stated that they experienced no change, but their writing revealed subtle positive shifts. The response content of students with negative attitudes who stated that they experienced no change revealed that those students actually did evidence change in the positive direction.

Clearly, the leading statements and questions posed by the authors to the participants, as well as the lack of diversity in the sample, raise questions about the study's reliability. However, it lends to support to the other studies, as their results imply that contact with gay and lesbian is related to more positive attitudes toward gay and lesbian individuals. In addition to contact, other variables also have been studied in relation to attitudes. This review next examines specific correlates of heterosexual people's attitudes toward lesbians and gay men.

#### *Correlates of Heterosexual Attitudes Toward Lesbians and Gay Men*

*Gender and Race.* Research studies consistently have shown that attitudes toward gays and lesbians vary by gender of the heterosexual participant as well as by the gender of the target in question (Kite, 1984; Herek & Capitanio, 1999; Herek 2000b). Kite (1984) conducted a meta-analytic review in order to assess sex differences in attitudes toward homosexuals. Independent variables in the meta-analysis were sex of author, sex of target, type of questionnaire, sample size, and year of publication. Kite found support for the hypothesis that males have more negative attitudes than females, especially when the target is perceived to be male. She found a marginally significant inverse relationship with sample size: the larger the sample size, the smaller the difference in sex differences. She found a significant effect for year, which could suggest that sex differences in attitudes are increasing over time or that the more recent studies used more reliable

measures or were otherwise better designed. She concluded that sex differences do seem to exist, but cautioned that findings of individual studies are influenced by study design.

Herek and Capitanio (1999) sought to examine the attitudes of heterosexual people toward gay men and lesbians as two distinct entities. They conducted interviews, gaining participants by using random digit dialing to obtain a national sample. First, callers administered “feeling thermometers,” of which higher scores indicated warmer feelings toward the target—this included questions such as political affiliation. They then administered Attitudes Toward Lesbians and Attitudes Toward Gay Men scale items; one half of the sample received the Lesbians scale first, while the other half received the Gay scale first. Sexuality of participants was also assessed.

The authors analyzed responses separately for Whites and Blacks, based on their previous research (Herek & Capitanio, 1999). The sample sizes of other racial/ethnic groups were not large enough to compare in this way. The results indicated that responses to survey questions about gay men and lesbians differed depending on the order in which the questions were asked. For both Black and White men, self-reported attitudes toward lesbians were significantly more favorable when the researchers’ questions about lesbians were posed before their questions about gay men. Heterosexual men tended to report less favorable attitudes toward lesbians when researchers first inquired about attitudes toward gay men, and reported more favorable attitudes when the lesbian items appeared first in the order of inquiry. However, the findings were more robust for White men; the race of the respondents affected the strength of the results. The authors point out that these results are consistent with the hypothesis that differences occur when questions are asked about lesbians versus gay men. This study implies that heterosexual men and women, and

White versus Black people (or at least men), may differ in the direction and intensity of their attitudes toward gay men and lesbians.

*Religion and Religiosity.* Research indicates that one's religious denomination as well as one's religiosity (frequency of worship) affects attitudes toward gay and lesbian people. Fisher, Derison, Polley III, Cadman, and Johnston (1994) demonstrated correlations of attitudes with both religious denomination and religiosity in two studies they conducted. In their first study, they analyzed the results from a survey that was part of a scientific jury selection for a trial regarding a sheriff being fired from his job, allegedly because of his sexual orientation. The authors stated that the purpose of scientific jury selection is to provide profiles of jurors who are likely to be partial to one side of the trial or the other; this particular survey involved both general and specific attitudes toward gays, and single-item questions about religious preference and frequency of worship were included.

The results of this first study indicated that those who labeled themselves Baptist, fundamentalist, or Christian showed high levels of antigay attitudes; Catholics, Episcopalians, Methodists and Presbyterians showed low to moderate levels; and Jews and those who indicated no religious preference showed the lowest levels. Data from people with "antigay" religions (as determined by the authors, using the attitudinal data) were then combined, as were data from people with "tolerant" religions, and frequency of worship was significantly correlated with five measures of antigay prejudice for respondents who identified with the "antigay" religions. In sum, people with some religious preferences were more prejudiced against gays than others, and people with no religious preference were the most accepting. Among those whose religious group was



found to be antigay, the frequency of attendance at religious services (serving as a proxy for religiosity) also predicted greater prejudice.

In their second study, Fisher et al. (1994) surveyed undergraduate students from the University of Central Florida. The same results were found: prejudice toward gay and lesbian people was greatest in those students who reported themselves as more religious and as attending religious services more frequently. While this study demonstrated less generalizability, it is corroborated by the first study, which included a more diverse sample. Similarly, while the first study used several untested measures (a few select questions from a larger scale; questions about the trial), the second study used the full Attitudes Toward Lesbians and Gay Men Scale and found similar results. The studies support each other, lending credibility to correlations between attitudes toward gay and lesbian people and religious denomination and religiosity. It is also possible, therefore, that a connection may exist between religiosity and behaviors toward lesbian and gay people, as well. However, the most important aspect of the Fisher et al. study as it relates to the current study is that, like all of the studies discussed so far, it related to attitudes, not behaviors. A next step is study heterosexual people's behaviors toward lesbian and gay people, but that cannot be accomplished without first developing a measure of these behaviors. The next section of this review discusses existing measures and the need for a new, behavioral assessment tool.

### *Measuring Behaviors Toward Gay and Lesbian People*

Existing scales related to relationships between heterosexual and gay and lesbian people are inadequate for several reasons. First, only one behavioral measure currently exists (Dillon & Worthington, 2003), and it is geared specifically to therapists. The

Lesbian, Gay, and Bisexual Affirmative Counseling Self-Efficacy Inventory (LGB-CSI; Dillon & Worthington, 2003) consists of five factors that assess counselor self-efficacy to engage in lesbian, gay, and bisexual affirmative counseling behaviors. The behaviors measured (Application of Knowledge, Advocacy Skills, Self-Awareness, Relationship, and Assessment Skills) are unique to therapy in both the content and vocabulary of the items. For example, one item for Advocacy, which potentially could be a behavior in which any person might engage, queries the confidence that a counselor possesses in the ability to “refer LGB clients to affirmative legal and social support” (Dillon & Worthington, 2003, p. 239). Most of the items are not applicable to non-therapy situations.

Most scales that have been created for non-therapy or general settings measure attitudes rather than behaviors. In addition, they seldom include affirmative items or those on the more positive end of the possible continuum of attitudes. For example, Herek’s Attitudes Toward Lesbians and Gay Men Scale (Herek, 1994), used in many of the studies he conducted that are described above, mainly consists of items regarding tolerance and intolerance; an example of a “positive” item is, “Male homosexuality is merely a different kind of lifestyle that should *not* be condemned” (Herek, 1994, p. 210). Herek’s scale, although limited, is widely used to measure attitudes toward gay and lesbian people (Dillon & Worthington, 2003; Schulte & Battle, 2004). A scale is needed that explicitly measures behaviors rather than attitudes, that attempts to assess a full range of possible behaviors along a continuum from negative to affirming behaviors, and is appropriate for use in non-clinical settings with a general heterosexual population.

The need for examining behaviors toward gay and lesbian people is obvious from the gap in research and measurement in this area. Existing literature primarily has focused on attitudes and on professional relationships such as therapy. Studies regarding contact between gay and lesbian people has not described heterosexual people's behaviors, but rather related the contact to their attitudes. Given this gap, measures are lacking that examine the behaviors of heterosexuals toward lesbians and gay men. The current study sought to remedy this gap by developing and validating a new measurement tool.

The research discussed in the literature review provided direction for the development of the scale in the current study: The conception of the study followed from the observation that studies regarding contact between heterosexual and gay/lesbian people in non-professional environments centered on heterosexual people's attitudes rather than behaviors. Borrowing from the therapy literature, affirmative, helpful therapeutic factors were explicated (e.g., demonstrating knowledge and understanding; focusing—or not—on sexual orientation when appropriate), and they led to the formation of some items for the scale in the current study. Correlations have been found between attitudes and gender, race, religion, and politics; these variables may be correlated with behaviors, as well, and they informed the creation of the demographic form in the current study. Finally, the gaps in the literature as well as reviews of existing scales demonstrated the need for a new measure and pointed toward developing a scale focused exclusively on behaviors, especially on trying to capture of full range of possible negative and positive behaviors. A new measure was developed and validated in the current study in order to

explore the nature of heterosexual people's behaviors toward gay and lesbian people, as well as correlates of those behaviors.

#### *Framework of the Current Validation Study*

The current study represents an attempt to develop and establish the validity of the Behaviors Toward Gays and Lesbians Scale (B-GAL). Construct validity, the type of validity most useful in addressing the question of whether the scale actually measures behaviors toward lesbian and gay people (Leong & Austin, 1996), was assessed in four ways. Convergent validity is said to exist if there is a high correlation between scores on the instrument and scores on other instruments intended to measure the similar constructs (Heppner, Kivlighan, Jr., & Wampold, 1999). As noted throughout the literature review, there are no existing measures of heterosexual behaviors toward lesbian and gay people with which the B-GAL can be compared. Thus, the B-GAL was compared with measures of civic-mindedness, attitudes toward gay and lesbian people, and identification as an ally. Thus, it was expected that the measures would correlate positively and moderately with these measures representing similar but distinct constructs.

A second measure of construct validity is discriminant validity, which is said to exist when small and/or negative correlations exist between measures of different constructs (Heppner, Kivlighan, Jr., & Wampold, 1999). In the current study, discriminant validity was examined by comparison of the B-GAL with a measure of social desirability. It was expected that the correlation between the B-GAL and social desirability would be small, suggesting that responses to the B-GAL are not overly affected by the desire to make a good impression; if the correlation were large, it would suggest that responses on the B-GAL were influenced by, or even tapping, social

desirability rather than the desired construct of heterosexual behaviors toward gay and lesbian people.

A third measure of construct validity is predictive validity, which is said to exist when the measure demonstrates the ability to predict something it should theoretically be able to predict; a high correlation between the measure being validated and a related construct would provide evidence for predictive validity (Trochim, 2000). In the current study, predictive validity was examined by comparison of the B-GAL with measures of age, political liberalism, exposure to educational programming, gender, race, religion, parents' educational level, geographical area of origin, and year in school.

The factor structure of the measure and its internal consistency also were explored. Exploratory factor analysis further establishes construct validity by examining factors that underlie a set of variables, or, in the case of a measure, items. Items that measure the same construct will be grouped together in the sense that they will correlate highly (load on) a single factor; the factors are then interpreted as constructs (Heppner, Kivlighan, Jr., & Wampold, 1999). Since the current study explored a new tool of assessment, the question of what factors might arise was posed as a research question rather than a hypothesis. Internal consistency, which refers to the consistency of results obtained across scale items (Leong & Austin, 1996) was measured statistically by obtaining the Cronbach alpha for the B-GAL; the measure was hypothesized to be reliable if values exceeded .80 (reliability estimates in excess of .80 are considered by multiple sources to be sufficient) (Heppner, Kivlighan, Jr., & Wampold, 1999).

### *Research Question and Hypotheses*

The current study examined the following research question:

Research Question: What is the factor structure of the B-GAL? Because the B-GAL is a new measure, it was necessary to determine what, if any, separate factors existed within the instrument.

The current study examined the following hypotheses:

Hypothesis 1: Internal reliability: The B-GAL will produce adequate estimates of internal consistency reliability. As measured by Cronbach's alpha, the item-Full scale correlations will be positive and at least .80.

Hypothesis 2a: Convergent validity: Participants' scores on the B-GAL will correlate positively and moderately with scores on the Civic Attitudes and Skills Questionnaire (CASQ).

Hypothesis 2b: Convergent validity: Participants' scores on the B-GAL will correlate negatively and moderately with scores on the Attitudes toward Lesbians and Gay Men Scale (ATLG).

