Openness, Anti-Gay Attitudes, and Intervention: Predicting the Time to Stop Anti-Gay Aggression

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Openness, Anti-Gay Attitudes, and Intervention:
Predicting the Time to Stop Anti-Gay Aggression

The United States Federal Bureau of Investigation reported sexual orientation related aggression as the second highest reported hate crime (Federal Bureau of Investigation, 2014). Within this category, 56.3% of the attacks were classified as anti-gay assaults on gay men. The National Coalition of Anti-Violence Programs (NCAVP) released a report on Lesbian, Gay, Bisexual, Transgender, Queer, and HIV-Affected Hate Violence. The NCAVP reported that in 2014 authorities identified approximately 35% of homicide victims as gay men. The group also reported that gay men were 2.3 times more likely to experience physical violence, 1.5 times more likely to require medical attention, and 1.5 times more likely to experience hate violence in public environments, compared to survivors who were not gay men (NCAVP, 2015). The large number of hate crimes left unreported often leads to an underestimation of the actual prevalence of aggression towards gay men based on sexual orientation (Parrott & Peterson, 2008). The Bureau of Justice Statistics of the United States found that an estimated 73% of violent hate crimes were not reported to police in 2011 (Bureau of Justice Statistics, 2014). Considering these reports, it is important to explore the factors that could prevent anti-gay violence and aggression. The current study assessed the role of personality traits and attitudes toward gay men in heterosexual men’s decision to intervene to stop an act of anti-gay aggression.

Bystander intervention is a promising approach that can lead to a reduction in violence and has been identified by social psychologists as a promising avenue for violence prevention (Potter, Fountain, & Stapleton, 2012). Bystander intervention is the
phenomenon in which a non-violent observer attempts to intervene and act against an aggressive situation. Although there are many models of bystander intervention, researchers often encourage bystanders to actively prevent and defuse aggressive situations (Amar, Sutherland, & Kesler, 2012). However, few studies have examined the influence of bystanders’ personality traits or attitudes on their behaviors. A deeper understanding of the mechanisms that predict individual-level responses to aggressive scenarios, such as which personality traits most strongly predict bystander intervention time, would expand the literature on bystander intervention and allow researchers to better predict intervention behaviors.

**Theoretical Overview**

There are many terms to describe discrimination toward gay men, such as homonegativity (Shields & Harriman, 1984), homophobia (Weinberg, 1972), and anti-gay attitudes (Herek, 1990). We use the latter term because the term itself strictly defines the type of attitude perceived by the individual feeling the emotion. In contrast, both the terms homonegativity and homophobia are based on the subject receiving the emotion and are commonly used in negative connotations (Herek, 2004). In addition, the root for both terms is “homo”. The term homosexual has evolved into a pejorative term and has been previously included in the *Diagnostic and Statistical Manual of Mental Disorders* (DSM) as a mental illness and disease, and thus notoriously created a stigma (Herek, 2004). For the purpose of our study, we chose the term anti-gay attitudes to best convey a simple context of an individual’s attitude without the stigma associated from the root word, as recommended by leading scholars in the field of anti-gay aggression (Herek, 2004). Furthermore, the term “gay men” is used instead of “homosexual,” and
the term “heterosexual” is used instead of the term “straight men,” as per the APA guidelines on reducing heterosexual bias in language (Herek, 1991).

Previous research has identified a range of factors that have been linked to anti-gay attitudes. Researchers have associated higher negative attitudes of heterosexual men with an increased likelihood of anti-gay aggressive behaviors in response to self-reported behaviors to gay men (Parrott & Peterson, 2008). When in discussion groups, participants who identified with anti-gay rights showed more social conformity compared to those who identified with pro-gay rights (Walker, Sinclair, & MacArthur, 2015). The level of anti-gay attitudes that heterosexual men have can also influence their emotional responses. When exposed to romantic and erotic male/male themed images, heterosexual men who reported having more negative attitudes towards gay men also reported more anger, more disgust, and lower levels of happiness in response to viewing the images (Bishop, 2015; Hudepohl, Parrott, & Zeichner, 2010). These attitudes of hostility have led to an expanding area of research focusing on the triggering factors of anti-gay violence and actions.

