

## Are Homophobic Men Attracted to or Repulsed by Homosexual Men? Effects of Gay Male Erotica on Anger, Fear, Happiness, and Disgust

Amos Zeichner and Dennis E. Reidy  
University of Georgia

Research has found that proximity to sexual minorities is associated with negative affect in homophobic individuals. To test whether negative feelings serve a protective function in homophobic men against the sexual behavior of gay men, 54 collegiate men assessed for homophobic attitudes were primed with explicit male homosexual or heterosexual erotica followed by a lexical decision task measuring anger, fear, happiness, and disgust. Results indicated that in the group primed with homosexual erotica, homophobia is positively related to anger and fear and negatively related to happiness and disgust. No such associations were found for the heterosexual prime. The findings are placed in the context of purported protective mechanisms of negative emotions of fear and anger, but not disgust, in sexually prejudiced people who may possess fear of, or actual sexual arousal associated with, same-sex stimuli.

*Keywords:* homophobia, sexual prejudice, sexual erotica

Inherent in nearly all definitions of homophobia are emotional elements of homonegativism experienced in response to homosexual individuals. For example, Hudson and Ricketts (1980) identified several types of affect—such as fear and anxiety, anger, and disgust—that homophobic men experience subsequent to exposure to homosexual interactions. Indeed, congruent with surveys (e.g., Franklin, 1998), laboratory studies have confirmed that men who endorse sexual prejudice against gay men demonstrate increases in anger and anxiety after video exposure to sexually explicit behavior of male–male dyads (Bernat, Calhoun, Adams, & Zeichner, 2001; Parrott & Peterson, 2008; Parrott & Zeichner, 2005). Moreover, the collective literature has indicated that anger and anxiety responses to gay men are important precursors of male-perpetrated antigay aggression.

Lesser studied and understood is the often reported disgust that sexually prejudiced men

feel toward gay men. An evolutionary perspective conceptualizes fear, anger, and disgust as representing emotional defenses against risk, danger, and morbidity. For example, it has been argued that emotions alter the appraisal process by which a person assesses probability of risk and implements adaptive coping actions (Lerner & Keltner, 2001). Fear, in response to threat, may motivate escape (Öhman & Mineka, 2001); anger, in response to transgression, may motivate aggression to eliminate future violations (Frank, 1988); and disgust, in response to perceived risk of contamination, might motivate protective defenses (Curtis, Aunger, & Rabie, 2004). Hence, it would seem that an individual who espouses negative attitudes about homosexual behavior might not only respond with fear and anger to such acts, but might also experience other negative emotions such as disgust. Alternatively, a socialization perspective may suggest that prevalent compulsory heterosexuality (Rich, 1983) “encourages developing boys and girls to be socialized into the established hierarchy of males over females” (Tolman, Spencer, Rosen-Reynoso, & Porche, 2003, p. 162) and, contiguously, develop negative behaviors, affect, and attitudes toward gay men.

A divergent interpretation of homophobia emerged from Adams, Wright, and Lohr (1996),

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Amos Zeichner and Dennis E. Reidy, Department of Psychology, University of Georgia.

Dennis E. Reidy is now at the Department of Psychology, University of South Alabama.

Correspondence concerning this article should be addressed to Amos Zeichner, Department of Psychology, University of Georgia, Athens, GA 30602-3012. E-mail: zeichner@uga.edu

who found that when shown gay male erotica, sexually prejudiced heterosexual men who endorsed negative affect toward homosexual men evinced greater sexual arousal (measured via penile tumescence) than did nonprejudiced men. More important, despite evidence of physiological sexual arousal, sexually prejudiced men did not report sexual arousal to the homosexual erotic material. Hence, it is likely that sexually prejudiced men were either unaware of or denied their same-sex arousal. Regardless of their motivations, denial of the arousal may well be linked to perceived threat generated by male homosexuality.

