

Prejudices and Discrimination as Goal Activated and Threat Driven: The Affordance Management Approach Applied to Sexual Prejudice

Angela G. Pirlott
Saint Xavier University

Corey L. Cook
Pacific Lutheran University

Stereotypes, prejudices, and discriminatory behaviors directed toward people based on their sexual orientation vary broadly. Existing perspectives on sexual prejudice argue for different underlying causes, sometimes provide disparate or conflicting evidence for its roots, and typically fail to account for variances observed across studies. We propose an affordance management approach to understanding sexual prejudice, which weds the fundamental motives theory with the sociofunctional threat-based approach to prejudice to provide a broader explanation for the causes and outcomes of sexual prejudice and to explain inter- and intragroup prejudices more broadly. Prejudices arise as specific emotions designed to engage functional behavioral responses to perceived threats and opportunities (i.e., affordances) posed by different sexual orientation groups, and interact with the perceiver's chronic or temporarily activated fundamental motives (e.g., parenting, mating), which determine the relevance of certain target affordances. Our perspective predicts *what* stereotype content is likely to direct specific affective and behavioral reactions (i.e., the stereotypes that relay threat- and opportunity-relevant information) and *when* the affordance-emotion-behavior link is likely to engage (i.e., when those threats and opportunities are directly relevant to the perceiver's current fundamental goal). This article synthesizes the extant sexual prejudice literature from an affordance management approach to demonstrate how fundamental goals interact with preexisting perceptions to drive perceptual, affective, and behavioral responses toward sexual orientation groups, and provides a degree of explanatory power heretofore missing from the prejudice literature.

Keywords: sexual prejudice, homophobia, heterosexism, discrimination, fundamental motives

Lesbian, gay, and bisexual (LGB) men and women experience a broad variety of discriminatory behaviors at the hands of (presumably) heterosexual men and women. For example, as of 2016, 73 countries worldwide outlawed homosexuality, and homosexual behavior warranted the death penalty in 13 of those countries (International Lesbian, Gay, Bisexual, Trans, and Intersex Association [ILGA], 2016). In 2016, 17 countries possessed morality laws, with many recently added, banning “promotion and propaganda” related to expression of sexual orientation and gay rights (ILGA, 2016). Additionally, as of 2016, just 26 countries allowed adoption by same-sex couples and only 22 allowed same-sex marriage (ILGA, 2016).

Beyond societal-level discrimination (i.e., *heterosexism*; Herek, 2007), LGBs experience high levels of interpersonal prejudice, stereotyping, and discrimination based on their sexual orientation—that is, *sexual prejudice*. For example, in 2015, 18% of hate crimes committed in the United States were based on sexual orientation, most of which (62%) targeted gay men (Federal Bureau of Investigation, 2016). A recent meta-analysis revealed that, across a wide variety of behaviors (e.g., verbal harassment, physical assault, sexual assault), LGBs experienced aggression at greater levels than heterosexuals experienced (*ds* ranging from .11 to .58; Katz-Wise & Hyde, 2012). LGBs also experience more subtle forms of discrimination, such as avoidance and social distancing. For example, heterosexual U.S. college students reported greater desires to avoid an imagined same-sex gay/lesbian roommate than a same-sex heterosexual roommate (Plant, Zielaskowski, & Buck, 2014, Study 2), and 22% to 32% of a sample of U.S. university faculty and staff reported refusing to allow a gay man or lesbian to coach their children (Sartore & Cunningham, 2009, Study 2).

Affective reactions to gay men, lesbians, and bisexual men and women also vary. For example, among a national sample of U.S. adults, more heterosexual women reported feeling comfortable with gay men (77%) than with lesbians (59%), but the reverse occurred for heterosexual men—more reported feeling comfortable with lesbians (68%) than gay men (56%; Herek, 2000). Heterosexual U.S. college students reported greater moral disgust toward gay and bisexual male and female targets relative to het-

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Angela G. Pirlott, Department of Psychology, Saint Xavier University; Corey L. Cook, Department of Psychology, Pacific Lutheran University.

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Correspondence concerning this article should be addressed to Angela G. Pirlott, Department of Psychology, Saint Xavier University, 3700 West, 103rd Street, Chicago, IL 60655, or to Corey L. Cook, Department of Psychology, Pacific Lutheran University, 12180 Park Avenue South, Tacoma, WA 98447. E-mail: pirlott@sxu.edu or clcook@plu.edu

erosexual male and female targets ($d = .73$ aggregated across targets and perceiver sex; Pirlott, 2012). In addition, among a sample of White U.S. college students, gay men elicited greater levels of general negativity (estimated¹ $d = .58$), disgust (estimated $d = .63$), anger (estimated $d = .30$), and pity (estimated $d = .65$)—but not fear/anxiety (estimated $d = .05$), and less envy (estimated $d = -.43$)—than European American targets (Cottrell & Neuberg, 2005).

