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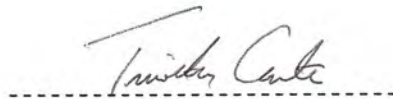
**Antigay Attitudes, Hostility, and Impulsivity as Predictors
of Antigay Behavior by College Students**

Presented to the faculty of Lycoming College
in partial fulfillment of the requirements
for departmental honors in Psychology

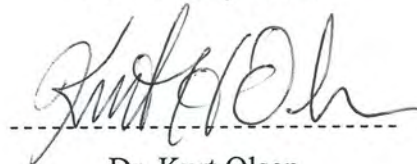
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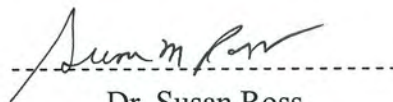
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BEHAVIOR

Antigay Attitudes, Hostility, and Impulsivity as Predictors
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Research on the victimization of gay, lesbian, and bisexual (GLB) people began in the 1970s and has increased since then (Herek, 2000). Researchers have examined rates of victimization, the effects of antigay victimization on GLB people, and characteristics of GLB victimization (e.g. Craig, 2001; D'Augelli, 1989; Franklin, 2000; Herek, Cogan, & Gillis, 2002; Rankin, 2003). The area which has received the least attention to date is the examination of perpetrators. Some recent research has sampled the general heterosexual population in order to better understand what motivates individuals to verbally and physically aggress against GLB people (e.g., Franklin, 2000; Haddock & Zanna, 1998; Van de Ven, 1994). However, little is known about antigay behavior and the link between the attitudes and behavior of aggressors. The current study seeks to examine three possible predictors of antigay behavior: hostility, impulsivity, and antigay attitudes.

An important feature of antigay behavior that sets it apart from other forms of aggression is the symbolic nature of the acts (Craig, 2001). This is demonstrated by the fact that victims and aggressors often do not know one another. Victims are selected for their actual or perceived identification with a minority group. Aggressors send a symbolic message of hate to all members of that minority group. A single victimization can therefore have repercussions for an entire community, neighborhood, or group, as well as for the victim him/herself. The victims, as well as other members of the associated minority group, may alter their routines and behavior after an antigay incident. In addition, hate crime victimization often causes greater psychological distress than nonbiased crimes, and results in long-term posttraumatic stress for many victims. Victim reactions can also include extreme anger with consequences such as the

purchase of a firearm. Further, rates of GLB victimization are high, as indicated in a study by Herek (1993), which reported that 42% of lesbian and gay men had experienced some form of physical abuse (e.g., being chased, having objects thrown at them, beaten up). Reports by aggressors are also high, as indicated in a study by Franklin in which 34% of young adults reported antigay behavior (e.g., chasing, throwing objects, hitting/kicking/beating, name-calling) (2000). Thus, ramifications for both the individual and group are compelling reasons for researching antigay behavior.

The study at hand pulls two aspects (hostility and impulsivity) from a model of hate by Beck (1999) and applies them to the relationship between antigay attitudes and behavior. The following literature review begins by framing the current study within the context of past research on antigay behavior. Research on homophobia will be presented, followed by research linking homophobia with antigay behavior. Finally, research on hostility and impulsivity will be reviewed, then linked to the concepts of antigay attitudes and behavior.

Antigay Behavior

Research on antigay behavior has focused on the characteristics of antigay behavior and its victims (e.g., Comstock, 1991; D'Augelli, 1989; Herek, 1984, 1993; Herek, Cogan, Gillis, 2002; Rankin, 2003). Antigay behavior is typically committed by young males (Comstock, 1991; Craig, 2001; Franklin, 2000; Murphy 2001). And, despite public perceptions, the majority of antigay behavior is not committed by members of hate groups (Berrill, 1992a; Craig, 2001). In addition, perpetrators typically have no prior criminal record (Comstock, 1991; Craig, 2001). However, other than these general similarities, little can be added to a "profile" of antigay aggressors. Moreover, they tend to come from a variety of backgrounds and have differing motives for their behavior (Comstock, 1991; Craig, 2001).

Within the growing collection of research on antigay behavior, a segment of studies focuses on college campuses. As in the general population, analysis of official reports of antigay harassment or assault on campuses is not sufficient because report rates are inaccurate due to inconsistent reporting by victims. For example, Herek (1993) reported that 90% of those surveyed did not report antigay incidents. Taking this into consideration, many studies have directly tapped the GLB population on campuses and canvassed the experiences of students, faculty, and staff. Such research shows that 75% of lesbian and gay men at Pennsylvania State University had experienced verbal abuse, 26% had been threatened with violence, and 17% had experienced property damage (D'Augelli, 1989).

Researchers have noted that the majority of GLB harassment occurs in the form of verbal insults (D'Augelli, 1989; Franklin, 2000; Herek, 1993; Rankin, 2003). Moreover, verbal abuse is not benign in nature (D'Augelli, 1989). Verbal abuse poses difficulties in daily living for those who are targeted or fear being targeted in the future. For example, Herek (1993) found that 76% of his respondents knew at least one person who had been harassed (e.g. chased or followed), insulted (e.g. spat upon), or assaulted (e.g. punched, hit, kicked, or beaten). The fears of abuse and discrimination were increased in many participants. This led to decreased reporting for 50-90% of those victimized, and perceptions of the campus being unsympathetic for 43% of respondents (Rankin, 2003). In addition, 51-89% of participants reported concealing their sexuality due to fears of abuse (D'Augelli, 1989; Rankin, 2003). Moreover, findings indicate that fellow students and roommates are the people most often responsible for the victimization (Comstock, 1991; D'Augelli, 1989; Rankin, 2003). For example, D'Augelli found that 35% of incidents reported were perpetrated by roommates, and 52% were perpetrated by other students. These findings underscore the importance of examining the attitudes and behavior of antigay

aggressors on college campuses.