Hypothesis 2c: Convergent validity: Participants' scores on the B-GAL will correlate positively and moderately with scores on ally identity. A moderate relationship was predicted in each hypothesis because each of the measures is assumed to represent constructs similar to, but distinct from, the B-GAL. The correlations also would be positive (except in the case of the ATLG, about which a negative correlation is predicted because high scores indicate negative attitudes).

Hypothesis 3: Discriminant validity: Participants' scores on the B-GAL will correlate minimally with scores of social desirability. A low correlation suggests that the B-GAL does not merely measure a participant's desire to appear socially desirable.

Hypothesis 4a: Predictive validity: The B-GAL will correlate positively and significantly with age. The literature demonstrates that people with more contact with gay and lesbian people develop more positive attitudes (Herek & Capitanio, 1996); the older students are, the more likely it is that they have been exposed to a gay or lesbian person. Therefore, if contact and positive attitudes are correlated, then age and behaviors are expected to be related, because age likely correlates with contact and behaviors likely correlate with attitudes. If the age span of the sample were broader, then a more curvilinear finding might be expected due to generational effects, but the sample was expected to consist of primarily traditional college students (i.e. primarily ages 18-22), which would all be the same generation.

Hypothesis 4b: Predictive validity: The B-GAL will correlate positively and significantly with political liberalism. Several studies (Herek, 1994; Herek & Capitanio, 1996) have demonstrated a correlation between political orientation (conservative/liberal) and attitudes toward lesbians and gay men. Since attitudes and behaviors are likely correlated as well, it is expected that the B-GAL will correlate with political orientation, specifically that scores on the measure will correlate positively and significantly with political liberalism.

Hypothesis 4c: Predictive validity: The B-GAL will correlate positively and significantly with the number of educational programs to which participants were exposed. In a qualitative study, Geasler, Croteau, Heineman, & Edlund (1995) evaluated

a presentation to high school students that included gay and lesbian panel speakers and found attitude change in an almost exclusively positive direction. It is therefore hypothesized that behaviors of those who have been exposed to programming would be more positive than those who had not.

Hypothesis 4d: Predictive validity: Scores on the B-GAL will differ by gender, with females scoring significantly more positively on the scale than males. Research has consistently shown that females express more positive attitudes toward gay and lesbian people than do males (Kite, 1984; Herek, 1999).

Hypothesis 4e: Predictive validity: Scores on the B-GAL will differ by race, with White people scoring significantly more positively on the scale than Black people. Research has demonstrated that Whites express more positive attitudes toward gay and lesbian people than do Blacks (Herek, 1999).

Hypothesis 4f: Predictive validity: Scores on the B-GAL will differ by religion, with participants indicating membership in moderate Christian denominations scoring significantly higher than those endorsing conservative Christian denominations, but significantly more negatively than those not endorsing any religion. This hypothesis is based on the previous findings of Fisher et al.'s (1994) study regarding attitudes, which demonstrated that, when grouped into conservative, moderate, and nonreligious categories (labeled as such by the researchers), participants who labeled themselves Baptist, fundamentalist, or Christian showed high levels of antigay attitudes; Catholics, Jews, Methodists, Presbyterians, Episcopalians, and Protestants of no specific denomination showed low levels; and those who indicated no religious preference showed the lowest levels.



Hypothesis 4g: Predictive validity: Scores on the B-GAL will differ by parents' educational level, with higher educational levels correlating significantly more positively with the B-GAL than lower educational levels. Herek and Capitanio (1996) found on the Attitudes Toward Lesbians and Gay Men Scale (ATLG) that scores differed by parents' educational level, with higher educational levels correlating significantly more negatively with the ATLG than lower educational levels (lower scores indicated less negative attitudes). Since attitudes and behaviors are expected to correlate, findings regarding educational level are expected to be similar in the current study to Herek and Capitanio's (1996) regarding attitudes.

Hypothesis 4h: Predictive validity: Scores on the B-GAL will differ by geographical area of origin (i.e., the location where one grew up), with people from urban areas scoring significantly higher than those from rural areas. Hypotheses 5d and 5e are based on the notion that those who have more contact with gay and lesbian people have more positive attitudes (Herek & Capitanio, 1996); gay and lesbian people tend to be concentrated in certain geographical areas, such as urban areas. Herek and Capitanio (1996) demonstrated a correlation between attitudes and geographical area, with people in urban areas having significantly lower scores (i.e., more positive attitudes) on the ATLG.

Hypothesis 4i: Predictive validity: Scores on the B-GAL will differ according to exposure to educational programming, with those who received educational programming related to gay and lesbian people or issues scoring significantly more highly than those who were not exposed to any programming. Again, this hypothesis relates to the finding that those who have more contact with gay and lesbian people tend to report more

positive attitudes (Geasler, Croteau, Heineman, & Edlund, 1995; Herek & Capitano, 1996).

Hypothesis 4j: Predictive validity: Scores on the B-GAL will differ significantly according to year in school, with more senior students scoring higher than students near the beginning of their college careers. As discussed, the literature demonstrates that people with more contact with gay and lesbian people develop more positive attitudes (Herek & Capitano, 1996); the more time one has spent in a large college community, the more likely it is that one has been exposed to a gay or lesbian person. Therefore, if contact and positive attitudes are correlated, then year in school and behaviors are expected to be related, because year in school likely correlates with contact, and behaviors likely correlate with attitudes.

## Chapter 3

### Method

#### *Participants and Procedure*

Participants were 175 students enrolled in introductory psychology courses at a large Mid-Atlantic university (University of Maryland, College Park). These courses typically contain students from all class years, though they sometimes hold more underclass students since the course level is introductory. The participants were recruited through a program in which they received extra credit for participating in research projects. The study was presented as research on social and interpersonal attitudes and behaviors. The participants were recruited for one-hour blocks of time; when they arrived for the study, the investigator obtained consent (see Appendix A), provided instructions (see Appendix B), and administered the measures (see Appendixes C-H) to the respondents. Completing the measures took the participants one hour or less. A debriefing statement (see Appendix I) was emailed to student participants at the close of data collection.

To avoid revealing the nature of the study, data from non-heterosexual students were eliminated after data collection as opposed to advertising that only heterosexuals might participate. Out of 178 participants, 1 indicated a sexual orientation other than heterosexual. Two other participants' data were eliminated: one student was under 18 years of age and failed to produce a consent form from a parent, and another student failed to complete more than fifty percent of the measures. Thus, the final sample consisted of 175 participants.

*Instrument Development: Behaviors Toward Gays and Lesbians Scale (B-GAL)*

A pool of 70 items was created (see Appendix J) based on existing lesbian/gay/ally and multicultural competency literature and through consultation with the faculty advisor. These items were administered to a panel of five experts (graduate students with knowledge of lesbian and gay issues) and the faculty advisor. Feedback received included recommendations to remove items involving the word “would” as it they were thought to reflect attitudes or potential behaviors rather than actualized behaviors; changing item wordings to make them more inclusive to lesbians; and eliminating broad or general, not well operationalized, items. Based on that feedback, 30 items were eliminated. A 40-item scale (see Appendix K) then was evaluated by the same panel and further modifications were made, primarily consisting of wording changes in order to make the items clearer. This became the 39-item scale that was explored in the current validation study (see Appendix F). Before the scale was used in further correlations, Cronbach alphas were calculated and an exploratory factor analysis was conducted in order to select the items that were analyzed as a final version of the Behaviors Toward Gays and Lesbians Scale (see Appendix F). The primary reasons for eliminating items during factor analysis were more statistical than conceptual, with the goals of increasing reliability of the scale and factor loadings of the items.

*Instruments*

Convergent validity for the Behaviors Toward Gays and Lesbians (B-GAL) Scale was established by comparison with the following measures:

*Civic-Mindedness.* Civic-mindedness was measured by selected factors of the Civic Attitudes and Skills Questionnaire (CASQ; Moely, Mercer, Ilustre, Miron, &

McFarland, 2002). The CASQ is composed of six factors measuring Civic Action, Interpersonal and Problem-Solving Skills, Political Awareness, Leadership Skills, Social Justice Attitudes, and Diversity Attitudes. For the scale used in the current study, factors were selected based on their relevance to behaviors toward gay and lesbian people. This modified scale is composed of 4 factors from the CASQ: Civic Action, Interpersonal and Problem-Solving Skills, Social Justice Attitudes, and Diversity Attitudes (see Appendix E). This scale consists of 33 items, which are scored on a 5-point Likert scale from 1 (completely disagree) to 5 (agree completely); some items are reverse scored. Full scale scores are obtained by summing the item scores. Thus, the possible range for full scale scores for the modified instrument is 33-165. High scores indicate a strong degree of civic-mindedness.

Reliability and validity for the CASQ has been established in samples of undergraduate students enrolled in liberal arts and sciences courses at a private research university. In the current sample, the reliability estimate for the selected factors was .86. Convergent validity was established by comparison with items measuring the value of college and mastery orientation. Discriminant validity was established by comparison with the Modern Racism Scale.

*Attitudes.* Attitudes were measured by the Attitudes toward Lesbians and Gay Men Scale (ATLG; Herek, 1994; see Appendix H). The ATLG is composed of two subscales measuring attitudes toward lesbians (e.g., “Lesbians are sick”) and attitudes toward gay men (e.g., “I would *not* be too upset if I learned that my son were homosexual”). Each subscale contains 10 items which are scored on a 9-point Likert scale from 1 (strongly disagree) to 9 (strongly agree); some items are reverse scored.

Subscale scores are obtained by summing the items; full scale scores are obtained by summing the two subscale scores. Thus, the possible range for subscale scores is 10-90; for full scale, the possible range is 20-180. *Low* scores indicate more positive attitudes toward lesbians and gay men.

Reliability and validity for the ATLG has been established in samples of undergraduate students in California (Herek, 1994). In the current sample, the reliability estimate was .95. Discriminant validity was established by comparing scores on the ATLG between members of lesbian and gay organizations and non-student adults who publicly supported a local gay rights initiative versus community residents who publicly opposed the initiative. Construct validity was established by the significant correlation of ATL and ATG scores with participants' traditional sex role attitudes, belief in a traditional family ideology, high levels of dogmatism, the perception that one's friends agreed with one's own attitudes toward homosexuality, and the absence of positive past interactions with lesbians or gay men.

*Ally identification.* A single statement, "I consider myself an ally to gay and lesbian people," was generated by the researcher and asked of the participants (see Appendix G). It was scored on a 7-point Likert scale from 1 (strongly disagree) to 7 (strongly agree). Similar items have been created in previous research; for example, Hettler and Cohen (1998) used a single item measure to assess the importance of religion in participants' lives. Single item measures often are preferred for their brevity and face validity (Nagy, 2002; Rohland, Kruse, & Rohrer, 2004).

Discriminant validity for the B-GAL scale was established by comparison with the following measure:

*Social Desirability.* Social desirability was measured by the 13-item short form of the Marlowe-Crowne Social Desirability Scale (Reynolds, 1982; see Appendix D). This is composed of 13 items from the original 33-item scale. Eight items are scored true or false, where true equals one and false equals two; five items are reversed scored, where true equals two and false equals one. The item scores are summed for a total score. Thus, the possible range of scores is 13-26. A high score indicates a socially desirable response tendency.

Reliability and validity for the short form of the scale have been established in samples of undergraduate students from a medium sized state university (Reynolds, 1982). In the current sample, the reliability estimate was .68. The authors considered item factor loadings, short form with total scale correlations, and concurrent validation with the Edwards Social Desirability Scale (as cited in Reynolds, 1982).

The following measures also were administered in order to explore the predictive validity of the B-GAL:

*Age.* Participants were asked to write their age (see Appendix C); the age range of the sample was 16-33.

*Political liberalism.* A single item, "Please circle a number on the scale below that most closely fits with how you would describe your political beliefs," was generated by the researcher and asked of the participants (see Appendix C). It was scored on a 5-point Likert scale from 1 (extremely conservative) to 5 (extremely liberal). The participants identified as Extremely Conservative (2.3%), Somewhat Conservative (14.9%), Middle of the Road (25.7%), Somewhat Liberal (42.9%), and Extremely Liberal (14.3%).