This evidence, although not comprehensive, documents a variety of societal and interpersonal prejudices targeting LGBs, which poses a challenge for existing theories to explain.² We offer a theoretical approach to help explain variances in sexual prejudice, which includes variance in affective and behavioral responses and variance across different sexual orientation targets, different perceivers, and different contexts. Our approach additionally explains which stereotypes, under what circumstances, and for whom certain affective prejudices and specific behavioral responses are likely to arise. We propose an *affordance management approach to prejudice*, which integrates the sociofunctional threat-based model of prejudice (Cottrell & Neuberg, 2005) with the fundamental motives framework (Kenrick, Griskevicius, Neuberg, & Schaller, 2010; Kenrick, Neuberg, Griskevicius, Becker, & Schaller, 2010). Our perspective argues that prejudices and discrimination arise predictably as functional reactions to perceived threats, and that the perceiver's active fundamental motives dictate the relevance of a perceived threat, which determines whether a prejudiced reaction is likely to occur. Our perspective explains nuances in the existing sexual prejudice literature by integrating and explaining previous research findings, while also highlighting numerous areas open to further empirical tests of the novel hypotheses provided by this approach. We further draw connections between prejudices, stereotypes, and discrimination toward LGBs on an interpersonal level to discrimination against LGBs at the societal level (see Herek, 2007).

The Affordance Management Approach

An affordance management approach to cognition, emotion, and behavior suggests that people think about and respond to those around them in ways intended to better manage the potential opportunities (e.g., for romance) and threats (e.g., to physical safety) these others afford (i.e., “affordances”; Gibson, 1979; McArthur & Baron, 1983; Neuberg, Kenrick, & Schaller, 2011; Schaller & Neuberg, 2012). This evolutionary-informed approach articulates a functional link between cognition, emotion, and behavior (e.g., Tooby & Cosmides, 2008; Keltner, Haidt, & Shiota, 2006; Nesse & Ellsworth, 2009). One evaluates potential threats and opportunities afforded by others, and these perceived affordances elicit specific emotions, which prompt specific behavioral reactions to mitigate perceived threats or seize perceived opportunities. Threats to health elicit physical disgust, prompting avoidance or rejection of the contaminating stimulus; threats to physical safety and sexual autonomy elicit fear, prompting escape; and obstructions to desired outcomes elicit anger, prompting aggression to remove the obstacle.

What designates a target as a threat or opportunity? The perception of affordances arises in the space between the inclinations or capacities of the target and the goals of the perceiver (McArthur & Baron, 1983). Whether a particular target poses a perceived

threat or opportunity varies as a function of the interaction between target variables (e.g., sex, age, race/ethnicity), which convey information about their perceived goals and abilities (e.g., interest in mating, intent and ability to harm), with perceiver variables (e.g., sex, sexual orientation) and perceivers' relevant social goals (e.g., mating, parenting). For example, a gay man may present a perceived companionship *opportunity* for a heterosexual woman interested in forming friendships but a perceived *threat* of sexual orientation countersocialization to a mother of a young boy.

Fundamental Motives Theory

What social goals are relevant for understanding perceived threats and opportunities? The fundamental motives theory (Kenrick, Griskevicius, et al., 2010; Kenrick, Li, & Butner, 2003; Kenrick, Neuberg, et al., 2010) suggests that a recurring set of challenges to survival and reproduction—finding and retaining mates, parenting, acquiring and maintaining status, avoiding disease, affiliating socially (which we argue includes successfully facilitating ingroup functioning), and protecting oneself—elicited evolutionary adaptations to successfully manage these challenges, that is, produced fundamental motives driving human behavior. Successful cognitive, emotional, and behavioral responses to these challenges increased the likelihood of an individual's survival and reproduction, which, through differential reproduction over time, led to evolved psychological mechanisms for addressing these recurring challenges. Accordingly, we link the fundamental motives theory to our affordance management approach to argue that fundamental motives are the primary organizers and drivers of perceptions of target characteristics. Thus, what humans perceive as threats and opportunities will be related primarily to threats and opportunities to the fundamental domains of mating, parenting, gaining and maintaining social status, avoiding disease, affiliating with one's ingroup, and preserving one's safety.