Homophobia

Studies have also investigated the presence of homophobic attitudes in heterosexual people (e.g., Franklin, 2000; Haddock & Zanna, 1998; Herek, 1984; Murphy, 2001; Van de Ven, 1994). Homophobia can be defined as “negative attitudes toward an individual because of her or his sexual orientation” (Herek, 2000, p. 19). Thus, homophobic people hold negative representations of GLB people and have negative emotional responses. The negative emotional responses of homophobia include negative attitudes against homosexual behavior, negative feelings toward people who identify as homosexual or bisexual, and negative responses to communities of GLB people (Herek, 2000).

Two consistent correlates of homophobia are age and education level. Herek (1984) reports that numerous studies have found older individuals, as well as those who have had less education, manifest higher levels of antigay attitudes. Despite these findings, it has been consistently reported that the majority of antigay victimizations are perpetrated by young men. For example, Comstock (1991) reported that 94% of incidents were perpetrated by males, and that 46% of incidents were perpetrated by those aged 21 and under. Moreover, research has also found young and educated participants to have antigay attitudes (Van de Ven, 1994). However, caution should be taken when interpreting these findings as they may be the result of sampling often being limited to college populations.

Homophobia and Antigay Behavior

The relationship between antigay attitudes and antigay behavior appears to be complex. Rates of antigay behavior are not synonymous with rates of negative attitudes. For example, polls conducted in the 1990s found more than half of American adults believed homosexuality to

be always wrong, and regarded gay individuals with disgust (Herek, 2000). However, those who act out against GLB people do not appear to constitute a similar proportion of the population (Comstock, 1991; Berrill 1992). The complex relationship between attitudes and behaviors has been noted in previous research (e.g. Ajzen & Fishbein, 1977; Kraus, 1995). Considering this, the relationship between homophobia and antigay behavior has been supported, yet homophobia cannot be expected to totally predict antigay behavior.

Haddock and Zanna (1998) examined the structure of antigay attitudes and found that stereotypic beliefs were not strong predictors of negative attitudes toward GLB people. Haddock and Zanna postulated that there are two types of beliefs: stereotypic beliefs and symbolic beliefs. Stereotypic beliefs are “characteristics attributed to typical members of a target group,” whereas symbolic beliefs are “beliefs that social groups violate or promote the attainment of cherished values, customs, and traditions” (Haddock & Zanna, p. 84). The researchers found that symbolic beliefs were the only predictive variable of negative attitudes toward GLB people. It appears that people hold more negative attitudes toward GLB people when they believe GLB people are hindering the attainment of values, such as a traditional family.

Hostility and Impulsivity

A potential predictor of the relationship between homophobia and antigay behavior may be hostility. Berkowitz (1993) defines hostility as “a negative or unfavorable attitude toward one or more other persons...[which] is usually accompanied by a desire to see the [other person(s)] suffer in some way” (p. 22). In addition, Berkowitz notes that hostile individuals are quick to assert negative evaluations of others. However, Berkowitz notes that negative opinions and attitudes are not always accompanied by the urge to attack. Still, the negative mind-set and reactionary nature of hostile people make them more likely to act out than others.

A second potential predictor of the relationship between antigay attitudes and behaviors may be impulsivity. Barratt (1994) describes impulsiveness as “essentially related to the *control* of thoughts and behavior” (p. 61). In other words, more impulsive individuals exercise less control over their thoughts and behaviors. Barratt further notes that “high-impulsive” individuals are present-oriented and place little importance on past and future commitments, but rather focus on satisfying immediate needs. Beck (1999) notes that a hostile impulse can be inhibited by anxiety, guilt, and shame about a personal action if the person thinks through the possible consequences. However, an impulsive person is not likely to think through consequences. In light of these attributes, it seems possible that people who are more impulsive will be more likely to act on their antigay attitudes and related thoughts.

Furthermore, in the research on hostility and impulsivity, the two are closely linked. For example, Barratt (1994) links impulsivity with aggression, and proposes “that the personality traits of impulsiveness and anger-hostility are related to most impulsive aggressive acts” (p. 72). Moreover, research examining hostility and aggression often notes the presence of impulsiveness in subjects’ thinking (e.g., Dodge & Somberg, 1987). Nevertheless, hostility and impulsivity are not synonymous; as Beck (1999) explains, some hostile people act out impulsively while others do not.

Dodge and Somberg (1987) found aggressive boys to be more hostile and impulsive. They were more likely to assume a peer had acted out of maliciousness than to think the actions were accidental. These boys also misinterpreted the motivations behind the actions of others. Both of these characteristics led the boys to adopt an *impulsive* response pattern in which they no longer analyzed information, but based reactions on simple rules acquired in socialization. Dodge and Somberg labeled this mode of thinking “preemptive processing.” They note that a

cue for this hostile and impulsive mode of thinking can be the violation of a personal value.

In similar research, Darley, Klosson, and Zanna (1978) found that adults and children responded less aggressively when they perceive a harmful act to have been accidental instead of malicious. In addition, Steinberg and Dodge (1983) found that aggressive subjects were more likely to attribute hostility to aggressive peers than to non-aggressive peers. This led the researchers to conclude that bias is “more likely related to *subjects’ labels and expectations about peers* than to the peers’ recently occurring behavior or physical appearance” (p. 320, emphasis added). Taking these findings into account, it is proposed that young adults may also resort to preemptive processing. It may be that when they do, they act based on expectations that others are violating personal values. This then may lead to defensiveness, feelings of victimization, and hostile retaliation.