It is important to consider that arousal experienced in response to homosexual behaviors, whether affective or sexual, may be difficult to assess because of the socially sensitive nature of its context. As such, common research methodologies that use self-report instruments do not allow parsing of arousal associated with anger, fear, disgust, or joy independent of volitional control of the responder. The lexical decision task methodology (i.e., assessment of perceptual processing speed of affect words) is useful in that it allows researchers to differentiate between affects based on the cognitive components of emotion and to detect biases toward affect-relevant stimuli free of the influence exerted by factors such as social desirability and demand characteristics. Trait-congruency theory posits that discrete states of affect are linked to enhanced activation of congruent emotion networks (Rusting, 1998) and, as such, influence cognitive processing of emotion cues. These trait-related cognitive biases purportedly increase the likelihood that a particular emotion (e.g., anxiety or fear) is, in fact, experienced. On the basis of theoretical work in this area (Bower & Forgas, 1999), network activation is involved in behavioral and physiological responses, as well as in verbal and semantic structures related to that emotion. This discrimination task purports to measure network activation via response latency evidenced by reaction times (RTs) to particular stimulus words, with faster RTs indicating greater network activation (e.g., Schacter, 1987). In contrast, slower RTs to emotion words suggest less activation. Thus, individuals in a state of sadness or happiness would respond more rapidly to words of the congruent affect (Olafson & Ferarro, 2001).

We hypothesized that sexual prejudice would be positively linked to heightened anger and anxiety after exposure to homosexual erotica. We expected a contrasting emotion, happiness, to be lower in sexually prejudiced individuals relative to their low-prejudice counterparts after similar erotic priming. Finally, we sought to examine, for the first time with this methodology, effects of erotic exposure on feelings of disgust. The nature of this relation is unclear, however, because reasonable hypotheses can be articulated for both a positive and a negative relation. For example, congruent with the experimental and evolutionary literature on sexual prejudice and negative affect, one might expect a positive association between prejudice and disgust. Alternatively, on the basis of the purported link between sexual prejudice and sexual arousal in response to homoerotic stimuli found by Adams et al. (1996), one might expect a negative association between such prejudice and disgust because sexual arousal would seem to be incompatible with this affective state. Given this uncertainty, extant findings in relation to disgust are necessarily exploratory in nature, and no directional hypothesis is presented.

## Method

### *Participants and Experimental Design*

Participants were 54 single collegiate men ( $M_{\text{age}} = 19.9$ ,  $M_{\text{education}} = 14.2$  years, 80% Caucasian, modal income = \$70,000) who responded to an advertisement recruiting heterosexual men whose native language was English. The study had two independent variables: homophobia and video exposure (male–male erotica or male–female erotica). Participants were randomly assigned to either the male–male ( $n = 26$ ) or the male–female ( $n = 28$ ) erotica condition via coin toss. The four criterion variables reflecting emotion facilitation were anger, fear–anxiety, happiness, and disgust.

### *Materials*

*Demographic form.* Participants completed a brief demographic form assessing age, race, education level, and average yearly income to confirm that groups were equivalent on these variables.

*Homophobia Scale* (Wright, Adams, & Bernat, 1999). This 25-item Likert-type scale assesses the extent to which participants agree or disagree with various statements regarding their thoughts, feelings, and behaviors with respect to homosexuality. The Homophobia Scale was deemed an appropriate measure of sexual prejudice because it assesses attitudes toward homosexuality across cognitive, emotional, and behavioral domains (O'Donohue & Caselles, 1993). We obtained an internal consistency coefficient of .77 for our sample.

*Stimulus material.* Participants viewed a 210-s color video depicting either a consensual sexual interaction between two gay men or a heterosexual dyad, which included sexual foreplay (i.e., kissing and undressing), oral-genital contact (i.e., fellatio and cunnilingus), and intercourse (i.e., anal or vaginal penetration). Previous research with these stimuli across different laboratories demonstrates that sexually prejudiced men report increased anger and anxiety after exposure to male-male erotic material (Bernat et al., 2001).