A Sociofunctional Threat-Based Approach to Prejudice

Cottrell and Neuberg (2005) applied a functional account of emotions to intergroup relations to propose a *sociofunctional* threat-based approach to prejudice. They proposed that prejudices between groups are characterized as specific affective reactions, which arise in response to the perception of specific threats to group living posed by outgroup members. These include, for example, threats to ingroup health, physical safety, personal freedoms, and economic resources. Thus, *perceived threats* attributed to groups drive prejudices, not *group membership*, per se.

Cottrell and Neuberg (2005) further outlined the ways specific perceived threats to the ingroup should predict certain intergroup emotions and behaviors (from Table 2, p. 773): Perceived threats to ingroup safety predict fear and avoidance to protect one's self or ingroup; perceived threats to ingroup health predict (physical) disgust and avoidance to minimize contamination; perceived threats to ingroup values predict (moral) disgust and attempts to maintain ingroup value systems via avoidance or suppression of

¹ Calculated from *Ms* and *SDs* from Table 3, p. 777.

² We contrast our perspective against of common prejudice perspectives in the Discussion section.

contaminating influences; and perceived obstacles to ingroup functioning (including threats to group economic resources, property, personal freedoms and rights, and social coordination³) predict anger and behavioral reactions to reclaim resources and restore group functioning.

In support of these theoretical predictions, Cottrell and Neuberg (2005) assessed White U.S. college students' affective prejudices (e.g., anger, disgust, fear, pity, envy, guilt, and general negativity) and perceptions of threats (e.g., to jobs and economic opportunities, health, physical safety) posed by a variety of social groups (e.g., activist feminists, African Americans, fundamentalist Christians, gay men) relative to European Americans. Their results demonstrated that conceptualizing prejudice as "general negativity" masked variance in specific emotions, thus suggesting that specific discrete emotions rather than general negativity best characterize prejudice. Their results also demonstrated that specific perceived threats predicted particular emotions: For example, perceptions that outgroups present obstacles to one's goals predicted outgroup anger, perceptions that outgroups pose threats of contamination predicted outgroup disgust, and perceptions that outgroups pose physical safety threats predicted outgroup fear. Furthermore, controlling for perceived threats accounted for substantial variance in affective prejudices toward outgroups, suggesting that although prejudices arise because of the nature of ingroup-outgroup relations, perceived threats attributed to outgroups drive prejudices. In all, this approach suggests that socio-culturally formed stereotypes of groups convey affordance-related information, which direct specific emotions and behavioral inclinations, thus constituting "prejudices" and "discrimination" against outgroups and their members.

This affordance management approach to prejudices suggests that prejudices arise functionally to manage the relevant perceived threats and opportunities posed by people of varying social group memberships. We integrate this approach with the fundamental motives theory (Kenrick, Griskevicius, et al., 2010; Kenrick et al., 2003; Kenrick, Neuberg, et al., 2010) to explain *what* stereotype content is likely to direct specific affective and behavioral reactions and *when* that affordance-emotion-behavior link is likely to engage. Stereotypes that relay affordance information relevant to evolved, fundamental human motives are likely to engage specific emotional and behavioral reactions to act strategically upon those threats and opportunities. Furthermore, the relevance and perception of the affordance stereotypes vary situationally and depend upon the perceiver's currently activated fundamental motives. Accordingly, our perspective argues that although many stereotypes might exist about a particular group, the stereotypes that engage emotional and behavioral reactions depend upon their threat- and opportunity-relevance to the perceiver's currently activated fundamental motives.

Thus, our theory proposes an *if-and-then* logic to understanding prejudices: *If* a fundamental motive is active, *and* a stereotype conveying threat or opportunity affordances relevant to the active fundamental motive is associated with a target, *then* that perception⁴ will engage a specific emotional and behavioral reaction toward the target to address the threat or opportunity. For example, *if* a heterosexual woman wants to ensure her children (or perhaps even children in general) develop hetero-gender-normatively, *and* she perceives that gay men influence children to become gay and/or effeminate, *then* she might be more inclined to view gay

men with moral disgust and try to prevent their contact with children, and/or with anger if she perceives gay men as adversely influencing children and respond with aggression or suppression to remove the influencing agent. In our review, we focus on stereotypical perceptions based on the current literature, though these perceptions may not be present for all individuals or cultures.