In situations of anti-gay aggression, personality traits may prompt bystanders to form certain attitudes towards gay men. Personality refers to a person’s initial characteristic patterns of thinking, feeling, and behaving (Kazdin, 2000). Although certain attitudes can change over time and through situational context, underlying personality traits remain relatively stable throughout adulthood (Roberts & Delvecchio, 2000; Ferguson, 2010). John and Srivastava (1999) developed the “Big Five” taxonomy of character traits, a widely used form of personality measurement. The Big Five Inventory (BFI) measures individuals’ social and interpersonal beliefs and consists of
openness to experience, conscientiousness, extraversion, agreeableness, and neuroticism. Researchers in the field of personality and gay men studies have theorized that the characteristic that most influences anti-gay attitudes is the level of openness to experience (Cullen, Wright, & Alessandri, 2002). Individuals who report high openness are more liberal and tend to seek a variety of experiences, and in turn have high levels of intellect, curiosity, unconventional values, and report a wide array of interests (John & Srivastava, 1999). However, lower openness predicts closed-mindedness, traditionalism, and conservative values (DeYoung, 2015). Lower levels of openness have also consistently predicted anti-gay attitudes and behaviors (Cullen, Wright, & Alessandri, 2002).

**Openness and Anti-Gay Attitudes.** Research using self-report measures suggests that openness to experience is a strong predictor of attitudes toward gay men and lesbians. People low on openness report, on average, more negative attitudes toward gay men than those who are high on openness (Barron, Struckman-Johnson, Quevillion, & Banka, 2008). Moreover, when researchers surveyed both men and women participants on views and attitudes towards race, sex, sexual orientation, and mental disabilities, openness to experiences was the strongest predictor of intolerance of gay lifestyles when compared to other facets of personality of the Big Five Inventory (Ekehammar & Akrami, 2007). Attitudes toward gay men may seem to be influenced by the general level of openness one has.

When analyzing anti-gay bias related aggression and violence, the level of bystanders’ openness can influence their behavior on how they may respond to others that oppose gay relationships between men. Freis and Gurung (2013) conducted a staged cyber-bullying experiment in which participants individually held a discussion with
confederates through a scripted Facebook post. Participants took turns with confederates on commenting and replying on one post. The topic of discussion eventually moved towards bullying of another confederate who stated that he or she was not legally allowed to marry their partner. The participants had the option to “pass” their turn to comment or continue on with the discussion. The researchers found that those who were low on openness were more likely to “pass” on the conversation when compared to those who held higher openness scores who attempted to change the topic. Overall, the findings of Freis and Gurung’s study suggest that an individual’s decision to intervene in an anti-gay related scenario is influenced by his or her openness level.

The decision by people low in openness not to intervene to stop homophobic bullying may be due to a perceived threat to their heterosexual identity, related to attitudes toward gay men, and the fear of being labeled gay (Carnaghi, Maass, & Fasoli, 2011). In addition, researchers have found that threats toward masculinity inhibit helping behavior in heterosexual men (Tice & Baumeister, 1995). Leone, Parrott, Swartout, and Tharp (2015) examined 261 heterosexual men on their masculinity gender role stress, bystander decisional balance, bystander efficacy, status, toughness, and anti-femininity levels. The researchers found that masculinity gender role stress significantly correlated with all of the other study variables among the participants, indicating that perceived masculinity can affect bystander intervention. In 2014, Hirai, Winkel, and Popan surveyed 330 Latino Americans on their personality, attitudes toward lesbians and gay men, and machismo levels. Machismo is a phenomenon common in Latin cultures in which male gender roles are characterized as aggressive, dominant, controlling, hyper-masculine, and family protective (Arciniega, Anderson, Tovar-
Blank, and Tracey, 2008). Hirai, Winkel, and Popan (2014) found that high levels of machismo were significantly correlated with low levels of openness. Furthermore, levels of machismo were positively correlated with prejudice attitudes toward gay and lesbians. Heterosexual men that have strong anti-gay attitudes, related to lower openness levels, may be more apathetic and more hesitant to intervene to anti-gay aggressive scenarios than those who hold weaker anti-gay attitudes. Analyzing the different factors that affect heterosexual men’s personalities and attitudes of gay men could assist with identifying other potential factors that affect the ways in which harmful anti-gay situations are handled.