Beck’s Model of Hate

Beck (1999) proposed a model of hate in which a key component is hostility. Beck writes, “In general, the ‘wrongs’ that most concern us are transgressions against our rights, our status, our personal domain, or our efficacy. ... Interference with or threat to these values constitutes an offense” (p. 57). Thus, the main motivator behind hostility towards another is the feeling of having been wronged, especially concerning cherished values. This motivator can be tied to the research of Haddock and Zanna (1998), which found people are more likely to have negative attitudes if they believe they are being blocked from attaining values. In addition, impulsivity is included in Beck’s model as characteristic thinking of hostile people. Beck notes that hostile people think in a reactive nature, and tend to have low self-control. This results in a direct progression from thinking negative thoughts to spoken words and perpetrating negative behavior.

Numerous factors can contribute to hate in Beck's model; however, the most pertinent hinge on the idea of an aggressor believing an "intentional" attack has occurred against his/her values or status and thus feeling justified in defending him/herself by punishing the "attacker." Further, Beck explains that hostile people tend to regard offensive behavior as intentional and malicious, rather than accidental and benign, concurring with the findings of Dodge and Somberg (1987).

Although Beck's model is general, it can be linked with GLB prejudice and antigay behavior. In exploring the functions of negative attitudes, Herek (1984) notes that homophobic attitudes often serve a defensive function. Herek cites characteristics of homophobic individuals that correlate with hostile attitudes toward homosexuals and indicate defensiveness. These correlates closely parallel characteristics listed by Beck that typify prejudiced thinking. For example, Herek notes authoritarianism, cognitive rigidity, intolerance of ambiguity, and dogmatism as related to homophobic attitudes. Thus, these characteristics can be tied to both antigay attitudes and the defensiveness described in Beck's model of hostility.

While research concerning antigay behavior has been increasing, there still remains a dearth of information about the relationship between attitudes and behaviors of aggressors. It is possible that hostility and impulsivity may influence whether or not people act on their thoughts and feelings. Moreover, it appears that hostility and impulsivity may be related to one another, as well as to attitudes and behaviors.

The question of this study is whether hostility, impulsivity, and antigay attitudes will be significant predictors of antigay behavior in college students. Gender differences will also be explored, as past research has shown males to be more aggressive and homophobic than females (e.g. Craig, 2001; Franklin, 2000; Van de Ven, 1994; Buss & Perry, 1992). It is expected that

males will be more hostile, more impulsive, more homophobic, and commit more antigay behavior than females. Overall, it is expected that more hostile people, more impulsive people, and people who hold negative attitudes toward GLB people will be more likely to have perpetrated antigay behavior. Furthermore, the effects of interactions between antigay attitudes and hostility and antigay attitudes and impulsivity on antigay behavior will be examined.

Methods

Participants

Participants were 107 students at a small liberal arts college in Pennsylvania. There were 61 women, 41 men, and 5 participants who did not indicate gender. Participants were from psychology, religion, and criminal justice classes. Some participants received extra credit for participating. The data from 2 female participants and 1 male participant were discarded, as these participants self-identified as other than heterosexual. Data from 3 female participants and 1 unmarked gender participant were discarded due to their previous participation in the study. The final sample consisted of 100 participants with 56 women, 40 men, and 4 participants who did not indicate gender.

Materials

The instruments used consisted of a questionnaire constructed for the current study on antigay behavior, three standard scales, and a list of demographic questions.

The antigay behavior scale (ABS). The first scale was created by the author to include common antigay behaviors (see Appendix A). It is a self-report questionnaire intended to assess how many times each participant engaged in a variety of antigay behaviors. Behaviors were collected from nearly identical lists in three empirical resources (Franklin, 2000; Herek, 1993; Rankin, 2003). The behaviors reflected a continuum from disparaging remarks to assault with a

weapon. The ABS was piloted in two introductory psychology classes to ascertain its ease of use and effectiveness. Alterations were made to clarify the wording of some items. The Likert format employed modeled that of the Conflict Tactics Scale (Straus, 1979) and ranged from (0) *never* to (6) *more than 20 times*, with (7) *before the past year*. Participants were asked to indicate the number of times in the past year they participated in each of the behaviors listed. In order to achieve an adequate level of internal consistency, only 3 items were used in the analyses (“Used a word such as ‘gay’ to comment negatively upon something (e.g., “That shirt is so gay,” “Described a GLB person in a derogatory manner (e.g., fag, dyke, queer) when they were not present,” and “Verbally insulted a GLB person to their face (e.g., “You’re such a fag”)). The coefficient alpha for these three items was .62.

The Buss-Perry aggression questionnaire (AQ). This self-report scale consists of 29 items created by Buss and Perry (1992) which can be grouped into four factors of aggression: physical aggression, anger, verbal aggression, and hostility. The category of interest in the current study is hostility, however other scales were explored as well. Buss and Perry described hostility as the cognitive component in their model of aggression, which consists of “feelings of ill will and injustice” (p. 457). Higher scores indicate greater hostility. For the current study, coefficient alphas for the subscales of physical aggression, anger, verbal aggression, and hostility were .86, .77, .69, and .84, respectively. A coefficient alpha of .90 was achieved for the overall AQ scale.

Barratt impulsiveness scale (BIS-11). The Barratt Impulsiveness Scale is the result of many revisions with the goal of deriving a scale measuring impulsivity that had a low correlation with anxiety (Barratt, 1994). The BIS-11 is the fourth measure in the BIS series and places an emphasis on “cognitive” items. For example, some items are “I make-up my mind quickly,” “I

do things without thinking,” and *“I am restless at the theater or lectures.”* Higher scores indicate greater impulsivity. The BIS-11 has been shown to be internally consistent for various groups (e.g., undergraduates, psychiatric patients, inmates). For the current study, a coefficient alpha of .82 was achieved.