In sum, as shown in Figure 1, our perspective explains that the salience of a particular fundamental motive activates preexisting threat or opportunity-related stereotypes specifically relevant to that motive, which then engages the resulting specific emotional and behavioral reactions. To our knowledge, no other existing theoretical framework specifies which stereotypes will likely engage specific affective and behavioral reactions, and for whom. Table 1 provides a noncomprehensive set of predictions based on the current literature detailing what stereotypes, based on their relevance to evolved fundamental human goals, should be important in guiding specific emotional and behavioral reactions. For example, people concerned with seeking new mates should be particularly vigilant of, respond with positivity and lust toward, and engage in behaviors to facilitate mating with targets generally perceived to pose desirable mating opportunities.

Although we use an *intergroup* framework through which to organize predictions, we note that stereotypes, of course, exist for social groups beyond outgroup categorizations. The current perspective explains reactions that emerge as a function of target group stereotypes, regardless of whether the target is an outgroup member or an ingroup member. Thus, our perspective differs slightly from the sociofunctional threat-based approach to prejudice—and other theories of intergroup prejudice—which focuses on intergroup relations directed at the ingroup, as perceptions of affordances posed by different groups may be directed at the individual perceiver as well as at the ingroup more broadly. Additionally, different ingroup members may be associated with a variety of goal-related affordances. For example, men, women, children, and elderly people are all ingroup members but have certain stereotypes applied to them, elicit different emotional reactions, and experience differential treatment, depending on the circumstances. Thus, although our perspective lends itself to explaining *intergroup* relations, it nonetheless applies to *intragroup* and other social relations in which stereotypes exist.

Applying the Affordance Management Approach to Sexual Prejudices and Discrimination

We review evidence supporting the affordance management approach to sexual prejudice by discussing how each fundamental motive should activate the relevant preexisting sexual orientation affordance stereotype, which should then trigger specific emotional and behavioral reactions to act upon these perceived affordances (see Figure 1). We organize our review based on the fundamental human motives of mating, seeking and maintaining

³ Importantly, this suggests that although "obstacles to one's goals" aptly characterizes antecedents to anger, these obstacles nonetheless encompass a broad variety of behaviors, each deserving their own specific level of analysis.

⁴ It is important to note that stereotypical perceptions can be conscious or unconscious and exist at a simple associative level. According to our model, stereotypes associated with target groups become activated when situationally associated with the respective fundamental motive.

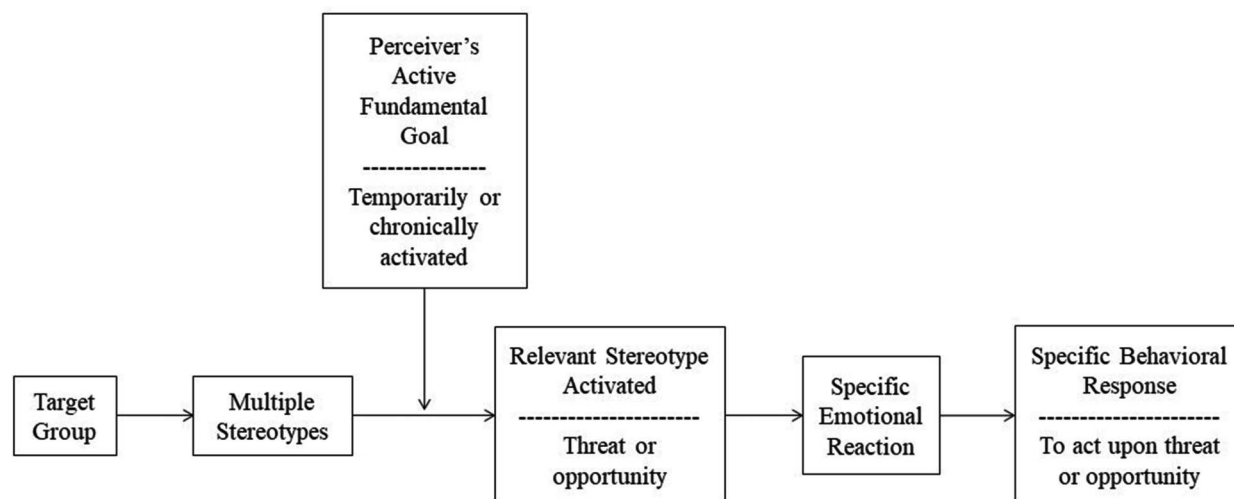


Figure 1. The affordance management approach to prejudice in which multiple stereotypes exist for a particular target group. A perceiver's fundamental goal—whether chronically or temporarily activated—dictates which stereotyped affordance is deemed relevant, which elicits specific emotional reactions that engage specific behavioral responses to adaptively manage the threat or opportunity.

status, parenting, avoiding pathogens, and facilitating ingroup functioning, because these domains are particularly relevant for stereotypes currently attributed to LGBs. Table 2 summarizes a set of example predictions applied to prejudices and discrimination against LGBs based on stereotypes connoting affordances available in the current literature. Although sexual prejudice can include prejudices and discrimination toward heterosexuals and those held by LGBs, given the cultural importance and effects of heterosexuals' prejudices and discrimination toward LGBs, we streamline this article to focus primarily on understanding heterosexuals' sexual prejudices toward LGBs.