The Present Study

The purpose of the present study was to determine the extent to which personality traits and attitudes toward gay men contribute to the intervention decisions of heterosexual men during anti-gay aggression. Both openness to experience and anti-gay attitudes predict hostility toward gay men, and anti-gay attitudes affect the decision to intervene to stop aggression directed at gay men. Furthermore, low openness is related with higher degrees of anti-gay attitudes. The present study was designed to determine whether 1) openness to experience predicts the time it takes heterosexual men to intervene to stop anti-gay aggression in a realistic observational setting, and 2) whether anti-gay attitudes mediate the relationship between openness and intervention time for heterosexual men.

Method

Participants

Participants consisted of 71 undergraduate male students at an urban university in the southeast region of the United States, between 18 and 39 years of age ($M = 20.5$).
All participants identified as heterosexual. Five participants were removed due to incomplete data and one participant was removed due to denial of video data; therefore 65 college men were analyzed from the final sample \( (n = 65) \). The participants completed the study for partial fulfillment for an introductory psychology course. See Table 1 for demographics details about the final sample.

**Measures**

**Openness.** To test the degree of openness to experience, we used The Big Five Inventory (BFI), which contains 44 items measuring five facets of personality: openness to experience, consciousness, extraversion, agreeableness, and neuroticism (John & Srivastava, 1999). The measures are assessed on a five-point Likert-type scale (0 being *strongly disagree* to 4 being *strongly agree*). For the present study, we only used the 10-item “Openness to Experience” subscale \( (\alpha = .65) \); higher scores indicate more openness. Sample items include: “I am curious about many different things” and “I value artistic, aesthetic experiences.”

**Anti-gay Attitudes.** Attitudes toward gay men were measured using the gay men subscale of the Attitudes Toward Lesbians and Gay Men Scale (Herek, 1988). Questions were assessed on a 9-point Likert-type scale (1 being *strongly disagree* to 9 being *strongly agree*). The 10-item subscale had strong reliability \( (\alpha = .94) \); higher scores indicate more negative attitudes towards gay men. Sample items included: “I think male homosexuals are disgusting” and “Homosexual behavior between two men is just plain wrong.”

**Intervention.** Using session videos, we coded for intervention time, operationalized as the latency between the point at which the confederate uttered his first
aggressive statement, and the point at which the participant directly intervened in the staged scenario. Direct intervention was coded as any intervention attempt, physical or verbal, directed at the aggressive confederate. Our trained team of coders reviewed the video recordings of participants’ reactions and evaluated by any attempt at communication between the participant and any other person in the room (i.e., bystanders, aggressor, or target) Intervention time was the actual time in seconds it took for the participant to intervene; each participant had up to the five minutes to intervene.

**Procedure**

Participants learned about the study through an online advertisement in the undergraduate research participant recruitment portal. The advertisement did not provide details about the true nature of the experiment, and made no reference to bystander intervention or attitudes toward gay men. Instead, the advertisement described the study as being focused on examining male college students’ attitudes and behaviors. The local institutional review board approved all study protocols.

Upon arrival for the study, the experimenter guided the participant into a laboratory room disguised as a waiting room where two to four male confederates, ostensibly other participants in the study, were present and seemingly also waiting for their turn to participate in the advertised study. At least two of the confederates, the target and the aggressor of the scenario, were always present. We analyzed and reported the differences attributed to the number of bystander confederates present separately from this study. The additional confederates, if present, were instructed not to engage with the target, aggressor, or participant in any way in order to record the participant’s reaction. All participants’ reactions were video-recorded using a hidden camera for
coding and security purposes. The experimenter oversaw each session on a computer monitor from the adjacent room.

**Aggression Script.** The participant and all confederates were instructed by the experimenter to remain in the waiting room while the experimenter went to make additional copies of the informed consent form. Once the experimenter had left the room, the confederates began a scripted scenario in which the aggressive confederate verbally harassed and physically intimidated the target confederate. The target confederate's sexual orientation was made salient to the participant through his t-shirt, which stated “I [heart] my boyfriend” and the statement he made when entering the room: “I’m sorry I’m late, guys. I was with my boyfriend and lost track of time.”