Attitudes toward lesbians and gay men (ATLG). Herek (1988) created this widely used scale which consists of 20 items that can be used together or separated to form two subscales, concerning attitudes toward lesbians or gay men. The full scale was used in the current study. The scale is in Likert format with 9-point scales ranging from strongly disagree to strongly agree. Higher scores indicate more negative attitudes. The ATLG has demonstrated reliability and validity in many settings. Internal consistency has also been supported with coefficient alphas of .90, .89, and .77 for the ATLG, ATG and ATL scales, respectively. For the current study, a coefficient alpha of .95 was achieved.

The questionnaires were administered in packet form in the order they were listed above. This order was selected in order to separate the measures of antigay behaviors and attitudes by placing the trait measures in between. The behavior measure was placed first because this was the most important measure in the study. As a final section, a few demographic questions were asked of the participants including their sex, class year, major, and sexuality. A cover page was included on each packet in order to cover participants' answers. The cover page also had two statements which participants could mark—one indicating they had already participated in the study, and one indicating that they did not want their answers used. No participants indicated that they did not want their answers used.

Procedure

Two blind researchers were employed in the current study. The researchers ran eight

sessions—five in classes, and three in the evening. A script was created that detailed what each researcher was to say and do in order to avoid differences in presentation. In order to deter participants from making inferences as to the relation of the questionnaires to each other, a minor deception was used suggesting that several studies were being run. Consent forms were given to participants, but were not to be signed and collected (see Appendix B). Participants were given packets in 9" X 12" manila envelopes as an added precaution to ensure their answers would not be seen by others. After participants completed their packets and placed them back in the manila envelopes, they returned them to the researcher. Participants were debriefed with a typed statement which included an explanation of the deception used, and the name and contact information of the research and projector advisor (see Appendix C).

Results

Means and standard deviations were calculated for each of the scales: the ABS with a range of 0 – 58.5 ($M = 6.46$; $SD = 4.29$), the AQ hostility subscale with a range of 8 – 40 ($M = 20.68$; $SD = 6.20$), the BIS with a range of 30 – 120 ($M = 65.72$; $SD = 10.18$), and the ATLG with a range of 20 – 180 ($M = 76.24$; $SD = 37.51$). Frequencies for responses to each of the Antigay Behavior Scale items were calculated (see Table 1).

A hierarchical regression of antigay attitudes, hostility, and the interaction between antigay attitudes and hostility on antigay behavior was run. Antigay attitudes were a significant predictor in the first step (see Table 2). A hierarchical regression of antigay attitudes, impulsivity, and the interaction between antigay attitudes and impulsivity on antigay behavior was run. Antigay attitudes were a significant predictor in the first step, and impulsivity was a significant predictor when added in the second step. The interaction between antigay attitudes and impulsivity indicated a trend as a predictor (see Table 3). Correlations between scales were

also run, including the three other subscales from the AQ, resulting in several significant small to moderate correlations (see Table 4). Of the scales of interest, hostility and impulsivity correlated significantly. Impulsivity also correlated with antigay behavior. Antigay attitudes correlated significantly with antigay behavior.

A MANOVA was run on gender differences for the ABS, AQ (including all subscales), BIS-11, and ATLG. It yielded a significant gender effect ($F(7, 83) = 10.98, p < .001$). Seven ANOVAS were also run to assess gender differences for each individual scale (see Table 5). Significant gender differences were found for the AQ Physical Aggression subscale, ATLG, ABS, and AQ Verbal Aggression subscale, with males scoring significantly higher than females.

Hierarchical regressions were also run on antigay behavior for male participants. No significant predictors were found for antigay behavior in males (see Tables 6 & 7). Correlations were also run for males only (see Table 8). However, only hostility and antigay attitudes correlated significantly.

Finally, hierarchical regressions were run on antigay behavior for female participants (see Tables 9 & 10). However, no significant predictors were found. Correlations were run for females only (see Table 11). No significant correlations were found between the measures of interest.

Discussion

The consequences of antigay behavior for victims and other GLB people make research into the relationships between antigay attitudes and behavior important. The current study examined the relationships between hostility, impulsivity, antigay attitudes and antigay behaviors. Past research has indicated that antigay attitudes are related to antigay behavior (e.g., Comstock, 1991; Herek, 1988). The current study explored whether the personality

characteristics of hostility and impulsivity would add to the predictive power of antigay attitudes. This prediction was derived from Beck's (1999) model of hate, which includes hostility as a key component and impulsivity as a characteristic way of thinking.

Antigay attitudes were supported as the strongest predictor of antigay verbal behavior in the current study. This supports past research which has shown antigay attitudes predict antigay behavior (e.g., Franklin, 2000; Haddock & Zanna, 1998). The current study also provides support for the general model of attitude-behavior consistency. This suggests future research should continue to explore the relationship between antigay attitudes and behavior.

Hostility and the interaction between antigay attitudes and hostility did not add to the predictive strength of the model. Moreover, hostility did not correlate with any of the other measures. It appears more hostile people were not more likely to commit antigay verbal behavior. In addition, people with antigay attitudes who were more hostile were not more likely to commit antigay verbal behavior. It may be that the college setting promotes tolerance, and thereby hedges the behavior of those who were hostile. Alternatively, it may be that hostility enters the model as a predictor of antigay attitudes, not antigay behavior. In this case, hostility would be contributing indirectly to antigay behavior. Future research may examine the relationship between hostility and antigay attitudes.