*Lexical decision task.* Facing a computer monitor and two keyboard keys labeled either *word* or *nonword* (pronounceable nonwords created by changing a single letter in each of the 120 words), participants were told to identify, by pressing either key as quickly as possible, whether each presented character string was an actual English word. Experimental trials consisted of 120 word and 120 nonword trials. The stimulus item disappeared after the participant responded or a latency of 3,000 ms, whichever occurred first, and was followed by an intertrial interval of 200 ms. Word stimuli were presented in a randomized fashion. Each neutral word was matched to each emotion word in terms of word frequency. Neutral and emotion words were matched on syllabic length to reduce any effect of word length on response latency. Emotion words for anger, happiness, and fear were taken from previous research (Reidy, Zeichner, Hunnicutt-Ferguson, & Lilienfeld, 2008). Disgust words were provided by a sample of 40 participants asked to generate an exhaustive list of words reflecting the emotion of disgust. We then compiled this list into a questionnaire administered to a separate sample of 30 independent raters. Each word was rated on a 5-point scale representing the level at which the words reflected the emotional experience of disgust.

We included 15 words receiving the highest rankings in this study.

### *Procedure*

Participants provided informed consent and were told that the purpose of the experiment was to assess the effect of sexually explicit material on word recognition. Next, the demographic form and Homophobia Scale were administered, along with a packet of unrelated questionnaires to disguise the study's true purpose and reduce possible priming effects. Participants viewed the erotic video on a TV monitor located adjacent to the lexical decision task computer while seated alone in the experimental room. The video was followed by the lexical decision task, after which participants were debriefed and compensated with partial course credit.

## Results

### *Lexical Decision Response Latency*

We deleted trials reflecting incorrect responses and removed any response latency 2.5 standard deviations above or below each individual's mean response latency. RTs to affect words were as follows: angry words,  $M = 681.41$  ms ( $SD = 102.85$ ); fear-anxiety words,  $M = 640.55$  ms ( $SD = 96.17$ ); happy words,  $M = 704.41$  ms ( $SD = 107.53$ ); disgust words,  $M = 760.75$  ms ( $SD = 104.82$ ); and neutral words,  $M = 723.40$  ms ( $SD = 106.28$ ). Paired sample  $t$  tests indicated that response latencies for each affect word category were significantly different from neutral words (all  $t_s > 2.4$ ; all  $p_s < .05$ ), and independent samples  $t$  tests indicated that response latencies to all word categories did not significantly differ between the two conditions.

We examined the change in processing speed of discrete affect words relative to other affect words by subtracting the mean RT for the 15 emotion words in each discrete affect from the composite of the remaining 45 emotion words (i.e., three affects). For example, to measure anger facilitation, we computed a difference score between RTs to anger words and the mean of RTs to fear-anxiety, happiness, and disgust words. This procedure allowed the examination of anger functioning in comparison to all other current emotional states. We computed difference scores for

each affect, yielding four outcome variables (i.e., anger, fear–anxiety, happiness, and disgust facilitation scores). More negative RT difference score values indicated less facilitation and, as such, decreased activation of that emotion network. Conversely, more positive RT values suggested increased activation of that emotion network. Proper methodological procedures necessitate the control of baseline responding to the word versus nonword task. This is accomplished by controlling for RTs to neutral words. Consequently, we conducted a series of partial correlations between homophobia and each emotion facilitation score controlling for neutral words in each condition.

Results indicated that in the homosexual erotica video condition, homophobia was positively associated with faster RTs to anger words ( $r = .36, p = .04$ ) and to fear–anxiety words ( $r = .32, p = .05$ ). Conversely, homophobia was related to slower responding to happiness words ( $r = -.34, p = .04$ ) and disgust words ( $r = -.43, p = .01$ ). In the heterosexual erotica condition, endorsement of homophobic traits did not significantly correlate with RTs (see Table 1).

We next computed Fisher's  $z$  transformations to determine whether correlation coefficients significantly differed across the two conditions. Results indicated that the correlation between homophobia and RTs to happiness words in the homosexual erotica video condition significantly differed from that between homophobia and RTs to happiness words in the heterosexual erotica video condition ( $z = -2.04, q = -.62, p = .02$ ).<sup>1</sup> Similarly, correlations for fear–anxiety words were significantly different across the two conditions ( $z = 1.77, q = .54,$

$p = .03$ ). When we compared correlations for RTs to disgust words, the difference between the two coefficients did not reach significance ( $z = 1.2, q = -.37, p = .11$ ). Similarly, correlation coefficients for RTs to anger words were not significantly different across the two conditions ( $z = 0.86, q = .27, p = .19$ ).