The aggressive confederate began by asking “What’s up with that t-shirt? You gay or something?” to which the target confederate responded “Yeah.” This visibly agitated the aggressive confederate, who then said “I don’t want to be in the same room as a gay guy.” The aggressive confederate continued to antagonize the gay target confederate, with the aggressive confederate becoming more and more agitated and continuing to demand that the gay confederate leave the room. The bystanders, if present, ignored the situation by reading magazines available on a small table in the middle of the room. The participant could intervene at any point in the scenario, and scripted breaks between verbal attacks allowed participants adequate opportunity to intervene. The intensity of the aggression escalated each minute with a new script line until the aggressive confederate stood up and moved threateningly toward the target, standing over him in an intimidating way. At this point the experimenter returned to the
room and asked “What’s going on?” The aggressive confederate then sat back down and the scripted scenario ended. The scenario lasted approximately five minutes total.

**Distraction Task.** After the scripted scenario ended, or if the participant attempted to physically intervene in any way, the experimenter retrieved the participant and the target confederate to complete the supposed experiment. The experiment brought the participant from the “waiting room” to an “experimental lab” on a different floor. The participant then completed a distraction task, a 15-minute memory task, included as a task to disguise the true intent of the study.

**Probe for Suspicion.** After the distraction task, participants completed a battery of surveys including the Big Five Inventory (John, & Srivastava, 1999) and the Attitudes toward Lesbians and Gay Men Scale (Herek, 1988). These measures also included a probe for suspicion, where participants were asked what they thought the study was about.

**Manipulation Check and Debriefing.** The participant completed a manipulation check after completing the distraction task. The participant was asked to recall what happened in the “waiting room” and explain why it happened. Following completion of the manipulation check, the participant was debriefed about the true purpose of the study and informed about the video recording. Each participant was given the opportunity to remove their video data from the study during the briefing. Participants who allowed their video data to remain in the study signed a specific consent form.

**Results**

The primary focus of the study was to evaluate the possible mediating role of anti-gay attitudes in the relation between openness levels and intervention time;
therefore, we collapsed the data for analysis across conditions containing between zero and two bystanders. We conducted a mediation analysis in SPSS 21 using the PROCESS macro (Hayes, 2012). Intervention time in seconds was regressed on openness, and anti-gay attitudes was included as a mediator, $R^2 = .12$, $F (1, 64) = 4.42, p < .05$ (see Figure 1).

Openness to experience levels was negatively associated with anti-gay attitudes - participants higher in openness had fewer anti-gay attitudes ($B = -.97, SE = .46, p < .05$). Additionally, attitudes toward gay men significantly predicted time to intervene; for each one point increase in anti-gay attitudes, participants waited an additional 29 seconds to intervene ($B = 29.04, SE = 11.11, p < .05$).

We conducted an evaluation of the mediating effect of anti-gay attitudes using PROCESS with 1,000 bootstrapped samples. Results suggested that attitudes toward gay men mediate the relation between openness and the time it takes heterosexual men to intervene to stop anti-gay aggression ($B_{indirect} = -28.13, SE_{bootstrap} = 18.18, CI_{95\%} = -74.71, -3.43$). The direct effect of openness on time to intervene was non-significant (See Table 2 for correlations between all study variables).

Discussion

The present study examined the effect of openness to experience on the time it takes heterosexual men to intervene in an anti-gay aggression, and how heterosexual men’s attitudes toward gay men mediate this relation. Lower levels of openness were related to higher levels anti-gay attitudes, and heterosexual men with more anti-gay attitudes took a longer time to intervene. The results suggests that how negatively the bystander views the target of aggression influences the bystander’s intervention process,
and that the bystander’s view is influenced by their degree of openness, at least in instances of anti-gay aggression.