In contrast, impulsivity added to the predictive strength of the model when entered after antigay attitudes. In other words, impulsivity accounted for variance in antigay verbal behavior above what was accounted for by antigay attitudes. It appears that people with antigay attitudes who were impulsive were more likely to have committed antigay verbal behavior than those who were not impulsive. This suggests that impulsive thinking by people with antigay attitudes overrides inhibitions within the person or from the surrounding society. Without inhibition to

stop them from acting, impulsive people with antigay attitudes may be more likely to abuse GLB people because they do not think through the consequences of their behavior. This may suggest that the same person who is acting out in other impulsive ways (e.g., changing jobs frequently, buying things on impulse, acting on the spur of the moment) is more likely to act out negative attitudes toward GLB people through antigay verbal behavior. Future research may examine the relationship between antigay attitudes, impulsivity, and antigay behavior in different populations. It is also suggested that impulsivity be examined in relation to a wider range of antigay behavior including physical abuse. It may be that impulsivity can overcome inhibitions for verbal behavior, but not physical behavior, which often holds greater legal consequences for the aggressor.

Although the model was not predictive when males and females were run separately, it can be noted that the correlations between the scales are higher for males than they are for females. This suggests the proposed model may be more apt for males than for females. It also suggests future research should take gender into account when exploring the relationship between antigay attitudes and other predictors of antigay behavior. Moreover, gender differences on some of the measures indicate that males were more physically aggressive, verbally aggressive, homophobic, and were more likely to have committed antigay verbal behavior. These results support previous research which shows males to be the aggressors in the majority of antigay behavior (Comstock, 1991; Craig, 2001; Franklin, 2000; Murphy, 2001).

The current study supported the addition of impulsivity to the general model of antigay behavior. However, future research may employ path analyses to examine the possible mediating roles of the current variables. It is also suggested that future research sample from non-collegiate populations in order to attain more variation in responses. The Antigay Behavior

Scale may be refined in future research. The verbal items may be broken down into more specific behaviors in order to assess finer differences between the behaviors. Further, more items may be added to assess whether participants are specifically targeting GLB people or demonstrate aggressive behavior with other groups, as well. Future research may also seek to apply Beck's general model of hate to other domains, such as racism and ageism, to further assess its validity.

It may be that hostility is not a key component in the model of antigay behavior. Haddock and Zanna (1998) found that people who felt their personal values and goals were violated by GLB people demonstrated feelings of disgust, discomfort, and confusion, but not hostility. This suggests that other factors may be at play in the model of antigay behavior and warrant more attention than hostility. It may also be that the measure of hostility used in the current study was not the most appropriate measure. Upon review of the items, as well as literature on the Buss-Perry Aggression Questionnaire, it appears that the hostility subscale may not have been the most appropriate measure when testing Beck's model of hate. Recent research has suggested the hostility subscale needs revision (Bryant & Smith, 2001; Harris, 1995).

The current study was limited by the population from which the sample was drawn. The use of participants from an undergraduate institution resulted in almost all reported behavior being one of three verbal items on the Antigay Behavior Scale. The current study was also limited in generalizability, as the sample consisted of mostly white, middle-class, college-aged participants. It should also be noted that self-report surveys may not be the most accurate method of assessing participant behavior as they are prone to demand characteristics. Nevertheless, the positive relationship between the antigay attitude and behavior scales in the current study suggest some support for the validity of the Antigay Behavior Scale.

Further, although the study was designed to keep participants blind concerning the identity of the researcher, approximately 20-30 participants were inadvertently told who she was. Their data could not be discerned and removed from the large data set as the researcher was unaware of this until after having collected the anonymous packets from multiple sessions. The researcher is rather well-known at the college for being involved with the campus GLB group; however, it is difficult to determine how familiar students are with her, or how much this may have affected their responses. Moreover, the support for the model and participants' willingness to indicate antigay attitudes and behavior mitigate this possibility somewhat.

The current study investigated whether antigay attitudes, hostility, and impulsivity were predictors of antigay behavior by college students. Antigay attitudes and impulsivity were supported as predictors of antigay behavior, however, hostility was not. Although males were not more impulsive or hostile than females, they were more likely to have antigay attitudes and to have committed antigay behavior. The results of the current study support the addition of impulsivity to the model of antigay behavior; however, it is possible that different models may be at work for the genders. Future research should continue to investigate other factors in the model of antigay behavior, as victimization of GLB people is little understood, yet holds physical and psychological consequences for those involved.

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Table 2

Summary of Hierarchical Regression of Antigay Attitudes, Hostility, and Interaction Effects on

Antigay Behavior

	R	R ²	ΔR^2	<i>F</i>	<i>p</i>
Step 1 (Enter ATLG)	.34	.11	.11	12.00	.001
Step 2 (Enter ATLG, AQ Hostility)	.35	.12	.01	.82	.37
Step 3 (Enter ATLG, AQ Hostility, ATLG X AQ Hostility)	.38	.14	.02	2.62	.11

Table 3

Summary of Hierarchical Regression of Antigay Attitudes, Impulsivity, and Interaction Effects on Antigay Behavior

	R	R ²	ΔR^2	F	p
Step 1 (Enter ATLG)	.33	.10	.11	11.70	.001
Step 2 (Enter ATLG, Impulsivity)	.40	.14	.05	5.32	.02
Step 3 (Enter ATLG, Impulsivity, ATLG X Impulsivity)	.43	.18	.02	2.76	.10

Table 4

Intercorrelations Between Buss-Perry Aggression Questionnaire (AQ), Barratt Impulsiveness Scale, Attitudes Toward Lesbians and Gay Men, and Antigay Behavior Scale