In addition, a single item, “Please circle a number on the scale below that most closely fits with how strongly you identify with your political stance chosen above” was generated by the researcher and asked of the participants (see Appendix C). It was scored on a 5-point Likert scale from 1 (not at all) to 5 (extremely). The participants identified the strength of their political orientation as Not at All (4.6%), Slightly (6.3%), Some (38.3%), Very (40.0%), and Extremely (10.9%).

*Educational exposure.* First, the item, “Have you been exposed to any educational programming or presentations regarding homosexuality?” was generated by the researcher and asked of the participants. This was scored with 1 for yes and 0 for no, with possible scores therefore ranging from 0-1, with a 0 indicating no exposure to programming and a 1 indicating exposure (see Appendix G). Approximately 64% of participants indicated they had not been exposed to programming, while approximately 37% indicated that they had. Qualitative data indicated that participants’ educational programming took place primarily in high school and college settings and included education regarding gay rights, discrimination, and acceptance; hearing a gay or lesbian speaker or about a personal experience; and learning about religious viewpoints.

Second, a follow-up question, “If so, how many?” was generated by the researcher and asked of the participants (see Appendix G). The number of presentations that participants indicated was the total score (minimum is 0, with no maximum); higher scores indicated more exposure to educational programming. The range of the number of programs that participants had been exposed to was 0-20.



*Gender.* Participants were asked to check one of the following options: Female, Male, Transgender (see Appendix C). The sample was 78.9% female and 21.1% male, with no participants labeling themselves as transgender.

*Race.* Participants were asked to indicate their race/ethnicity from the following options: African American/Black (10.3%); Arab/Middle Eastern American (2.9%); Asian American/Pacific Islander (13.1%); Caucasian/Euro-American (64.6%); Hispanic or Latino/a (4.0%); Native American/American Indian (0%); Multiracial (5.1%); and Other (0%). For Multiracial and Other, participants were asked to indicate their race/ethnicity (see Appendix C). Races indicated as part of Multiracial included African American/Black, Asian American/Pacific Islander, and Hispanic or Latino/a.

*Religion.* Participants were asked to indicate “Religion currently practicing, if any” (see Appendix C). The responses were then coded into Atheist/none/blank (22.3%), Baptist (3.4%), Catholic (24.0%), Christian (8.0%), Jewish (26.9%), Lutheran (0.6%), Methodist (5.1%), Muslim (2.3%), Presbyterian (2.3%), Protestant (0.6%), and Other (4.6%). For analyses, Baptist, Christian, and Lutheran were coded to form Group 1 (Conservative); Catholic, Jewish, Methodist, Presbyterian, and Protestant were coded to form Group 2 (Moderate), and Atheist/none/blank formed Group 3 (None). Participants identifying themselves as Muslim or Other were not included in the analysis of the relevant hypothesis because those religious denominations were not included in any groups compared by Fisher et al. (1994), from which this analysis was modeled. The purpose of creating the groups was to conduct an analysis testing mean differences on B-GAL scores between groups.

*Parents' education.* Participants were asked to indicate their fathers' highest level of education; the categories were: Not applicable (1.7%), 8<sup>th</sup> grade or less (0.6%), Some high school (1.7%), High school degree (9.7%), Some college (16.0%), College degree (23.4%), Some post-graduate work (5.1%), and Advanced/graduate degree (41.7%; see Appendix C). Based on the low percentages of endorsement of certain categories, the categories were grouped into High school degree or less, Some college, College degree/Some post-graduate work, and Advanced/graduate degree so that mean differences on B-GAL scores could be compared between groups.

Participants were also asked to indicate their mothers' highest level of education, and the categories were the same as above: Not applicable (1.7%), 8<sup>th</sup> grade or less (0.6%), Some high school (2.3%), High school degree (8.6%), Some college (14.9%), College degree (30.3%), Some post-graduate work (9.1%), and Advanced/graduate degree (32.6%). Based on the low percentages of endorsement of certain categories, the categories were grouped into High school degree or less, Some college, College degree/Some post-graduate work, and Advanced/graduate degree so that mean differences of B-GAL scores could be compared between groups.

*Geographical area of origin.* Participants were asked to indicate areas that they lived in for a year or more, prior to college (see Appendix C); they indicated Urban (21.7%), Suburban (72.0%), and Rural (6.3%). Mean differences of B-GAL scores between the groups were analyzed.

*School year.* Participants were asked to indicate their year in school (see Appendix C); participants were 41.7% freshmen undergraduates, 30.9% sophomore undergraduates, 17.7% junior undergraduates, 8.6% senior undergraduates, 1.1% fifth-

year or more undergraduates, no participants labeled themselves as graduate students or “other.” Mean differences of B-GAL scores between the groups were analyzed.

*Additional demographics.* Additional demographic information was asked of the participants (see Appendix C). This included participants’ sexual orientation, major, state of origin, and religion formerly practiced (if any). Only heterosexual participants’ responses were included in the analysis since the scale being validated measured heterosexuals’ knowledge about gay- and lesbian-related issues and heterosexuals’ ally behaviors.

### *Analysis*

*Research Question.* The current study examined the following research question:

Research Question: What is the factor structure of the B-GAL? **Exploratory**

### **Principal Factors Analysis was conducted for the B-GAL.**

*Hypotheses.* The current study examined the following hypotheses:

Hypothesis 1: Internal reliability: The B-GAL will produce adequate estimates of internal consistency reliability.

**A Cronbach alpha reliability coefficient was calculated after factor analysis and a final version of the B-GAL was developed.**

Hypothesis 2: Convergent validity.

Hypothesis 3: Discriminant validity.

**Pearson correlations were conducted.**

Hypothesis 4: Predictive validity.

**Pearson correlations and independent samples t-tests were conducted; one-way ANOVAs were conducted with Tukey tests as the post-hoc analyses.**

## Chapter 4

### Results

The B-GAL was developed by the author to measure a wide range of potential behaviors enacted by heterosexual people toward lesbian and gay people. The research question examined the factor structure of the B-GAL. Hypotheses 2-4 examined the psychometric properties of the B-GAL. Specifically, Hypothesis 2 tested convergent validity, Hypothesis 3 tested discriminant validity, and Hypothesis 4 tested predictive validity.

Table 1 contains the sample's means and standard deviations for the scores on each measure. As can be seen in Table 1, the possible range of scores on the full-scale, final B-GAL was 30-150; the mean score for the sample was 90.68, with a standard deviation of 15.79. The possible scores for Factor 1 of the B-GAL were 10-50; the mean score was 18.10 with a standard deviation of 6.43. The possible scores for Factor 2 of the B-GAL were 11-55; the mean score was 46.62 with a standard deviation of 6.11. The possible scores for Factor 3 of the B-GAL were 9-45; the mean score was 26.22 with a standard deviation of 7.70.

Means and standard deviations of the convergent and discriminant validity measures are contained in Table 1, as well. The mean score on the CASQ was 132.35 with a standard deviation of 12.43. The mean score on the ATLG was 57.13 with a standard deviation of 31.20. The mean score on Ally Identification was 4.52 with a standard deviation of 1.57. Finally, the mean score on the Marlowe-Crowne Social Desirability Scale (Short Form) was 18.40 with a standard deviation of 2.76.

Table 1  
*Instrument Score Ranges, Means and Standard Deviations*

Scale	Possible Range	Mean	SD
CASQ	33-165	132.35	12.43
ATLG	20-180	57.13	31.20
Ally Identification	1-7	4.52	1.57
Social Desirability	13-26	18.40	2.76
Full Scale B-GAL (30 items)	30-150	90.68	15.79
Factor 1: "Taking Community Action" (10)	10-50	18.10	6.43
Factor 2: "Avoiding the Negative" (11)	11-55	46.62	6.11
Factor 3: "Speaking Out" (9)	9-45	26.22	7.70

The means and standard deviations for the continuous demographic variables are as follows: The mean age of the sample was 19.15 with a standard deviation of 1.6. The mean score on political orientation was 3.52 with a standard deviation of 0.99 and the mean score on identification with political orientation was 3.46 with a standard deviation of 0.93. Finally, the mean number of programs that participants had been exposed to was 0.99 with a standard deviation of 2.36.

Research Question: What is the factor structure of the B-GAL? Principal axis factor analysis was used to explore the factor structure of the B-GAL. Using Varimax rotation, which minimizes the number of variables that have high loadings on each factor and therefore simplifies the interpretation of the factors, the factor analysis yielded 3 factors. Table 2 contains the factor loadings for the B-GAL. Eigenvalues ( $>1$ ), the scree plot, and percentage of variance criteria were used to determine the factors. Ten factors had eigenvalues greater than 1, so the criteria were raised to eigenvalues greater than 2. The three factors had eigenvalues of 9.84, 4.35, and 2.05. The scree plot favored a 2-factor solution, but the 3-factor solution had more than adequate eigenvalues, accounted for more of the variance, and formed constructs that fit conceptually. Gorsuch (1997) pointed out that it is better to over-factor than to under-factor, and that extracting too few factors can radically change the solution, while keeping an extra factor is likely not problematic, leaving the earlier ones unchanged. Nine items (12, 13, 16, 17, 20, 24, 25, 36, and 37) were eliminated based on low and/or similar factor loadings and on the goal of increasing the reliability coefficient. For the final, 30-item scale (see Table 2), the 3-factor structure accounted for 50.38% of the variance. The first factor accounted for 30.26% of the variance; the second factor accounted for 13.54% of the variance; and the

Table 2  
*Factor Loadings for the Behaviors Toward Gays and Lesbians Scale (B-GAL)*

Item	Factor loadings		
	I	II	III
I receive information (email, regular mail, etc.) from a gay rights organization.	<b>.83</b>	<.000	.16
I am a member of a gay and lesbian rights organization off campus.	<b>.76</b>	<.000	<.000
I donate time or money to an organization that advocates for gay and lesbian rights.	<b>.75</b>	<.000	.23
I am a member of a gay and lesbian rights organization on campus.	<b>.72</b>	<.000	.12
I display a gay-supportive symbol, such as a pin, sticker, poster, etc. in my home, office, or car.	<b>.72</b>	<.000	.17
I forward information about gay and lesbian rights to others.	<b>.67</b>	.15	.24
I actively participate in support groups or community events for gay or lesbian people.	<b>.67</b>	.13	.24
I have signed a petition or sent a letter in support of gay and lesbian rights.	<b>.57</b>	.21	.28
Being an ally in the gay community is a central aspect of my identity.	<b>.52</b>	.13	.45
I go out of my way to learn more about gay and lesbian issues (e.g., attending a lecture, taking a class, asking questions of people with more knowledge).	<b>.42</b>	.24	.29
I avoid gay/lesbian people of the opposite sex. (REV)	<.000	<b>.89</b>	.12
I avoid gay/lesbian people who are the same sex as me. (REV)	<.000	<b>.87</b>	<.000
I have avoided a gay or lesbian person of the same sex because I thought they found me attractive. (REV)	<.000	<b>.71</b>	<.000
I avoid being around gay or lesbian people showing affection, i.e. hand-holding, hugging or kissing. (REV)	.20	<b>.63</b>	<.000
I go out of my way to avoid hearing about gay and lesbian issues. (REV)	<.000	<b>.57</b>	.15
I avoid standing up for gay and lesbian people because it is embarrassing. (REV)	.11	<b>.55</b>	.31
I have knowingly insulted a suspected or openly gay person. (REV)	<.000	<b>.48</b>	<.000
I have stopped speaking to a friend because I found out he/she was gay or lesbian. (REV)	<.000	<b>.41</b>	.16
I have told anti-gay jokes. (REV)	<.000	<b>.38</b>	.17
I laugh at anti-gay jokes. (REV)	.16	<b>.30</b>	.17
I belong to an organization that is against or hostile to homosexuals.	-.22	<b>.30</b>	<.000
I challenge others' anti-gay behavior even if it could mean losing some type of power or status.	.14	<.000	<b>.85</b>
I challenge others' anti-gay behavior even if it could mean losing friends.	.13	<.000	<b>.83</b>
I have advocated for gay and lesbian rights even if it meant that people might think I was gay.	.37	.14	<b>.60</b>
I try to persuade people who are heterosexist/homophobic to become less so.	.31	.32	<b>.55</b>
I am known as an ally of gay and lesbian people.	.47	.13	<b>.54</b>
I can be counted upon to speak up and protest anti-gay behavior even when there are no gay or lesbian people present.	.25	.15	<b>.53</b>
I have helped a gay or lesbian friend cope with heterosexism and homophobia.	.41	.22	<b>.45</b>
I have greeted an "out" gay or lesbian person in public.	.14	.29	<b>.39</b>
I publicly oppose discrimination and harassment of gay and lesbian individuals.	.13	.18	<b>.39</b>

*Note.* There are 30 items. I = Taking Community Action; II = Avoiding the Negative; III = Speaking Out. Dominant loading for each item is in bold. Analysis based on 170 observations.

third factor accounted for 6.57% of the variance. As can be seen in Table 2, the first factor was labeled “Taking Community Action,” the second factor was labeled “Avoiding the Negative,” and the third factor was labeled “Speaking Out.” The first factor consisted of ten items and loadings ranged from .83 to .42; the second factor consisted of eleven items and loadings ranged from .89 to .30; and the third factor consisted of 9 items and loadings ranged from .85 to .39. As can be seen on Table 2, only 5 items loaded below .40 as their highest loading. Only three items (6, 9, 19) loaded similarly (< .10 difference) on more than one factor. The final, 30-item B-GAL itemized in Table 2 was used to test the hypotheses.