Mating

Our current psychological mating system evolved to engage behaviors designed to foster successful reproduction with desirable mates by effectively responding to mating threats and opportunities. Successful mating includes pursuing desirable mates, beating out competitors, avoiding undesirable partners (e.g., those whose sexual, relationship, and parenting interests diverge from the perceiver's), and avoiding unwanted mating (i.e., sexual coercion and rape).

Given the important benefits of mating, the adaptive costs of a poorly calibrated mating system are steep, although the costs differ for men and women. Women bear a greater potential physical burden of sexual activity—for example, pregnancy, which minimally results in gestation and lactation—relative to men's minimal obligatory investment of sperm (Trivers, 1972). Further, the shorter fertile window imposed on women by menopause limits women's reproductive ability relative to men's, and most women birth between zero and four children, whereas men technically bear no biological limit (Trivers, 1972). Given these potential costs, women tend to choose their mating partners carefully and mate largely (though not solely) in the context of long-term committed relationships (Schmitt, Shackelford, & Buss, 2001). Therefore, for

women, reproducing with a poor partner—one who provides a poor genetic contribution or fails to invest parenting energy and resources in the relationship and child (Haselton & Buss, 2000)—or not reproducing at all pose large costs. In terms of fitness, men potentially gain more from pursuing an unrestricted mating strategy in which they mate with many women. Because some men mate successfully with many partners, other men risk having no partners or limited mating opportunities. Therefore, for men, missing a mating opportunity arguably poses the greatest mating cost (Haselton & Buss, 2000).

The activation of mating goals should cause individuals to strategically respond emotionally and behaviorally toward those perceived to pose threats and opportunities related to mating. In conjunction with their sex, a target's sexual orientation label provides explicit information about their mating interests. Accordingly, targets of differing sexual orientations and sexes should be perceived to pose mating opportunities or threats to the extent that their mating interests are perceived as compatible or incompatible with the perceiver's.

Unwanted sexual interest threats. Unwanted sexual interest could facilitate mating with an undesired partner (i.e., sexual coercion) or undermine the perception of one's sexual orientation as heterosexual or gender-normative when the target is of the same sex as the perceiver (i.e., stigma by association; Neuberg, Smith, Hoffman, & Russell, 1994). Mating with an undesirable person could result in reproducing with someone of poor genetic quality or a poor long-term partner or parent. It could also cost other mating opportunities, because one spent resources (e.g., time and energy spent during mate seeking or mating as well as long-term parental investment) on an undesirable partner or because better potential partners lose interest as a result of the previous mate (e.g., because the previous mate degraded one's mate value).

Prediction 1: If mating concerns—particularly mating autonomy concerns—are active, and perceptions exist suggesting

Table 1

General Predictions From the Affordance Management Approach to Prejudice: Salience of Fundamental Goals Predicts Activation of Relevant Stereotyped Affordances That Predict Specific Affective Prejudices and Behavioral Responses

Fundamental goal	Relevant stereotyped affordance	Affective prejudices	Behavioral reactions
Mating	Sexual coercion threat	Fear, anxiety	Avoidance, escape
	Intrasexual competition threat	Anger	Aggression to beat competitor
	Mating opportunity	Positivity, lust	Mating approach
Seeking and maintaining status	Undermine status	Anxiety	Avoidance to minimize likelihood of loss of status
		Anger	Aggression to regain status
Parenting and child development	Influence children's development	Moral disgust	Avoidance to prevent influence
		Anger	Aggression to block or stop influence
	Harm children (e.g., physically or sexually)	Anxiety, fear, moral disgust	Avoidance to prevent harm
Avoiding pathogens	Threat to health	Anger	Aggression to stop harm
		Physical disgust	Avoidance to prevent contamination
Social affiliation and ingroup cohesion	Threats to ingroup cohesion	Moral disgust	Avoidance to prevent ingroup contamination
		Anger	Aggression to stop influence
	Threats to ingroup resources	Anger	Aggression to prevent resource loss or seize resources
Physical safety	Friendship opportunity	Positivity	Affiliative approach
	Threats to physical safety	Fear	Avoidance, escape

that certain sexual orientation groups pose unwanted sexual interest threats, then mating concerns should activate such perceptions, which should elicit fear and anxiety toward those groups and motivate avoidance of such targets to prevent unwanted mating.