	Behavior	Attitude	Impulsiv	AQ Hostility	AQ Verbal	AQ Anger	AQ Physical	AQ
Behavior		.34***	.23**	.04	.26***	.29***	.55***	.40***
Attitude			.02	-.16	.14	-.00	.32***	.11
Impulsiv				.24**	.31***	.31***	.40***	.42***
AQ Hostility					.27***	.43***	.17	.64***
AQ Verbal						.64***	.56***	.75***
AQ Anger							.58***	.85***
AQ Physical								.79***

** $p < 0.05$

*** $p < 0.01$

Table 5

Gender Differences in Antigay Behavior, Antigay Attitudes, Impulsivity, and Aggression

Measures

<u>Dependent Variable</u>	<u>F</u>	<u>Males (M)</u>	<u>Females (M)</u>
Antigay Behavior	32.77***	8.96	4.40
Antigay Attitudes	30.15***	97.18	59.17
Impulsivity	1.29	67.03	64.60
AQ Hostility	.71	20.18	21.30
AQ Physical	39.99***	26.34	18.17
AQ Anger	3.34	18.84	17.06
AQ Verbal	4.60**	15.11	13.53

**P<0.05

***P<0.01

Table 6

Summary of Hierarchical Regression of Antigay Attitude, Hostility, and Interactions Effects on

Antigay Behavior for Males

	R	R ²	ΔR^2	F	p
Step 1 (Enter ATLG)	.12	.02	.02	.58	.45
Step 2 (Enter ATLG, AQ Hostility)	.32	.10	.09	3.47	.07
Step 3 (Enter ATLG, AQ Hostility, ATLG X AQ Hostility)	.56	.32	.22	11.43	.002

Table 6

Summary of Hierarchical Regression of Antigay Attitude, Hostility, and Interactions Effects on

Antigay Behavior for Males

	R	R ²	ΔR^2	F	p
Step 1 (Enter ATLG)	.12	.02	.02	.58	.45
Step 2 (Enter ATLG, AQ Hostility)	.32	.10	.09	3.47	.07
Step 3 (Enter ATLG, AQ Hostility, ATLG X AQ Hostility)	.56	.32	.22	11.43	.002

Table 7

Summary of Hierarchical Regression of Antigay Attitudes, Impulsivity, and Interaction Effects on Antigay Behavior for Males

	R	R ²	ΔR^2	F	p
Step 1 (Enter ATLG)	.12	.02	.02	.57	.45
Step 2 (Enter ATLG, Impulsivity)	.25	.06	.05	1.78	.19
Step 3 (Enter ATLG, Impulsivity, ATLG X Impulsivity)	.28	.08	.02	.61	.44

Table 8

Intercorrelations Between Buss-Perry Aggression Questionnaire (AQ), Barratt Impulsiveness Scale, Attitudes Toward Lesbians and Gay Men, and Antigay Behavior Scale for Males

	Behavior	Attitude	Impulsiv	AQ Hostility	AQ Verbal	AQ Anger	AQ Physical	AQ
Behavior		.12	.21	.24	.22	.32**	.50***	.48***
Attitude			-.03	-.33**	.08	-.19	.21	-.06
Impulsiv				.31	.30	.39**	.62***	.60***
AQ Hostility					.24	.25	.11	.54***
AQ Verbal						.63***	.49***	.73***
AQ Anger							.52***	.80***
AQ Physical								.80***

**p<0.05

***p<0.01

Table 9

Summary of Hierarchical Regression of Antigay Attitude, Hostility, and Interactions Effects on Antigay Behavior for Females

	R	R ²	ΔR^2	F	p
Step 1 (Enter ATLG)	.09	.01	.01	.46	.50
Step 2 (Enter ATLG, AQ Hostility)	.10	.01	.00	.07	.79
Step 3 (Enter ATLG, AQ Hostility, ATLG X AQ Hostility)	.14	.02	.01	.42	.52

Table 10

Summary of Hierarchical Regression of Antigay Attitudes, Impulsivity, and Interaction Effects

on Antigay Behavior for Females

	R	R ²	ΔR^2	F	p
Step 1 (Enter ATLG)	.11	.01	.01	.59	.45
Step 2 (Enter ATLG, Impulsivity)	.20	.04	.03	1.53	.22
Step 3 (Enter ATLG, Impulsivity, ATLG X Impulsivity)	.22	.05	.01	.55	.46

Table 11

Intercorrelations Between Buss-Perry Aggression Questionnaire (AQ), Barratt Impulsiveness Scale, Attitudes Toward Lesbians and Gay Men, and Antigay Behavior Scale for Females

	Behavior	Attitude	Impulsiv	AQ Hostility	AQ Verbal	AQ Anger	AQ Physical	AQ
Behavior		.10	.20	.03	.20	.21	.24	.19
Attitude			-.03	.07	.11	.11	-.10	.06
Impulsiv				.23	.27**	.23	.21	.29**
AQ Hostility					.32**	.63***	.46***	.81***
AQ Verbal						.64***	.61***	.72***
AQ Anger							.69***	.89***
AQ Physical								.82***

**P<0.05

***P<0.01

APPENDIX A

If you know that you have already participated in the current studies, please indicate so below:

____ I have already participated

If you want to withdraw from the studies, or do not want your results to be used (results will be discarded), please indicate below:

____ I do not wish my results to be used in the current studies

ABS Scale

For each of the following items circle the number corresponding to how many times you have engaged in the behavior during the *past year*:

In the items below, GLB refers to gay, lesbian, or bisexual.