Hypothesis 1: Internal reliability: The B-GAL will produce adequate estimates of internal consistency reliability. The reliability coefficient for the final, 30 item version of the B-GAL was .91. This coefficient demonstrates an above-adequate level of reliability, indicating that the B-GAL is unreliable only 9% of the time. Therefore, Hypothesis 1 was supported.

Hypothesis 2a: Convergent validity: Participants’ scores on the B-GAL will correlate positively and moderately with scores on the Civic Attitudes and Skills Questionnaire (CASQ).

Hypothesis 2b: Convergent validity: Participants’ scores on the B-GAL will correlate negatively and moderately with scores on the Attitudes toward Lesbians and Gay Men Scale (ATLG).

Hypothesis 2c: Convergent validity: Participants’ scores on the B-GAL will correlate positively and moderately with scores on ally identity.



Table 3 contains the correlations among all continuous variables. As shown in Table 3, the correlations between the B-GAL and all measures of convergent validity were statistically significant in the predicted directions: the correlation between the B-GAL the CASQ in this sample was .42, the correlation between the B-GAL and ATLG was -.67, and the correlation between the B-GAL and Ally Identification was .74. All of the correlations were moderate, thus all convergent validity hypotheses were supported.

Hypothesis 3: Discriminant validity: Participants' scores on the B-GAL will correlate minimally with scores of social desirability. As shown in Table 3, the correlation between the B-GAL and the short form of the Marlowe-Crowne Social Desirability Scale was .08, indicating that the B-GAL scores do not merely capture participants' desire to appear affirmative. The results demonstrate a distinct difference between positive behaviors toward gay and lesbian people and social desirability. This hypothesis was supported.

Hypothesis 4a: Predictive validity: The B-GAL will correlate positively and significantly with age. As shown in Table 3, the correlation between the B-GAL and age was .05, for which the significance level (2-tailed) was .53. This hypothesis was not supported. Further, age did not in fact correlate with any other continuous variable, as shown in Table 3.

Hypothesis 4b: Predictive validity: The B-GAL will correlate positively and significantly with political liberalism. As shown in Table 3, the correlation between the B-GAL and political liberalism was .34, which was significant at the .01 level (.000). This hypothesis was supported.

Table 3  
*Correlations between Continuous Variables*

Variable	1	2	3	4	5	6	7	8	9
1. B-GAL	--	** .42	** -.67	** .74	.08	.05	** .34	* .17	* .19
2. CASQ	** .42	--	* -.16	* .35	* .18	.06	** .27	** .27	* .16
3. ATLG	** -.67	* -.16		* -.72	-.05	-.10	.43	-.04	-.01
4. Ally Identification	** .74	* .35	* -.72	--	.07	.06	** .37	.06	.09
5. Social desirability	.08	* .18	-.05	.07	--	.08	-.03	-.03	* -.16
6. Age	.05	.06	-.10	.06	.08	--	.04	-.03	.06
7. Political liberalism	** .34	** .27	** -.43	** .37	-.03	.04	--	** .27	.11
8. Political ID	* .17	** .27	-.04	.06	-.03	-.03	** .27	--	.11
9. Educational exposure (number)	* .19	* .16	-.01	.09	* -.16	.06	.11	.11	--

Hypothesis 4c: Predictive validity: The B-GAL will correlate positively and significantly with the number of educational programs to which participants were exposed. As shown in Table 3, the correlation between the B-GAL and exposure to educational programs was .19, which was significant at the .05 level (.012). Thus, there is support for this hypothesis.

Hypothesis 4d: Predictive validity: Scores on the B-GAL will differ by gender, with females scoring significantly more positively on the scale than males. The mean scores on the B-GAL by gender are shown in Table 4. An independent samples t-test yielded a significance level of .000, indicating a statistically significant difference between female and male scores on the B-GAL. Thus, this hypothesis was supported. However, the results should be interpreted cautiously due to the small sample size for males (n=37).

Hypothesis 4e: Predictive validity: Scores on the B-GAL will differ significantly by race, with White people scoring significantly more positively on the scale than Black people. The mean scores on the B-GAL by race/ethnicity are shown in Table 4. An independent samples t-test yielded a significance level of .304, indicating no statistically significant difference between scores of Whites and Blacks on the B-GAL. Thus, this hypothesis was not supported.

Hypothesis 4f: Predictive validity: Scores on the B-GAL will differ by religion, with participants indicating membership in moderate Christian denominations scoring significantly higher than those endorsing conservative Christian denominations, but significantly more negatively than those not endorsing any religion. The mean scores on the B-GAL by religion are shown in Table 4. As shown in Table 5, a one-way ANOVA

Table 4  
*One-Way ANOVA Results Between the B-GAL and Categorical Variables*

Variable	df	Mean Square	F	p
Between subjects				
Religion	2	237.90	1.04	.36
Father's education	3	363.83	1.45	.23
Mother's education	3	538.92	2.22	.09
Geographical area	2	45.84	0.18	.83
Year in school	4	200.54	0.80	.53

Table 5  
*Mean Differences in B-GAL Responses between Categories of Demographic Variables*

Demographic Group and Categories	Mean	SD
Gender		
Female	93.17	15.09
Male	81.41	15.04
Race/Ethnicity		
Black	87.06	17.37
White	91.07	14.98
Religion		
Group 1: Conservative	86.76	17.05
Group 2: Moderate	91.8	14.61
Group 3: None	92	15.41
Father's Educational Level		
High school or less	93.86	19.2
Some college	88.43	13.99
College degree/Some post-grad	87.62	16.23
Advanced/graduate degree	92.6	15.19
Mother's Educational Level		
High school or less	90.35	14.53
Some college	88.27	15.7
College degree/Some post-grad	87.88	16.01
Advanced/graduate degree	94.72	15.32
Geographical Area of Origin		
Urban	90.47	17.61
Suburban	90.98	14.99
Rural	88	19.29
Educational Exposure		
Yes	94.84	17.52
No	88.19	14.19
Year in School		
Freshman	89.55	15.23
Sophomore	91.74	15.43
Junior	88.52	17.06
Senior	96.13	17.9
5 <sup>th</sup> year or more undergrad	96	5.66

yielded a significance level of .36, indicating that no significant differences existed between Group 1 (Conservative), Group 2 (Moderate) and Group 2 (None). This hypothesis was not supported.

Hypothesis 4g: Predictive validity: Scores on the B-GAL will differ significantly by parents' educational level, with higher educational levels correlating more positively with the B-GAL than lower educational levels. The mean scores on the B-GAL by parents' education level are shown in Table 4. As shown in Table 5, one-way ANOVAs yielded significance levels of .23 and .09 for father's and mother's educational level, respectively. This hypothesis was not supported.

Hypothesis 4h: Predictive validity: Scores on the B-GAL will differ significantly by geographical area of origin. The mean scores on the B-GAL by geographical area of origin are shown in Table 4. As shown in Table 5, a one-way ANOVA yielded a significance level of .83, indicating little difference between participants from urban, suburban, and rural geographical areas. This hypothesis was not supported.

Hypothesis 4i: Predictive validity: Scores on the B-GAL will differ significantly according to exposure to educational programming, with those who received educational programming related to gay and lesbian people or issues scoring higher. The mean scores on the B-GAL by exposure to educational programming are shown in Table 4. An independent samples t-test yielded a significance level of .010, indicating a statistically significant difference of scores on the B-GAL between participants who were and were not exposed to educational programming regarding gay and lesbian issues, thus supporting the hypothesis.

Hypothesis 4j: Predictive validity: Scores on the B-GAL will differ significantly according to year in school, with more senior students scoring higher than students near the beginning of their college careers. The mean scores on the B-GAL by year in school are shown in Table 4. As shown in Table 5, a one-way ANOVA yielded a significance level of .53, indicating little difference between participants at varying points in their college education. This hypothesis was not supported.

## Chapter 5

### Discussion

The purpose of the current study was to develop and validate a scale measuring heterosexual people's behaviors toward people who are lesbian or gay. The Behaviors Toward Gays and Lesbians Scale (B-GAL) was examined through reliability, factor analyses, and convergent, discriminant, and predictive validity. The factor analysis yielded three factors and the scale was found to have adequate reliability and validity. Participants' scores on the B-GAL were then analyzed in order to determine how the sample reported behaving toward lesbians and gay men.

From analysis of the B-GAL, three factors emerged, and the assessment tool was found to be both valid and reliable. Items grouped into three factors that were labeled "Taking Community Action," "Avoiding the Negative," and "Speaking Out." The factor labeled "Taking Community Action" includes items that involve acting affirmatively on an organizational or community level. This factor included items that concerned joining or supporting organizations that support gay and lesbian people, displaying supportive symbols, and finding information and forwarding it on to others. The second factor, "Avoiding the Negative," included most of the reverse-coded items, forming a group of items that indicates affirmative, but passive behavior. This factor included, for example, abstaining from telling gay jokes. The final factor, "Speaking Out," encompassed items that assessed taking a personal stance – letting others (both heterosexuals and anyone else in the environment, as well as gay friends) know about their affirmative stance. Thus, while the first two factors both indicate an affirmative stance toward gay and lesbian



people, the third factor measures how “public” one might be, and the behavior measured by this factor seems to be publicizing one’s affirmative attitude.

The current study hypothesized that the B-GAL would demonstrate convergent validity by correlating moderately with the Civic Attitudes and Skills Questionnaire (CASQ), the Attitudes Toward Lesbians and Gay Men Scale (ATLG), and a measure of ally identification. The correlations between the B-GAL and these measures, although moderate, were statistically significant, demonstrating that some overlap exists between the constructs measured. The correlation coefficient for that between the B-GAL and the CASQ was moderate (.42); it makes sense that some correlation would exist between the two scales since the CASQ taps into participants’ desire to improve their community and to advocate. The first factor of the B-GAL (“Taking Community Action”), especially, indicates that measuring behaviors toward gay and lesbian people includes assessing advocacy. While the CASQ assesses positive attitudes toward social justice in general and one’s desire to advocate, the B-GAL measures actual behaviors performed, and includes aspects of heterosexual behaviors other than advocacy. Thus, the moderate, significant correlation was expected and lends support to the validity of the B-GAL.