**Limitations and Future Directions**

There are a few limitations of the study that should be noted. A possible limitation to our study may have been that participants may not have fully believed the scenario to be authentic, although participants were thoroughly probed for suspicion and none confidently identified that the anti-aggression scenario was staged. Witnessing the anti-gay aggression scenario may have primed participants’ survey responses although participants completed cognitively intense tasks unrelated to the study between witnessing the scenario and completing the measures. To avoid this limitation in the future, researchers should consider conducting a field experiment to possibly avoid suspicions or priming effects. A more public environment, outside a research lab, would allow for more genuine reactions, and less threat of priming once the scenario has ended.

Another limitation to the study was the lack of experimental control over the race and ethnicity of the confederates. Given the small sample size, we lacked statistical power to use race and ethnicity as a moderator or covariate. The race and ethnicity of the aggressive confederate, target confederate, bystander confederates, and the experimenter could have affected intervention behaviors of some participants. Along with race and ethnicity, there may have been other unassessed variables that may have affected the current findings, such as the religious beliefs of the participants. Further research would benefit by expanding on the race and ethnicity or religion of heterosexual men as potential factors affecting intervention times to stop anti-gay aggressive scenarios.
The results were collected from college students from an urban university and thus have limited generalizability to other populations. The results could have been influenced by the setting, which may have impacted the average levels of anti-gay attitudes. The heterosexual participants may have been less prejudiced to gay men compared to other areas because the university is located in an urban area. Thus, future studies should be conducted comparing groups from different communities aside from a university.

Despite the noted limitations, prior research in this area has mostly relied on self-assessments of bystander behavior from participants, whereas the present study used a realistic scenario meant to reflect a real world experience of anti-gay aggression.

**Conclusion**

The goal of this study was to examine the effect of openness to experience on the time it takes heterosexual men to intervene to an anti-gay aggressive scenario, and how heterosexual men’s attitudes toward gay men mediate this relation. As speculated, anti-gay attitudes significantly predicted the time to intervene; for each one point increase in anti-gay attitudes, participants waited an additional 29 seconds to intervene, on average. In total, this suggests that heterosexual men who have lower levels of openness to experience hold stronger anti-gay attitudes, which then slows their intervention speed in cases of anti-gay aggression. The present study highlights the importance of examining both personality traits and attitudes toward the population of interest when predicting bystander behavior. These results provide evidence that certain dimensions of personality can affect intervention behaviors. The present study adds to the knowledge of personality and anti-gay aggression research and can assist with expanding bystander
intervention programs that identify correlations of different personality types and intervention behaviors of heterosexual men. These programs are imperative to reduce the high rates of anti-gay aggression that have been demonstrated across the past decade.
Table 1

*Demographic Sample Characteristics*

<table>
<thead>
<tr>
<th>Reported Race/Ethnicity</th>
<th>n</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black or African American</td>
<td>26</td>
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<tr>
<td>White or European American</td>
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<tr>
<td>Asian or Pacific Islander</td>
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<td>Asian American</td>
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<tr>
<td>Hispanic/Latino</td>
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<tr>
<td>Middle Eastern Descent</td>
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<tr>
<td>Bi-Racial or Multi-Racial</td>
<td>4</td>
</tr>
<tr>
<td>Native American</td>
<td>3</td>
</tr>
</tbody>
</table>

*Note.* Participants were able to identify as more than one race/ethnicity.
Table 2

Correlations Between Openness, Anti-Gay Attitudes, and Intervention Time

<table>
<thead>
<tr>
<th>Measure</th>
<th>1</th>
<th>2</th>
<th>3</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Openness</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Attitudes Toward Gay Men</td>
<td>-.240*</td>
<td>-</td>
<td></td>
</tr>
<tr>
<td>3. Intervention Time</td>
<td>-0.169</td>
<td>.343**</td>
<td>-</td>
</tr>
</tbody>
</table>

Note: *p < 0.05 (2-tailed); **p < 0.01 (2-tailed).
Figure 1. Mediating Effect of Anti-Gay Attitudes on Openness and Bystander Intervention Time

Note: Coefficients are standardized. Dashed lines indicate non-significant relationships. Attitudes toward gay men mediate the relation between openness and the time it takes heterosexual men to intervene to stop anti-gay aggression. The direct effect of openness on time to intervene was non-significant.
References


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