	Once	Twice	3-5 Times	6-10 Times	11-20 Times	> 20 Times	Before the past year	Never
1. Intentionally written graffiti on the property of a GLB person	1	2	3	4	5	6	7	0
2. Intentionally stolen the property of a GLB person	1	2	3	4	5	6	7	0
3. Intentionally damaged the property of a GLB person(ex. scratched their car; ripped their clothing)	1	2	3	4	5	6	7	0
4. Used a word such as 'gay' to comment negatively upon something (ex. "That shirt is so gay")	1	2	3	4	5	6	7	0
5. Described a GLB person in a derogatory manner (ex. fag, dyke, queer) when they were not present	1	2	3	4	5	6	7	0
6. Verbally insulted a GLB person to their face (ex. "You're such a fag")	1	2	3	4	5	6	7	0
7. Threatened a GLB person with violence	1	2	3	4	5	6	7	0
8. Physically assaulted a GLB person (ex. kicked, hit with or without a weapon, etc.)	1	2	3	4	5	6	7	0
9. Sexually harassed or assaulted a GLB person	1	2	3	4	5	6	7	0

BPA

INSTRUCTIONS: Please read each item carefully and decide to what extent it is characteristic of your feelings and behavior. Fill in the blank next to each item by choosing a number from the scale printed below.

1 = very uncharacteristic or untrue, strongly disagree

2 = uncharacteristic

3 = neutral

4 = characteristic

5 = very characteristic or true, strongly agree

- ___ 1. Once in a while I can't control the urge to strike another person.
- ___ 2. I flare up quickly but get over it quickly.
- ___ 3. I tell my friends openly when I disagree with them.
- ___ 4. I am sometimes eaten up with jealousy.
- ___ 5. I have become so mad that I have broken things.
- ___ 6. When people annoy me, I may tell them what I think of them.
- ___ 7. I sometimes feel like a powder keg ready to explode.
- ___ 8. Other people always seem to get the breaks.
- ___ 9. Given enough provocation, I may hit another person.
- ___ 10. Some of my friends think I'm a hothead.
- ___ 11. When people are especially nice, I wonder what they want.
- ___ 12. I can think of no good reason for ever hitting a person.
- ___ 13. I often find myself disagreeing with people.
- ___ 14. I have trouble controlling my temper.
- ___ 15. I know that "friends" talk about me behind my back.
- ___ 16. I get into fights a little more than the average person.
- ___ 17. I am suspicious of overly friendly strangers.

- ___ 18. If I have to resort to violence to protect my rights, I will.
- ___ 19. I can't help getting into arguments when people disagree with me.
- ___ 20. Sometimes I fly off the handle for no good reason.
- ___ 21. At times I feel I have gotten a raw deal out of life.
- ___ 22. There are people who pushed me so far that we came to blows.
- ___ 23. When frustrated, I let my irritation show.
- ___ 24. I sometimes feel that people are laughing at me behind my back.
- ___ 25. My friends say that I am somewhat argumentative.
- ___ 26. I have threatened people I know.
- ___ 27. I am an even tempered person.
- ___ 28. I wonder why sometimes I feel so bitter about things.
- ___ 29. If somebody hits me, I hit back.

BIS

INSTRUCTIONS: Please read each item carefully and decide to what extent it is characteristic of you. Fill in the blank next to each item by choosing a number from the scale printed below.

- 1 = Rarely/Never
- 2 = Occasionally
- 3 = Often
- 4 = Almost Always/Always

- ___ 1. I plan tasks carefully.
- ___ 2. I do things without thinking.
- ___ 3. I make-up my mind quickly.
- ___ 4. I am happy-go-lucky.
- ___ 5. I don't "pay attention."
- ___ 6. I have "racing" thoughts.
- ___ 7. I plan trips well ahead of time.
- ___ 8. I am self-controlled.
- ___ 9. I concentrate easily.
- ___ 10. I save regularly.
- ___ 11. I "squirm" at plays or lectures.
- ___ 12. I am a careful thinker.
- ___ 13. I plan for job security.
- ___ 14. I say things without thinking.
- ___ 15. I like to think about complex problems.
- ___ 16. I change jobs.
- ___ 17. I act "on impulse."
- ___ 18. I get easily bored when solving thought problems.

- ___ 19. I act on the spur of the moment.
- ___ 20. I am a steady thinker.
- ___ 21. I change residences.
- ___ 22. I buy things on impulse.
- ___ 23. I can only think about one problem at a time.
- ___ 24. I change hobbies.
- ___ 25. I spend or charge more than I earn.
- ___ 26. I often have extraneous thoughts when thinking.
- ___ 27. I am more interested in the present than the future.
- ___ 28. I am restless at the theater or lectures.
- ___ 29. I like puzzles.
- ___ 30. I am future oriented.

HAS

INSTRUCTIONS: Please read each item carefully and decide to what extent it is characteristic of your thoughts. Fill in the blank next to each item by choosing a number from the scale printed below.

- 1 = Strongly disagree
- 2 = Disagree
- 3 = Somewhat disagree
- 4 = Slightly disagree
- 5 = Neutral
- 6 = Slightly agree
- 7 = Somewhat agree
- 8 = Agree
- 9 = Strongly agree

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

- ___ 15. Just as in other species, male homosexuality is a natural expression of sexuality in human men.
- ___ 16. If a man has homosexual feelings, he should do everything he can to overcome them.
- ___ 17. I would *not* be too upset if I learned that my son were a homosexual.
- ___ 18. Homosexual behavior between two men is just plain wrong.
- ___ 19. The idea of male homosexual marriages seems ridiculous to me.
- ___ 20. Male homosexuality is merely a different kind of lifestyle that should *not* be condemned.