The ATLG correlates with the B-GAL significantly, and is high (-.67) in the range that might be considered “moderate” (.50-.70; Hinkle, Wiersma, & Jurs, 1998). The negative correlation was expected because a high score on the ATLG indicates *negative* attitudes, while the B-GAL indicates affirming behaviors. As with the CASQ, a particular factor of the B-GAL relates especially to the ATLG: “Speaking Out” appears to assess one’s level of disclosure regarding their attitudes. It must be assumed that positive attitudes preceded their disclosure. Advocacy also presumably would be a result, at least

in part, of positive attitudes. It therefore makes sense that the B-GAL would correlate highly with the ATLG. Yet, the B-GAL still assesses a distinct construct because a perfect correlation does not exist between attitudes and behaviors.

Comparison of the B-GAL to the 1-item measure of ally identification (“How strongly do you identify as an ally?”) yielded a relatively high correlation (.74) as compared to the hypothesized moderate correlation. However, it may be desirable if the construct that the B-GAL measures is highly related to whether one is an ally. Conceptually, being an ally implies that one engages in certain behaviors, and no existing scale measures the extent to which one behaves as an ally. The limitation in interpreting this correlation is that when the 1-item ally measure was administered, the term “ally” was not defined for the participants. Therefore, the meaning of the correlation lies in how the participants in the current study interpreted the question.

The discriminant validity of the B-GAL was supported by its low correlation with social desirability, indicating that the B-GAL does not tap into a construct that it was not developed to measure. The result would be even more robust if the social desirability scale had a higher degree of reliability—the alpha level for the social desirability scale is slightly lower (.68) than desired (.70), so this finding is potentially less reliable than those regarding convergent validity.

In addition to convergent and discriminant validity, several demographic measures were used to assess the predictive validity of the B-GAL. Its correlation with age was non-significant; this is likely due to the narrow age range that the participants represented (about 95% of the participants were between the ages of 18-21). A statistically significant but moderate correlation (.34) emerged between the B-GAL and

political liberalism. This could be due to the fact that the participants, on average, only moderately identified with their political stance. A larger correlation might be found among participants reporting stronger political stances.

The B-GAL also correlated significantly with the number of educational programs to which one was exposed, but the coefficient was only .19. Consistent with the correlation between B-GAL scores and exposure, those who had been exposed to programming scored significantly higher on the B-GAL than those who had not (94.84 versus 88.19). Unfortunately, educational programming was not defined for the participants and a range of interpretations on the part of the participants was evident based on qualitative descriptions of the programs to which they were exposed. The researcher assumed education to be affirmative, but several students reported being taught about homosexuality being wrong. One participant seemed to interpret “program” as a television show. In addition, participants were only asked to write if they had been exposed to education; therefore, participants might have lied merely to skip that section of the survey. Given these weaknesses, the results are likely underestimating the relationship between affirmative education and affirmative behaviors: the way education was assessed, participants may have included negative education or failed to describe affirmative exposure. Thus, it is highly possible that correlations between education and behaviors and score differences between those who had or had not been exposed might be much higher if education were assessed more clearly and adequately.

In the cases of most of the variables, significant mean differences between groups were not found. This was the case with race, religion, parents’ education, geographical area (urban, suburban, rural), and school year. One contributor to the lack of differences

here is likely the homogeneity of the sample: there simply was not enough of a range within some of the variables to yield a significant difference. School year is correlated with age, and, as discussed, no significant differences were found between ages because they are so similar. An overwhelming 72% of the sample reported coming from a suburban area (only 6% were from rural areas, with the remaining 22% from urban areas). In terms of parents' education, 72% of mothers and 70% of fathers had a college degree or greater (some post graduate work or a graduate level degree). This was not the case with race and religion, however, which were fairly diverse. Perhaps age or geographical area supercedes any racial or religious differences in beliefs – e.g., college students have more beliefs in common because of their age than their religion. Likewise, perhaps people are liberal (or not) more because of where they live or grew up or because of their or their parents' education and are similar to others around them regardless of race or religion.

Significant differences between groups did exist within the category of gender. As predicted, women had a higher average score on the B-GAL than did men (93.17 vs. 81.41). The number of female and male participants was very uneven, resulting in a small sample size of males ( $n=37$ ), suggesting that the predictive validity hypothesis regarding gender be interpreted with reservation. However, the standard deviations on the scores were almost identical (15.09 for women, 15.04 for men); the lack of greater variability among the men may indicate that the sample is somewhat representative even with small numbers. Overall, the predictive validity of the B-GAL has been demonstrated to be limited, but this is likely due more to a homogenous sample and to methodological issues than to the actual validity of the B-GAL, as evidenced by the fact that the convergent and

discriminant validity, which were assessed by comparison to more established measures, were strong. Taken together, the results support the validity of the B-GAL. Furthermore, the B-GAL produced a more than adequate level of reliability (.91).

In addition to the validity and reliability of the B-GAL, the scale also can be used to provide a preliminary assessment of college students' behaviors toward lesbian and gay people. Participants' mean scores on the B-GAL and its factors can be used to assess the current direction of behaviors (i.e., positive or negative) and, especially among those with positive behaviors, the type of behaviors (i.e., community action, avoiding the negative, speaking out) being enacted. Scores on the full scale B-GAL form a distribution that is close to normal (see Figure 1), with the midpoint being almost exactly the same as the potential midpoint based on the possible range of scores (possible range of scores is 30-150, therefore the midpoint or hypothetical mean would be 90). The centrality of the mean in the current sample indicates that the behavioral tendency is to behave either neutrally, or a mix of negatively and positively. The normality of the distribution lends further support to the scale because it indicates that the measure captured a full range of potential behaviors, from negative to the point of physical violence, to extremely affirming.

The distributions on the three factors offer further insight into the interpretation of the scores. Scores on the third factor, "Speaking Out," are distributed similarly to the total scale scores (see Figure 2), indicating that some have spoken up strongly in favor of gay and lesbian people, some strongly endorsed *not* speaking up or even endorsed behaviors such as telling gay jokes, while most fell in the middle, possibly being selective about when, or with whom, to speak up either in favor of or against gay and lesbian

Figure 1. Distribution of participants' B-GAL scores.

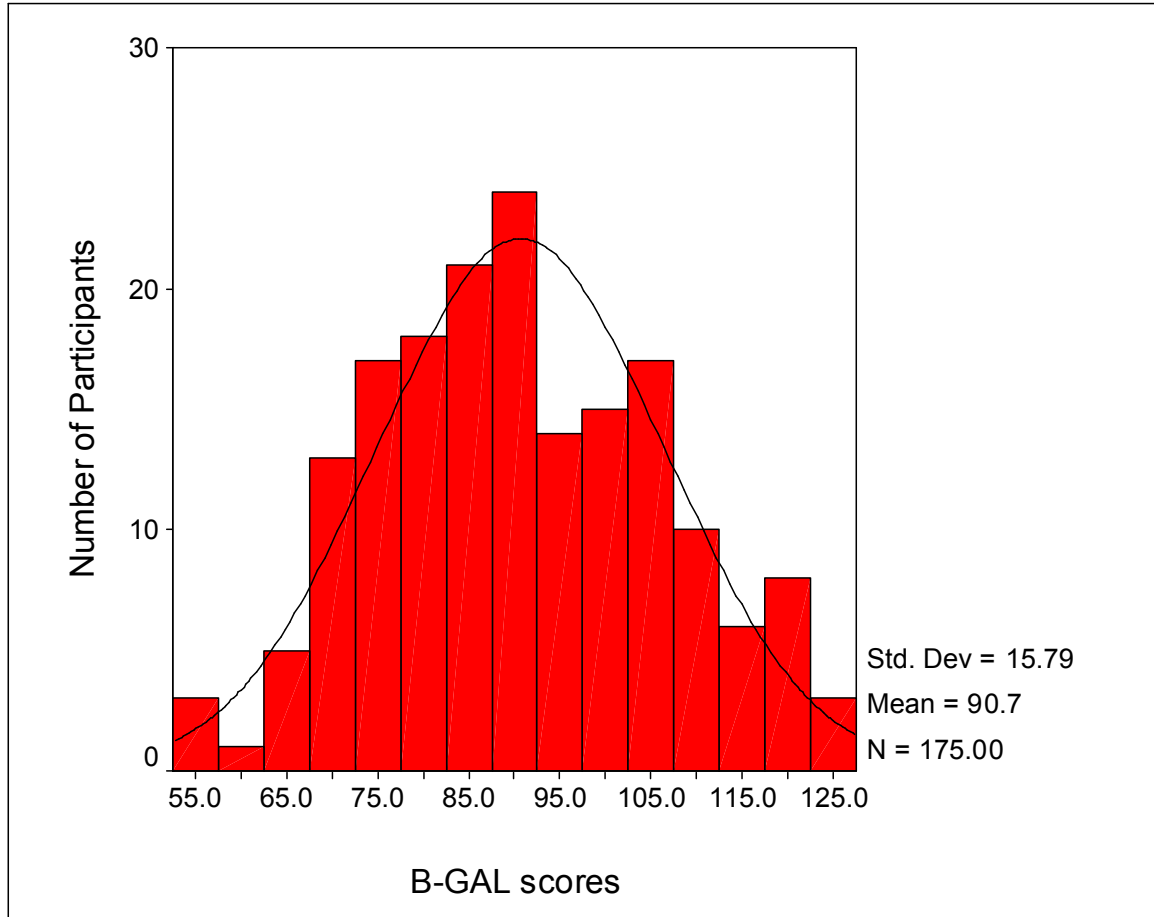
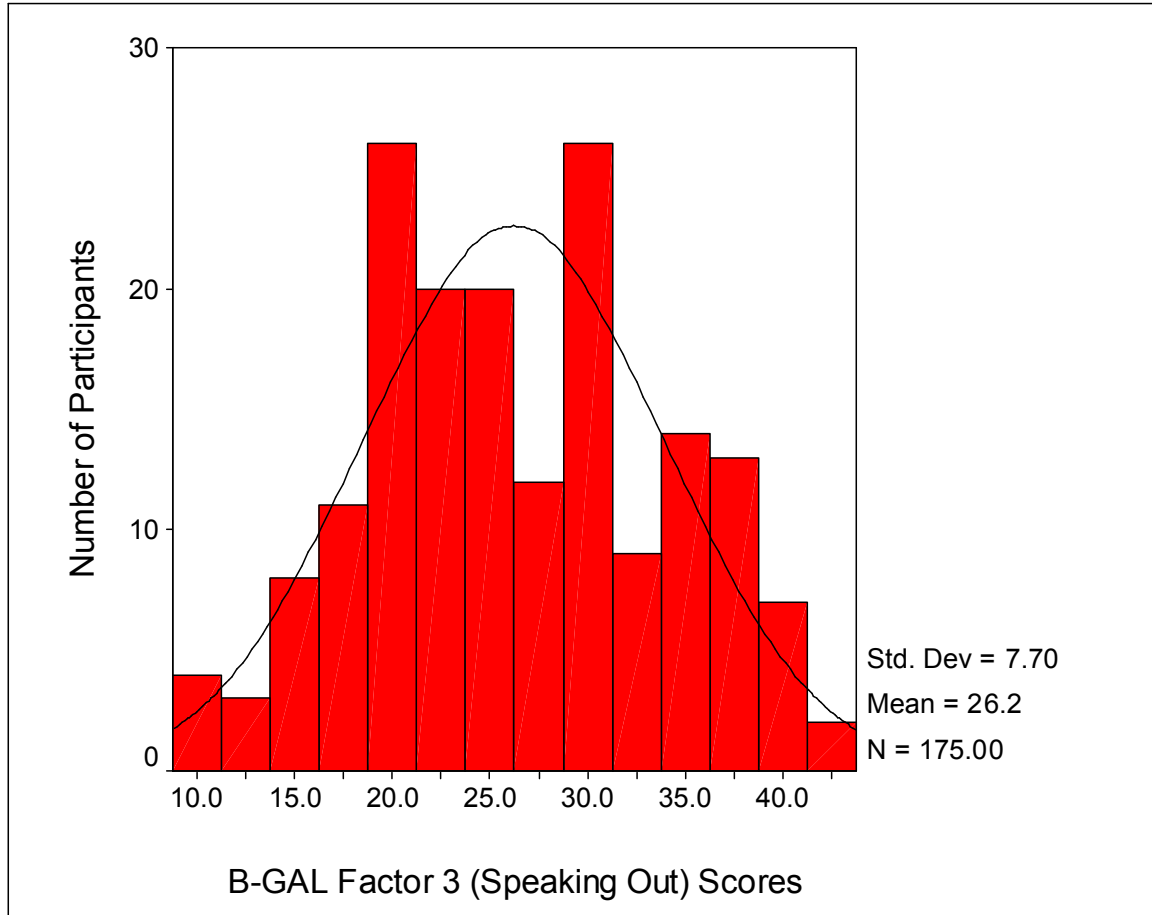