## Discussion

The purpose of this study is to examine the influence of homophobic attitudes and exposure to homoerotic material on emotion in men. On the basis of the extant literature (Franklin, 1998; Hudson & Rickett, 1980; Parrott & Zeichner, 2005), we expected that after exposure to homoerotic priming, sexually prejudiced men would experience more anger and anxiety and less happiness than their low-prejudice counterparts. Our findings confirmed most of these hypotheses. Whereas homophobia significantly correlated with happiness (negatively), fear, and anger (positively) in the gay erotica condition, no significant correlations exist for these emotions in the heterosexual erotica condition. These findings are consistent with arguments that negative emotions toward “unnatural” behavior may serve a socially protective function (Frank, 1988; Öhman & Mineka, 2001). It is noteworthy that effect sizes for the differences between the relationships of homophobia with emotion ranged from medium to large and differences for fear and happiness were large relative to that of anger. This may indicate that relative to fear, anger is the weaker emotional response to gender norm violation or variant sexual behavior. Taken as a whole, the lexical decision task findings for fear and, to a lesser extent, anger indicate that when a highly sexually prejudiced man is confronted with an extreme form of gender role violation, he is apt to implicitly defend against a perceived threat with emotions of anger, fear, and attendant diminished happiness.

Counterintuitive, perhaps, are the findings relative to disgust. As noted, disgust is conceptualized as a defensive reaction against feared substances, animals, or situations (Charash &

Table 1  
*Partial Correlations for Homophobia and Lexical Decision Task Affect Indices Controlling for Neutral Words*

Variable	Anger	Fear– anxiety	Happiness	Disgust
Homophobic in gay condition	.36*	.32*	-.34*	-.43*
Homophobic in heterosexual condition	.11	-.21	.27	-.09

Note. Negative coefficients indicate slower response latencies.

\*  $p < .05$ .

<sup>1</sup> Cohen (1992) identified  $q$  as the effect size measure to represent the difference between two independent correlations. Cohen's guidelines for interpreting  $q$  are as follows: small,  $q = .10$ ; medium,  $q = .30$ ; and large,  $q = .50$ .

McKay, 2002; Fessler, Pillsworth, & Flamson, 2004). Hence, this emotion may follow exposure to homoerotica as well. However, our findings indicate that feelings of anger and fear are coupled with low levels of disgust after exposure to homoerotic material. Our exploratory approach to examining this emotion is predicated on our reasoning that sexually prejudiced men, who commonly report that they are disgusted by homosexual behavior (Franklin, 1998), do so to comply with social norms and may, in fact, seek to hide their feared sexual arousal associated with same-sex stimuli. We expected that when emotions are accessed via cognitive bias toward affect-relevant cues, un-governed by factors such as social desirability and gender norm adherence, sexually prejudiced men would experience anger and fear after exposure to homosexual erotic material. Although we did not present a directional hypothesis relative to disgust, our findings suggest that sexually prejudiced men are not disgusted by homosexual stimuli but may fear attraction to them.

Although speculative at this stage, these data may align with those of Adams et al. (1996), who found that sexually prejudiced men evinced more sexual arousal to homosexual stimuli. Sexual arousal (i.e., attraction) and disgust (i.e., repulsion) represent two opposing processes. If the homophobic men in our sample were sexually attracted to the gay erotica, this would inhibit their state experience of disgust. Clearly, our findings await replication with larger and less homogeneous samples and by supplementing the lexical decision task procedure with concurrent physiological measures of arousal to link specific affect-based arousal with behavioral consequences of such negative emotion. However, our findings do point to the possibility that for individuals who are sexually prejudiced, anger and, to a greater extent, fear may make up a defense mechanism, whereas diminished disgust may be indicative of latent affinity with homosexuality.

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