Sex: M F

Class Year: 2004 2005 2006 2007

Major: _____

Sexuality: Heterosexual Bisexual Homosexual

APPENDIX B

Consent Form

I have been informed that I am free to participate or to decline to participate in the current studies. I understand that I may withdraw from participation at any time without prejudice or penalty. If I become uncomfortable at any time, I may stop participating. Should I choose to withdraw, I may indicate so on the front page of the packet and my information will be discarded. I understand that the information I provide will be used for research purposes only and will be kept confidential. I have been promised a brief description of the role my participation plays in these projects after completing the questionnaires.

Note: There are questions in the following measures which may be controversial.

I voluntarily agree to participate in the present research projects.

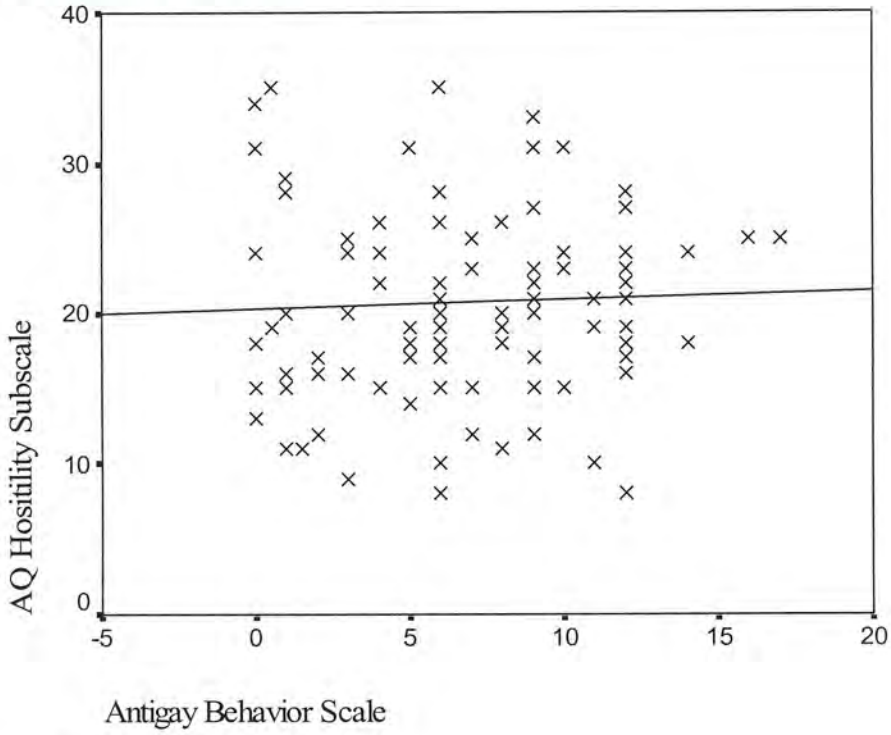
APPENDIX C

Thank you for your participation. The packet you have completed is actually for just one study. It was felt necessary to employ a small deception in order to avoid having participants make inferences about the nature of the study. The study seeks to find a relationship between negative attitudes and behavior. In particular, it is thought that certain personality characteristics increase the likelihood of someone acting out negative attitudes through negative behavior. Heather Zelle is the researcher who is completing this study as part of an Honors Project. She will analyze your answers without knowledge of which class or person they originated from. Your participation is greatly appreciated, and should you have further questions or concerns you may contact either Heather (x1217) or the project advisor Dr. Ryan (x4163).

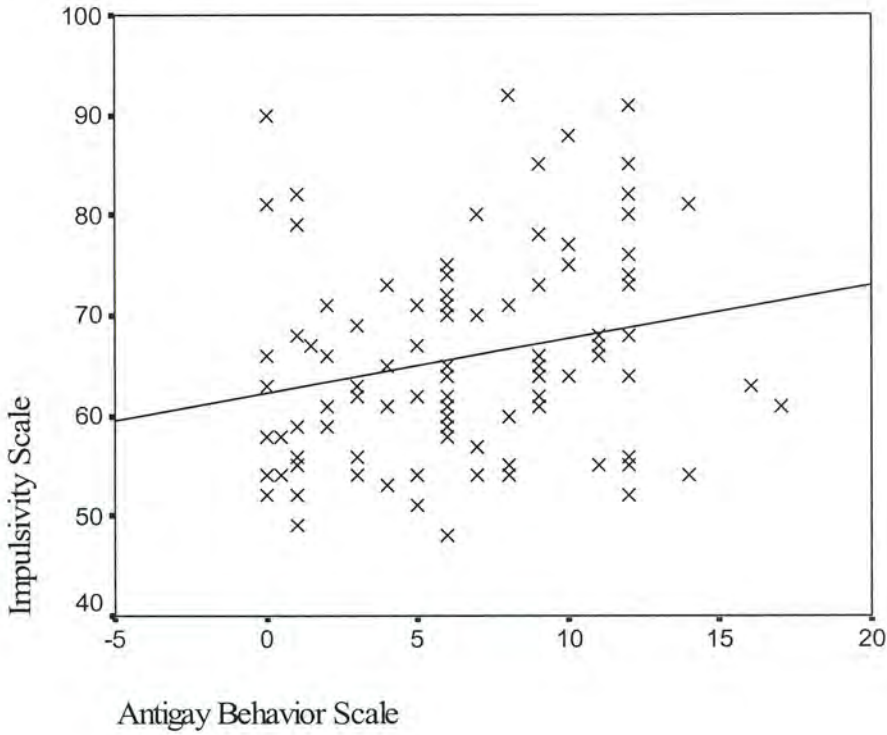
As on last request, we ask that you *do not speak about this study with anyone*. It is very important to research accuracy that future participants are unaware of the nature of the study. Thank you.

APPENDIX D

Antigay Behavior and Hostility



Antigay Behavior and Impulsivity



Antigay Behavior and Antigay Attitude