Figure 2. Distribution of participants' B-GAL Factor 3 (Speaking Out) scores.



people or to be silent. The remaining two factors skewed in opposite directions (see Figures 3 & 4). The first factor, “Taking Community Action,” (Figure 3) is skewed to the right, indicating that the majority of respondents did *not* endorse taking the kinds of action that this factor describes. The second factor, on the other hand, is skewed to the left, demonstrating that most participants endorsed “Avoiding the Negative.” Combined, the distributions of the factors indicate that the sample was, for the most part, inactive in regard to lesbian and gay people: the majority endorsed neither negative nor advocacy-type behaviors, and responded neutrally to the “Speaking Out” items, together indicating inaction (i.e., not speaking out in an affirming way, but not vehemently rejecting those items, which indicates not speaking out in a negative way, either). The current study may suggest apathy, a word often used to describe the state of college students’ opinions on current political and social issues and events (Bennett & Bennett, 2001). However, the mean score on how participants identified with their political stance was 3.46 on a Likert scale ranging from 1-5, indicating a slightly above average identification with a political stance. Together, the results suggest that these college students have some opinions about political issues, possibly even some strong opinions, but that perhaps gay and lesbian issues are not among the issues of interest to them.

An alternate view is that college students are perhaps in the middle of a developmental trajectory, moving from negative to affirmative attitudes and behaviors. Especially given the strong correlation between attitudes toward gay and lesbian people and contact with them (Herek & Capitanio, 1996), these young people simply may not have had enough time or experience to develop stronger stances, especially affirmative ones.



Figure 3. Distribution of participants' B-GAL Factor 1 (Taking Community Action) scores.

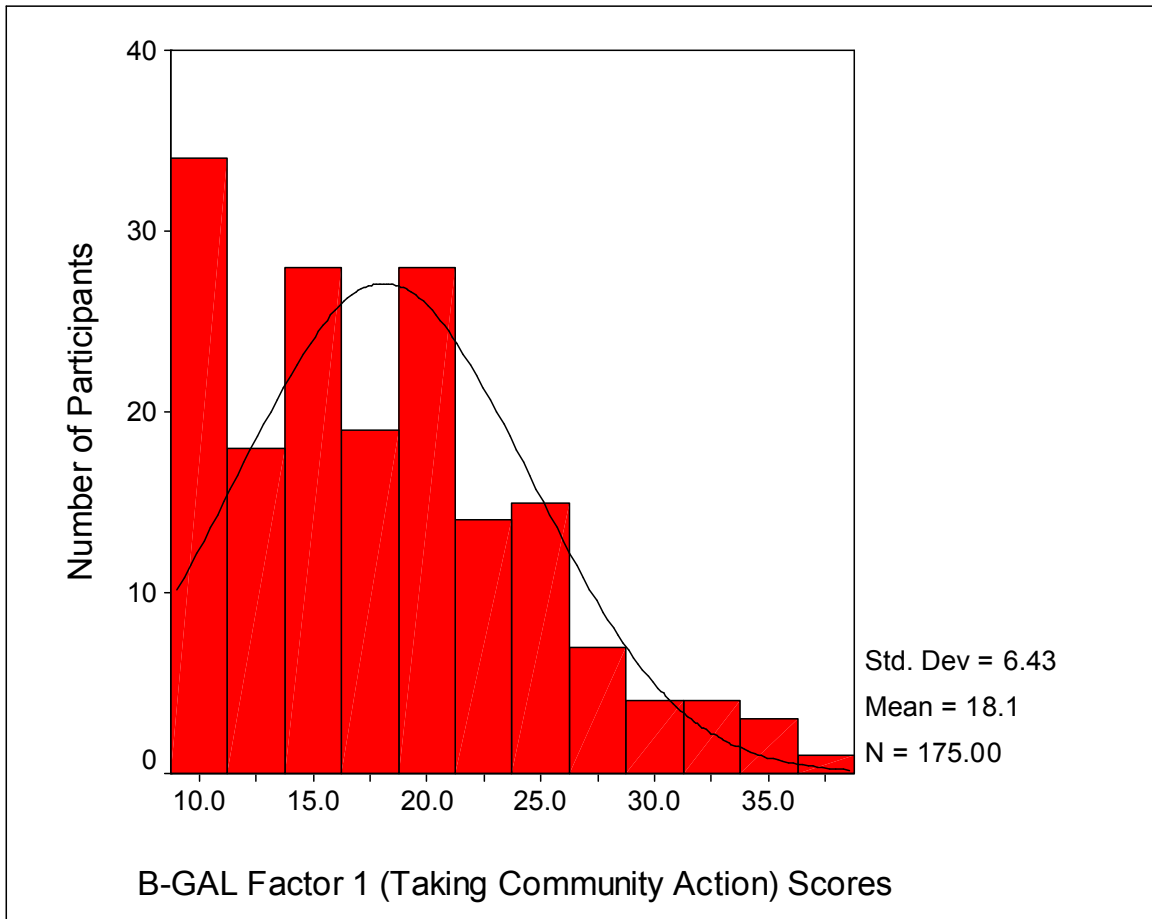
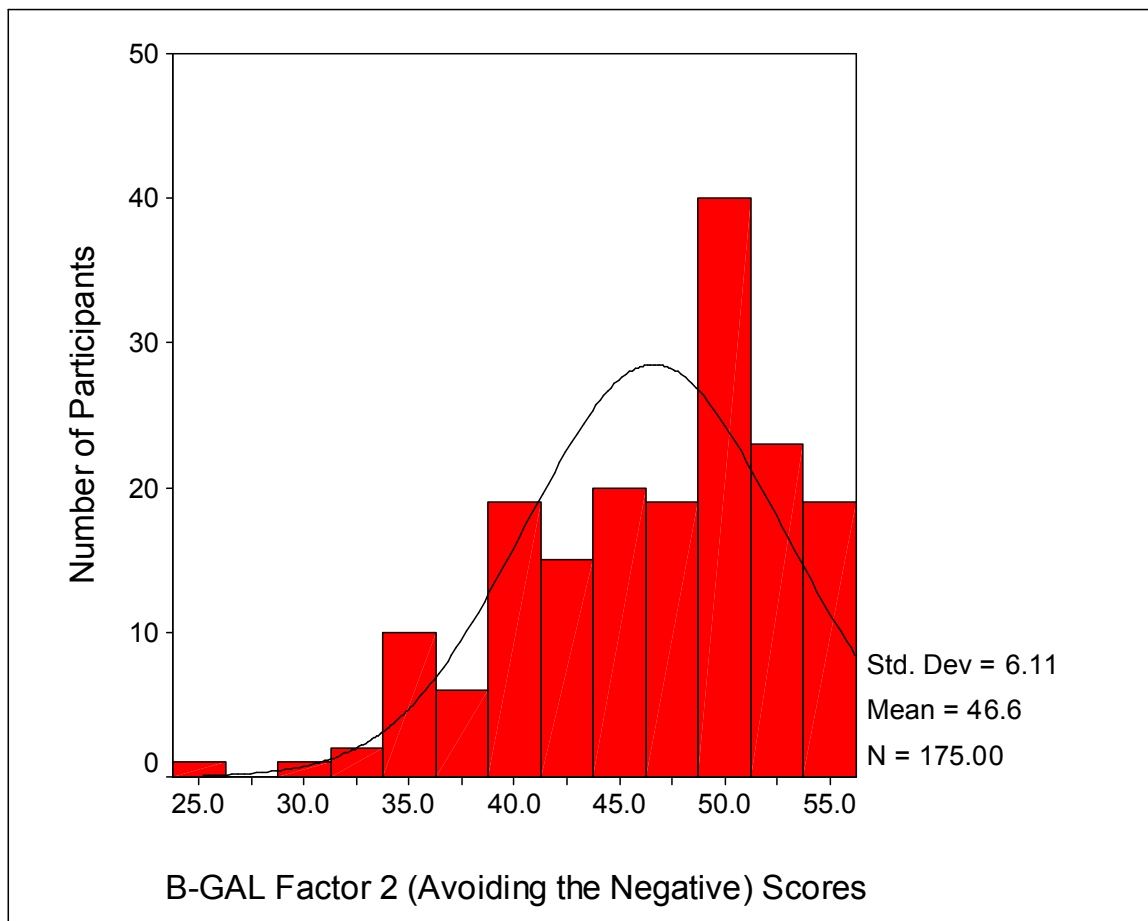


Figure 4. Distribution of participants' B-GAL Factor 2 (Avoiding the Negative) scores.



### *Limitations of the Study*

One flaw of this study lies in the basic assumption of the data set: participants self-reported their sexual orientation and only one student out of 178 indicated an orientation other than heterosexuality; it is possible that participants falsely indicated their heterosexuality, either because of desiring secrecy for some reason or because of not identifying as gay or lesbian even internally. Another possibility is that some of the participants may be too young to have fully formed their sexual orientation identification.

One of the largest limitations of the current study is the homogeneity of the sample. Especially because factors such as geographical location and education are associated at least with attitudes toward lesbian and gay people, the lack of diversity in these types of demographics limited the findings regarding the way behaviors interact with those variables. The homogeneity of the sample therefore limits the generalizability of the findings, as well. In no case is this truer than with gender; the sample was overwhelmingly female, and gender is known to have an interaction effect with attitudes toward gay and lesbian people. Replicating the current study with a more gender-balanced sample would be desirable. It should be noted that the B-GAL scores of the sample represented a wide range in spite of the homogeneity of the sample, which lends support to the measure. Nevertheless, heterogeneity in all demographic areas would allow for more generalizability, including a stronger analysis of between-group differences in behaviors toward lesbian and gay people. These limitations and results lead to many other ideas and opportunities for future research, as well.

### *Implications of the Study for Research and Practice*

The current study demonstrated the psychometric adequacy of a newly developed scale measuring heterosexual people's behaviors toward gay and lesbian people (Behaviors Toward Gays and Lesbians; B-GAL). Additional examination of the measure suggested that heterosexual college students may be largely inactive regarding that population and suggested that gender, political orientation, and exposure to educational programming may be related to these behaviors (at least in a small, relatively homogenous sample of students). This is an extremely novel research area and much room exists for future research. First, as mentioned, the study could be improved upon merely by diversifying the sample and better defining some of the vocabulary used in data collection (e.g., “ally” and “educational programming”). Second, while the normal distribution of the B-GAL scores is positive in that it indicates that wide range of potential behaviors was assessed, it could be meaningful to attempt to discriminate more within the mid-range of the scale, since the distribution also indicates that a large number of participants’ scores lay there. Finally, examining behavioral change would be the next major step beyond the current research. Now that a measure has been developed and the behaviors of a population can be quantified, pre- and post-tests as well as longitudinal studies may be conducted, all of which might clarify further the correlations and/or predictors of heterosexual behaviors toward gay and lesbian people.

The ability to conduct pre- and post-tests, and therefore to assess interventions, is one of the current study’s major implications for practice. This is especially true given the finding that exposure to educational programs was significantly correlated with scores on the B-GAL. Given that the scale was validated with a college population, it could be

especially useful in examining the efficacy of various college and university presentations, events, and experiences. Likewise, it could be used as an assessment tool in the selection of students into some type of position, event, or experience; for example, positive behaviors toward gay and lesbian people would be an excellent trait in resident assistants, orientation leaders, and other peer leaders.