Prediction 2: (a) Active mating goals should activate preexisting perceptions of unwanted sexual interest threats, which should activate concerns of stigma-by-association from same-sex LGB targets (to the extent unwanted sexual interest is perceived as degrading one's mate value and/or costing one's future mating opportunities), which should elicit anxiety and facilitate avoidance to evade stigmatization, and, (b) if stigmatized, elicit anger and facilitate aggression to remove the stigma. (Given its relationship to maintaining social status, we discuss support for Prediction 2 in the Seeking and Maintaining Status section.)

Some heterosexuals believe certain sexual orientation groups pose unwanted sexual interest threats. For example, McDonald, Donnellan, Lang, and Nikolajuk (2014a) asked heterosexual U.S. male undergraduates to imagine a positive or negative interaction with a gay man. Perceptions of unwanted sexual interest emerged as the most frequent type of negative interaction described, with 42% of participants describing such situations (McDonald, Donnellan, Lang, & Nikolajuk, 2014b). Likewise, Eliason, Donelan, and Randall (1992) asked U.S. female nursing students open-ended questions regarding their thoughts about lesbians. Again, perceptions of unwanted sexual interest arose as the most prevalent theme—that lesbians seduce and make sexual advances toward heterosexual women, and therefore heterosexual women should be wary of and keep their distance from lesbians—generated by 38% of the sample. Pirlott and Neuberg (2014, Studies 1 and 3) indirectly assessed perceptions of unwanted sexual interest posed by heterosexual, bisexual, and gay/lesbian male and female targets. They asked heterosexual U.S. college students to rate their own sexual interests if single and approached by an “attractive, intel-

ligent, funny, desirable” member of each sexual orientation group, and to rate their perception of each of groups' general sexual interest in heterosexual people of the perceiver's sex. They subtracted the difference to calculate unwanted sexual interest for each group. Across both studies, heterosexual women perceived bisexual men, bisexual women, and lesbians to pose strong threats of unwanted sexual interest, yet perceived minimal threats from heterosexual men (mutual sexual interest targets), or gay men and heterosexual women (mutual sexual disinterest targets). Heterosexual men perceived strong threats of unwanted sexual interest from gay and bisexual men but minimal threats from heterosexual and bisexual women (mutual sexual interest targets), lesbians (unreciprocated sexual interest targets), or heterosexual men (mutual sexual disinterest targets; $d = 1.71$, comparing perceptions of unwanted sexual interest from unwanted sexual interest targets with unrequited and mutual sexual interest targets, aggregated across studies and across heterosexual men and women).

Concerns regarding unwanted sexual interest might explain existing patterns of anxiety and discomfort toward LGBs. In a 1997 national survey, a random sample of U.S. adults reported their comfort (which inversely indicates anxiety) toward gay men and lesbians. Consistent with patterns of perceptions of unwanted sexual interest, more heterosexual women reported being somewhat or very comfortable with gay men (77%) than lesbians (59%; estimated⁵ $d = .51$), whereas more heterosexual men were somewhat or very comfortable with lesbians (68%) than gay men (56%; estimated $d = .32$; Herek, 2000; see also Polimeni, Hardie, & Buzwell, 2000). Yost and Thomas (2012) measured heterosexual U.S. college students' prejudices toward bisexual men and women using a questionnaire assessing anxiety (among other beliefs and behavioral intentions) and found that heterosexual men rated bisexual men less favorably than bisexual women ($d = .86$), but

⁵ Calculated by converting the proportions of women and men reporting comfort with gay men versus lesbians from Table 3 (p. 259) to z scores.

Table 2
Predictions From the Affordance Management Approach to Prejudice Applied to Sexual Prejudice