Further, the finding that the mean score on the B-GAL was almost exactly in the mid-range of possible scores, combined with the finding that educational programming may have a positive effect, seems to indicate that college students may be primed for some type of intervention: behaviors are not too negative at the start; the mean B-GAL score implies that most students are not extremely opposed to some of the positive behaviors described within the scale; and the current study indicates that programming could have a positive effect. The measure could also be used to assess the idea of a developmental trajectory toward affirmativeness: a longitudinal study could assess the effect of college students' experiences on behaviors toward lesbians and gay men, or a cross-sectional study with a much wider age range than the current study could assess age differences in student behaviors. Overall, the establishment of the B-GAL not only allows for the assessment of heterosexual people's behaviors toward lesbian and gay people, but possesses the potential to act as a tool in social change, which is perhaps the most exciting and promising aspect of this budding research area.

## Appendix A: Informed Consent

**Identification of Project/Title**

Social and Interpersonal Attitudes and Behaviors

**Statement of Age of Subject  
(Please note: Parental  
consent always needed  
for minors.)**

*I state that I am over 18 years of age and wish to participate in a program of research being conducted by Dr. Clara Hill and Heather Walton in the Department of Psychology at the University of Maryland, College Park.*

**Purpose**

*The purpose of this research is to learn about college students' social and interpersonal attitudes and behaviors.*

**Procedures**

*The procedures involve the completion of 6 short surveys which will take approximately an hour to complete. Most of the survey items ask about your level of agreement with various statements--for example, "I don't understand why some people are poor when there are boundless opportunities available to them," and "I go out of my way to learn more about gay and lesbian issues."*

**Confidentiality**

*All information collected in this study is anonymous. I understand that the data I provide will be grouped with data others provide for reporting and presentation and that individual identifying data will not be used. In addition, all data will be kept in a locked room to which only the researchers have access.*

**Risks & Benefits**

*I am aware that the risks of this study are minimal and may include slight discomfort with the content of the surveys. I may benefit from this study by thinking and about how I feel and behave in various situations.*

**Freedom to Withdraw, &  
Ability to Ask Questions**

*The experiment is not designed to help me personally, but to help the investigator learn more about social and interpersonal attitudes and behaviors. I am free to ask questions or withdraw from participation at any time and without penalty. **If you have questions about your rights as a research subject or wish to report a research-related injury, please contact: Institutional Review Board Office, University of Maryland, College Park, Maryland, 20742; (e-mail) [irb@deans.umd.edu](mailto:irb@deans.umd.edu); (telephone) 301-405-4212.***

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Of Investigators**

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**Please add name,  
signature, and date  
lines to the final page  
of your consent form**

NAME OF SUBJECT \_\_\_\_\_

EMAIL ADDRESS \_\_\_\_\_

SIGNATURE OF SUBJECT

---

DATE

---

## Appendix B: Informed Consent

Social and Interpersonal Attitudes and Behaviors

Thank you for choosing to participate in this study!

Your participation will consist of completing a survey that is made up of 6 sections. Please complete them in order, and check the directions for each section.

Please take your time; it will greatly benefit the research project if you are able to answer the items with your most honest opinions.

Thank you for your time!



## Appendix C: Demographics

**SECTION 1**

Please respond to all items as applicable.

1. Age: \_\_\_\_\_
2. Year in school:  
 Freshman undergraduate  
 Sophomore undergraduate  
 Junior undergraduate  
 Senior undergraduate  
 5<sup>th</sup> year or more undergraduate  
 Graduate Student  
 Other (indicate): \_\_\_\_\_
3. Major(s): \_\_\_\_\_
4. Geographical area of origin (please check all descriptions that apply to areas you lived in for a year or more, prior to college):  
 Urban  
 Suburban  
 Rural  
 Other (indicate): \_\_\_\_\_
5. State(s) of origin –e.g., “MD” if you are from Maryland: \_\_\_\_\_
6. Father’s highest level of education:  
 Not applicable  
 8<sup>th</sup> grade or less  
 Some high school  
 High school degree  
 Some college  
 College degree  
 Some post-graduate work  
 Advanced/graduate degree
7. Mother’s highest level of education:  
 Not applicable  
 8<sup>th</sup> grade or less  
 Some high school  
 High school degree  
 Some college  
 College degree  
 Some post-graduate work  
 Advanced/graduate degree

8. Gender (check):  
 Female  
 Male  
 Transgender
9. Race/Ethnicity (check one; if multiracial or not listed, indicate on the appropriate line):  
 African American/Black  
 Arab/Middle Eastern American  
 Asian American/Pacific Islander  
 Caucasian/Euro-American  
 Hispanic or Latino/a  
 Native American/American Indian  
 Multiracial (indicate): \_\_\_\_\_  
 Other (indicate): \_\_\_\_\_
10. Sexual orientation (check):  
 Heterosexual  
 Gay or Lesbian  
 Bisexual  
 Uncertain  
 Other (indicate): \_\_\_\_\_
11. Religion(s) currently practicing, if any: \_\_\_\_\_
12. Religion(s) formerly practiced, if any: \_\_\_\_\_
- 

Please circle a number on the scale below that most closely fits with how you would describe your political beliefs:

<b>Extremely conservative</b>	<b>Somewhat conservative</b>	<b>Middle of the road</b>	<b>Somewhat liberal</b>	<b>Extremely liberal</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

---

Please circle a number on the scale below that most closely fits with how strongly you identify with your political stance chosen above:

<b>Not at all</b>	<b>Slightly</b>	<b>Some</b>	<b>Very</b>	<b>Extremely</b>
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>

## Appendix D: Marlowe-Crowne Social Desirability Scale, Short Form

**SECTION 2**

Listed below are a number of statements concerning personal attitudes and traits. Read each item and decide how it pertains to you.

Please respond either TRUE (T) or FALSE (F) to each item. Indicate your response by circling the appropriate letter next to the item. Be sure to answer all items.

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

13. I have never deliberately said something that hurt someone's feelings.

T

F

## Appendix E: Civic Attitudes and Skills Questionnaire (CASQ)

**SECTION 3**

Listed below are a number of statements. Please read each one and indicate how strongly you agree or disagree with each statement by circling a number to its right.

	<b>SCALE:</b>				
	completely disagree	disagree somewhat	neither agree nor disagree	agree somewhat	agree completely
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1. I plan to do some volunteer work.	1	2	3	4	5
2. I plan to become involved in my community.	1	2	3	4	5
3. I plan to participate in a community action program.	1	2	3	4	5
4. I plan to become an active member of my community.	1	2	3	4	5
5. In the future, I plan to participate in a community service organization.	1	2	3	4	5
6. I plan to help others who are in difficulty.	1	2	3	4	5
7. I am committed to making a positive difference.	1	2	3	4	5
8. I plan to become involved in programs to help clean up the environment.	1	2	3	4	5
9. I can listen to other people's opinions.	1	2	3	4	5
10. I can work cooperatively with a group of people.	1	2	3	4	5
11. I can think logically in solving problems.	1	2	3	4	5
12. I can communicate well with others.	1	2	3	4	5
13. I can successfully resolve conflicts with others.	1	2	3	4	5
14. I can easily get along with people.	1	2	3	4	5
15. I try to find effective ways of solving problems.	1	2	3	4	5

	<b>SCALE:</b>				
	completely disagree	disagree somewhat	neither agree nor disagree	agree somewhat	agree completely
	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
16. When trying to understand the position of others, I try to place myself in their position.	1	2	3	4	5
17. I find it easy to make friends.	1	2	3	4	5
18. I can think analytically in solving problems.	1	2	3	4	5
19. I try to place myself in the place of others in trying to assess their current situation.	1	2	3	4	5
20. I tend to solve problems by talking them out.	1	2	3	4	5
21. I don't understand why some people are poor when there are boundless opportunities available to them.	1	2	3	4	5
22. People are poor because they choose to be poor.	1	2	3	4	5
23. Individuals are responsible for their own misfortunes.	1	2	3	4	5
24. We need to look no further than the individual in assessing her/his problems.	1	2	3	4	5
25. In order for problems to be solved, we need to change public policy.	1	2	3	4	5
26. We need to institute reforms within the current system to change our communities.	1	2	3	4	5
27. We need to change people's attitudes in order to solve social problems.	1	2	3	4	5
28. It is important that equal opportunity be available to all people.	1	2	3	4	5

	<b>SCALE:</b>				
	completely disagree <b>1</b>	disagree somewhat <b>2</b>	neither agree nor disagree <b>3</b>	agree somewhat <b>4</b>	agree completely <b>5</b>
29. It is hard for a group to function effectively when the people involved come from very diverse backgrounds.	1	2	3	4	5
30. I prefer the company of people who are very similar to me in background and expressions.	1	2	3	4	5
31. I find it difficult to relate to people from a different race or culture.	1	2	3	4	5
32. I enjoy meeting people who come from backgrounds very different from my own.	1	2	3	4	5
33. Cultural diversity within a group makes the group more interesting and effective.	1	2	3	4	5

Appendix F: Behaviors Toward Gays and Lesbians Scale  
(B-GAL; 39-item scale given to participants)

**SECTION 4**

Listed below are a number of statements. Please read each one and indicate how strongly you agree or disagree with each statement by circling a number to its right.

<b>SCALE:</b>	<b>strongly disagree</b>	<b>disagree</b>	<b>neither agree nor disagree</b>	<b>agree</b>	<b>strongly agree</b>
1. I actively participate in support groups or community events for gay or lesbian people.	1	2	3	4	5
2. I am a member of a gay and lesbian rights organization or support group <b>on</b> campus.	1	2	3	4	5
3. I am a member of a gay and lesbian rights organization or support group <b>off</b> campus.	1	2	3	4	5
4. Being an ally in the gay community is a central aspect of my identity.	1	2	3	4	5
5. I am known as an ally of gay and lesbian people.	1	2	3	4	5
6. I have helped a gay or lesbian friend cope with heterosexism and homophobia.	1	2	3	4	5
7. I have stopped speaking to a friend because I found out he/she was gay or lesbian.	1	2	3	4	5
8. I have advocated for gay and lesbian rights even if it meant that people might think I was gay.	1	2	3	4	5
9. I have greeted an “out” gay or lesbian person in public.	1	2	3	4	5
10. I avoid being around gay or lesbian people showing affection, i.e. hand-holding, hugging or kissing.	1	2	3	4	5



	<b>SCALE:</b>				
	<b>strongly disagree</b>	<b>disagree</b>	<b>neither agree nor disagree</b>	<b>agree</b>	<b>strongly agree</b>
11. I publicly oppose discrimination and harassment of gay and lesbian individuals.	1	2	3	4	5
12. When I meet people, I assume they are heterosexual.	1	2	3	4	5
13. I have hit, hurt, or fought with someone because he or she was gay or lesbian.	1	2	3	4	5
14. I laugh at anti-gay jokes.	1	2	3	4	5
15. I have told anti-gay jokes.	1	2	3	4	5
16. I have sat in silence while others told anti-gay jokes.	1	2	3	4	5
17. I have used a word such as “fag,” “dyke,” “homo,” or “queer” as an insult.	1	2	3	4	5
18. I have knowingly insulted a suspected or openly gay person.	1	2	3	4	5
19. I belong to an organization that is against or hostile to homosexuals.	1	2	3	4	5
20. I belong to a religious institution (e.g., synagogue, church) that is against or hostile to homosexuals.	1	2	3	4	5
21. I challenge others’ anti-gay behavior even if it could mean losing friends.	1	2	3	4	5
22. I challenge others’ anti-gay behavior even if it could mean losing some type of power or status.	1	2	3	4	5
23. I avoid standing up for gay and lesbian people because it is embarrassing.	1	2	3	4	5
24. When talking, I try to be sensitive to the fact that anyone could be gay or lesbian.	1	2	3	4	5

	<b>SCALE:</b>				
	<b>strongly disagree</b>	<b>disagree</b>	<b>neither agree nor disagree</b>	<b>agree</b>	<b>strongly agree</b>
25. I read books, or watch television shows or movies, that feature gay characters and/or issues.	1	2	3	4	5
26. I go out of my way to learn more about gay and lesbian issues (e.g. attending a lecture, taking a class, asking questions of people with more knowledge).	1	2	3	4	5
27. I go out of my way to avoid hearing about gay and lesbian issues.	1	2	3	4	5
28. I can be counted upon to speak up and protest anti-gay behavior even when there are no gay or lesbian people present.	1	2	3	4	5
29. I have avoided a gay or lesbian person of the same sex because I thought they found me attractive.	1	2	3	4	5
30. I avoid gay/lesbian people who are the same sex as me.	1	2	3	4	5
31. I avoid gay/lesbian people of the opposite sex.	1	2	3	4	5
32. I donate time or money to an organization that advocates for gay and lesbian rights.	1	2	3	4	5
33. I receive information (email, regular mail, etc.) from a gay rights organization.	1	2	3	4	5
34. I forward information about gay and lesbian rights to others.	1	2	3	4	5
35. I have signed a petition or sent a letter in support of gay and lesbian rights.	1	2	3	4	5
36. I use gender neutral terms, such as partner or significant other, instead of gender specific terms like boyfriend or girlfriend.	1	2	3	4	5

	<b>SCALE:</b>				
	<b>strongly disagree</b>	<b>disagree</b>	<b>neither agree nor disagree</b>	<b>agree</b>	<b>strongly agree</b>
37. I avoid using stereotypes when discussing gay or lesbian people or culture.	1	2	3	4	5
38. I display a gay-supportive symbol, such as a pin, sticker, poster, etc. in my home, office, or car.	1	2	3	4	5
39. I try to persuade people who are heterosexual/homophobic to become less so.	1	2	3	4	5

## Appendix G: Ally Identification, Educational Exposure

**SECTION 5**

Please circle a number on the scale below that most closely corresponds with your agreement to the statement below:

**I consider myself to be an ally to gay and lesbian people.**

Strongly disagree						Strongly agree
<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>

---

**Have you been exposed to any educational programming or presentations regarding homosexuality?**

(circle one)      **YES**      **NO**

**If so, how many?** (indicate number) \_\_\_\_\_

**Please write a brief description of each program or presentation you have been exposed to, and your role (i.e. attendee, facilitator) in that program:**

## Appendix H: Attitudes Toward Lesbians and Gay Men (ATLG)

**SECTION 6**

For each item, circle the number that best fits your level of agreement with the statement: 1 is the strongest level of **disagreement**, and 9 is the strongest level of **agreement**.

	Strongly Disagree	Strongly Agree
1. Lesbians just can't fit into our society.	1 2 3 4 5 6 7 8 9	
2. A woman's homosexuality should <i>not</i> be a cause for job discrimination in any situation.	1 2 3 4 5 6 7 8 9	
3. Female homosexuality is detrimental to society because it breaks down the natural divisions between the sexes.	1 2 3 4 5 6 7 8 9	
4. State laws regulating private, consenting lesbian behavior should be loosened.	1 2 3 4 5 6 7 8 9	
5. Female homosexuality is a sin.	1 2 3 4 5 6 7 8 9	
6. The growing number of lesbians indicates a decline in American morals.	1 2 3 4 5 6 7 8 9	
7. Female homosexuality in itself is no problem, but what society makes of it can be a problem.	1 2 3 4 5 6 7 8 9	
8. Female homosexuality is a threat to many of our basic social institutions.	1 2 3 4 5 6 7 8 9	
9. Female homosexuality is an inferior form of sexuality.	1 2 3 4 5 6 7 8 9	
10. Lesbians are sick.	1 2 3 4 5 6 7 8 9	
11. Male homosexual couples should be allowed to adopt children the same as heterosexual couples.	1 2 3 4 5 6 7 8 9	
12. I think male homosexuals are disgusting.	1 2 3 4 5 6 7 8 9	
13. Male homosexuals should <i>not</i> be allowed to teach school.	1 2 3 4 5 6 7 8 9	
14. Male homosexuality is a perversion.	1 2 3 4 5 6 7 8 9	

	Strongly Disagree									Strongly Agree
15. Just as in other species, male homosexuality is a natural expression of sexuality in human men.	1	2	3	4	5	6	7	8	9	
16. If a man has homosexual feelings, he should do everything he can to overcome them.	1	2	3	4	5	6	7	8	9	
17. I would <i>not</i> be too upset if I learned that my son were a homosexual.	1	2	3	4	5	6	7	8	9	
18. Homosexual behavior between two men is just plain wrong.	1	2	3	4	5	6	7	8	9	
19. The idea of male homosexual marriages seems ridiculous to me.	1	2	3	4	5	6	7	8	9	
20. Male homosexuality is merely a different kind of lifestyle that should <i>not</i> be condemned.	1	2	3	4	5	6	7	8	9	

## Appendix I: Debriefing Statement

**Debriefing Statement**

The study that you participated in is an attempt to validate a scale measuring heterosexual people's behaviors toward people who are gay and lesbian. (Responses of participants who self identified as LGB or T will not be used for the validation of the measure but may be correlated with other variables in the study). By completing several scales, the researcher can compare the responses to established scales with the responses to the new scale in order to determine whether the new scale is valid.

The researcher is studying heterosexual people's behaviors toward people who are gay and lesbian because it has not been measured before with a scale known to the researcher. Examples of future uses of the scale include evaluating the efficacy of an educational program.

The study was presented to participants in the advertising as measuring social attitudes in general, rather than specifically behaviors toward gay and lesbian people, in an attempt to avoid biasing the participants in any way.

If you have any questions about the research project or would like to learn about the results in the future, please contact Heather Walton at [hw Walton@hotmail.com](mailto:hw Walton@hotmail.com)

## Appendix J: Original 70-Item B-GAL

1. I make an effort to actively support gay and lesbian rights.
2. I make an effort to actively protest gay and lesbian rights.
3. I challenge homophobia in others.
4. I am a gay rights advocate.
5. I challenge homophobia in myself.
6. I am affiliated with an organization that is anti-gay.
7. I do not support homophobic attitudes.
8. I support homophobic attitudes.
9. I support homophobic behaviors.
10. I do not support homophobic behaviors.
11. I go out of my way to participate in community events or support groups for gay or lesbian people.
12. I go out of my way to avoid events that support gay people.
13. I have openly spoken up against anti-gay behavior.
14. I would openly speak up against anti-gay behavior.
15. I would support a gay rights organization.
16. I am a member of a gay rights organization or support group on campus.
17. I am a member of a gay rights organization or support group off campus.
18. Being an ally in the gay community is a central aspect of my identity.
19. I openly interact with the gay community.
20. I make an active attempt to advocate for gay rights.
21. I make an active attempt to protest against gay rights.
22. I am known as an ally.
23. I am known as anti-gay.
24. I would be willing to try to help a gay friend cope with heterosexism and homophobia.
25. I have helped a gay friend cope with heterosexism and homophobia.
26. If I found out a friend were gay, I would stop speaking to him/her.
27. I am supportive of those I know who are gay.
28. I would be willing to advocate for gay rights even if it meant that people thought I was gay.
29. I would greet an "out" gay person in public.
30. I have public contact with gay people.
31. I would avoid being around gay people showing affection, i.e. hugging or kissing.
32. I publicly oppose discrimination and harassment of gay individuals.
33. I go out of my way to learn more about gay issues.
34. I go out of my way to avoid hearing about gay issues.
35. When I meet people, I assume they are heterosexual.
36. I discriminate against people who are gay.
37. I have harassed someone because they're gay.
38. I have hit, hurt, or fought with someone because they're gay.
39. I laugh at anti-gay jokes.
40. I have told anti-gay jokes.
41. I have used a word such as "fag," "dyke," "homo," or "queer" as an insult.
42. I would not knowingly insult a suspected or openly gay person.
43. When talking, I try to be sensitive to the fact that anyone could be gay.



44. I belong to an organization or church that is against or hostile to homosexuals.
45. I challenge homophobic words.
46. I challenge homophobic actions.
47. I treat gay people with respect.
48. I challenge others' anti-gay behavior even if it means losing friends.
49. I challenge others' anti-gay behavior even if it means losing some type of power or status.
50. I avoid standing up for gay people because it is embarrassing.
51. I am involved with pro-gay efforts.
52. I am involved with anti-gay efforts.
53. I educate myself about gay issues.
54. I go out of my way to learn more about gay issues by reading books, going to films, attending lectures, or participating in community events.
55. I can be counted upon to speak up and protest anti-gay behavior even when there are no gay people present.
56. I would avoid a gay person of the same sex if I knew they found me attractive.
57. I avoid gay people of my sex.
58. I avoid gay people of the opposite sex.
59. I donate time or money to a gay rights organization.
60. I receive information (email, regular mail, etc.) from a gay rights organization.
61. I forward information about gay rights to others.
62. I would sign a petition supporting gay rights.
63. I would sign a petition to limit gay rights.
64. I use gender neutral terms, such as partner or significant other, instead of gender specific terms like boyfriend or girlfriend.
65. I object to homophobic jokes in all situations.
66. I don't tolerate homophobic comments.
67. I avoid using stereotypes when discussing gay people or culture.
68. I display a gay-supportive symbol, such as a pin, sticker, poster, etc. in my home, office, or car.
69. I display anti-gay materials in my home, office, or car.
70. I try to persuade people who are heterosexual/homophobic to become less so.

1. I actively participate in community events or support groups for gay or lesbian people.
2. I am a member of a gay and lesbian rights organization or support group on campus.
3. I am a member of a gay and lesbian rights organization or support group off campus.
4. Being an ally in the gay community is a central aspect of my identity.
5. I am known as an ally.
6. I have helped a gay or lesbian friend cope with heterosexism and homophobia.
7. I have stopped speaking to a friend because I found out he/she was gay or lesbian.
8. I have advocated for gay and lesbian rights even if it meant that people thought I was gay.
9. I have greeted an "out" gay or lesbian person in public.
10. I avoid being around gay or lesbian people showing affection, i.e., hugging or kissing.
11. I publicly oppose discrimination and harassment of gay and lesbian individuals.
12. When I meet people, I assume they are heterosexual.
13. I have harassed someone because he or she was gay or lesbian.
14. I have hit, hurt, or fought with someone because he or she was gay or lesbian.
15. I laugh at anti-gay jokes.
16. I have told anti-gay jokes.
17. I have sat in silence while others told anti-gay jokes.
18. I have used a word such as "fag," "dyke," "homo," or "queer" as an insult.
19. I have knowingly insulted a suspected or openly gay person.
20. I belong to an organization that is against or hostile to homosexuals.
21. I belong to a church that is against or hostile to homosexuals.
22. I challenge others' anti-gay behavior even if it means losing friends.
23. I challenge others' anti-gay behavior even if it means losing some type of power or status.
24. I avoid standing up for gay and lesbian people because it is embarrassing.
25. When talking, I try to be sensitive to the fact that anyone could be gay or lesbian.
26. I read books, or watch television or movies, that feature gay characters and/or issues.
27. I go out of my way to learn more about gay and lesbian issues (e.g., attending a lecture, taking a class, asking questions to people with more knowledge).
28. I go out of my way to avoid hearing about gay and lesbian issues.
29. I can be counted upon to speak up and protest anti-gay behavior even when there are no gay or lesbian people present.
30. I have avoided a gay person of the same sex because I thought they found me attractive.
31. I avoid gay people who are the same sex as me.
32. I avoid gay people of the opposite sex.
33. I donate time or money to an organization that advocates for gay and lesbian rights.
34. I receive information (email, regular mail, etc.) from a gay rights organization.

35. I forward information about gay and lesbian rights to others.
36. I have signed a petition or sent a letter in support of gay and lesbian rights.
37. I use gender neutral terms, such as partner or significant other, instead of gender specific terms like boyfriend or girlfriend.
38. I avoid using stereotypes when discussing gay or lesbian people or culture.
39. I display a gay-supportive symbol, such as a pin, sticker, poster, etc. in my home, office, or car.
40. I try to persuade people who are heterosexist/homophobic to become less so.

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