Fundamental goal	Predictions	Relevant stereotyped affordance	Perceiver × Target interaction	Affective prejudices	Behavioral reactions
Mating	Prediction 1	Unwanted sexual interest underlying threat of sexual coercion	For heterosexual women: bisexual men, bisexual women, lesbians For heterosexual men: gay and bisexual men	Fear, anxiety	Avoidance to minimize sexual coercion threat
	Prediction 2a	Unwanted sexual interest underlying threat of stigma by association	For heterosexual women: bisexual women and lesbians For heterosexual men: gay and bisexual men	Anxiety	Avoidance to minimize likelihood of stigmatization
	Prediction 2b	Unwanted sexual interest underlying threat of stigma by association	For heterosexual women: bisexual women and lesbians For heterosexual men: gay and bisexual men	If stigmatized, anger	If stigmatized, aggression to remove stigma
Seeking and maintaining status	Prediction 3	Mating opportunity	For heterosexual women: desirable heterosexual men For heterosexual men: desirable women, regardless of orientation	Positivity, lust	Mating approach
	Prediction 4a	Undermine status via stigma by association	For heterosexual women: bisexual women and lesbians For heterosexual men: gay and bisexual men	Anxiety	Avoidance to minimize likelihood of stigmatization
	Prediction 4b	Undermine status via stigma by association	For heterosexual women: bisexual women and lesbians For heterosexual men: gay and bisexual men	If stigmatized, anger	If stigmatized, aggression to remove stigma
Parenting and child development	Prediction 5	Influence children's normative gender role and sexual orientation development Sexually harm children	Gay and bisexual men and women, especially individuals of the same sex as the child Gay and bisexual men and women, especially individuals of the same sex as the child	Moral disgust Anger	Avoidance to prevent influence Aggression to stop influence
	Prediction 6	Threat to health	Gay and bisexual men	Moral disgust Anger	Avoidance to prevent influence Aggression to stop influence
Avoiding pathogens	Prediction 7	Threats to ingroup values	Gay and bisexual men and women	Physical disgust	Avoidance to prevent contamination
	Prediction 8	Threats to religious ingroup values	Gay and bisexual men and women	Moral disgust Anger	Avoidance to prevent ingroup contamination Aggression to stop social influence
Social affiliation and ingroup cohesion	Prediction 9	Friendship opportunity	For heterosexual women: heterosexual women and gay men For heterosexual men: heterosexual men	Moral disgust Anger	Avoidance to prevent ingroup contamination Aggression to stop social influence
	Prediction 9	Friendship opportunity	For heterosexual women: heterosexual women and gay men For heterosexual men: heterosexual men	Positivity	Affiliative approach

heterosexual women evaluated bisexual men and women equally (Yost & Thomas, 2012). Overall, this research suggests that targets perceived to direct unwanted sexual interest were also the targets toward whom heterosexual men and women report feeling less comfortable.

Mediation analyses likewise suggest that perceptions of unwanted sexual interest explain some of heterosexuals' prejudices toward certain LGB targets. Pirlott and Neuberg (2014, Study 3) assessed heterosexual U.S. college students' perceptions of unwanted sexual interest and their dislike and negativity toward each sexual orientation group and found patterns of dislike to map onto targets perceived to pose threats of unwanted sexual interest. Women directed elevated negativity toward bisexuals and lesbians (relative to heterosexuals and gay men) and perceived elevated unwanted sexual interest from bisexuals and lesbians relative to heterosexuals and gay men. Men felt elevated negativity toward gay and bisexual men relative to heterosexuals, bisexual women, and lesbians, and likewise perceived elevated unwanted sexual interest from gay and bisexual men (relative to heterosexuals, bisexual women, and lesbians). Mediation analyses demonstrated that perceptions of unwanted sexual interest statistically mediated the relationship between targets perceived to pose unwanted sexual interest threat (relative to targets perceived to pose mutual or unreciprocated sexual interest) and negativity.

Further research demonstrates that some heterosexuals avoid same-sex gay or lesbian individuals in intimate situations. Plant et al. (2014, Study 2) randomly assigned heterosexual U.S. college students to imagine sharing an apartment with a gay/lesbian or heterosexual same-sex roommate, and participants reported an increased likelihood of privately avoiding (i.e., in the apartment) a same-sex gay/lesbian roommate relative to a heterosexual roommate (estimated⁶ $d = 1.12$). In addition, playing a sport creates the potential for intimate situations (e.g., in locker rooms), and in a study of current and former U.S. college athletes, women reported less willingness to participate on a sports team with a lesbian coach over a gay coach (estimated⁷ $d = .32$), whereas men reported less willingness to participate with a gay coach over a lesbian coach (estimated $d = .66$; Sartore & Cunningham, 2009, Study 1). That many countries prohibit LGBs from serving in the military provides further evidence linking perceptions of unwanted sexual interest in potentially intimate settings to policy-level discrimination. In all, these findings suggest that heterosexuals may avoid same-sex gay/lesbian individuals more than same-sex heterosexual or opposite-sex gay/lesbian individuals in intimate situations, perhaps to avoid threats of unwanted sexual interest.

One study experimentally manipulated mating motives among heterosexual U.S. college students and measured desires to avoid a same-sex gay/lesbian or heterosexual roommate in private situations (Plant et al., 2014, Study 2), but the activation of mating goals failed to elevate intentions to avoid unwanted sexual interest targets in private. However, the experimental manipulation asked participants to write about a time in which they felt intense sexual desire for another person or a time in which they felt very happy. Thus, this manipulation might have activated a motive to seek mating opportunities, which likely differs from a motive to avoid mating autonomy threats. Future research should specifically address whether activating mating autonomy threats elevates concerns of avoiding unwanted sexual interest targets.

In sum, we predicted that salient mating concerns activate preexisting perceptions that some sexual orientation targets pose unwanted sexual interest threats, which elicit fear and anxiety toward, and facilitates avoidance of, targets perceived to pose unwanted sexual interest threats. The existing research supports those predictions: Enhanced anxiety, discomfort, and negativity emerge toward targets perceived to pose threats of unwanted sexual interest and avoidance of such targets emerges in potentially intimate situations. Future research could further test these predictions by examining individual differences in, and experimental activations of, mating autonomy concerns to determine whether they activate perceptions that specific sexual orientation groups pose threats of unwanted sexual interest, elevate anxiety and fear, and engage avoidance responses to reduce unwanted sexual interest, and by contrasting findings for all sexual orientation target groups.

Mating opportunities. Missing a desirable mating opportunity imposes potential costs for both men and women. The benefits afforded to men by seeking many mating opportunities exceed those of women, given men's lesser minimal parental investment (Trivers, 1972), and men, more than women, tend to condone and pursue short-term and unrestricted mating strategies (Petersen & Hyde, 2010). Given the greater costs of missed mating opportunities, heterosexual men might be more likely to show mating interest in desirable women of all sexual orientations, whereas heterosexual women might show more selectivity and be less interested in mating with gay and bisexual men, who they might perceive as making poor long-term partners and/or parents.

Prediction 3: If mating goals are active and perceptions exist suggesting that certain sexual orientation groups pose desirable mating opportunities, then these mating goals should activate such mating affordance perceptions, which should elicit positivity and lust and motivate approach toward desirable targets to facilitate mating.

Indeed, men and women show differential selectivity when considering mates from various sexual orientation groups. As previously noted, Pirlott and Neuberg (2014, Studies 1 and 3) asked heterosexual U.S. college students their sexual and relationship interests toward each sexual orientation group. Men in both studies directed greater sexual interest toward women across sexual orientations relative to men across sexual orientations (comparing across aggregated targets and across both studies, $d = 2.26$), whereas women directed greater sexual interest primarily toward heterosexual men relative to bisexual men, gay men, heterosexual women, bisexual women, and lesbians ($d = 2.75$).

Existing research suggests that some heterosexuals view targets perceived to pose mating opportunities more positively than non-mating opportunity targets. Operationalizing positivity as the opposite of negativity and dislike, Pirlott and Neuberg (2014) found that heterosexual U.S. college students viewed positively targets they also perceived as potential mating partners—women viewed heterosexual men positively (relative to bisexuals and lesbians), and men viewed all female targets positively (relative to gay and

⁶ Calculated using t value and degrees of freedom (df), p. 638.

⁷ Calculated using M , SD of each target rating and r between target ratings from Table 1, p. 104.

bisexual men), although heterosexual women also viewed heterosexual women and gay men positively, and heterosexual men also viewed heterosexual men positively (comparing mating-interest targets relative to non-mating-interest targets, $d = .42$, aggregated across male and female perceivers).

The available evidence, though limited, supports our prediction: Perceptions that some sexual orientation groups pose mating opportunities elicit positivity toward such targets. Future research could further test predictions to demonstrate whether chronic and temporary activation of mating goals activate perceptions that certain sexual orientation groups provide mating opportunities and increase positivity and mating approach behaviors toward specific targets of interest.

Seeking and Maintaining Status

Achieving favorable social status provides increased access to valuable resources and social rewards, which directly benefit evolutionary goals such as survival, mating, and promoting offspring survival (Kenrick, Griskevicius, et al., 2010; Kenrick, Neuberg, et al., 2010). Anderson, Hildreth, and Howland's (2015) literature review suggests that the desire for status is fundamental and desired equally by both men and women, although the benefits of status might differ for men and women in mating domains, given that women more than men value status-related traits in a mate (e.g., Buss, 1989).

How do different sexual orientation groups affect one's status? Simply interacting with another person potentially causes others to characterize one as similar to their companion, despite salient differences, especially if the target's companion belongs to a stigmatized group, that is, *stigma by association*—the process by which associating with members of a stigmatized group similarly stigmatizes “normal” individuals (Neuberg et al., 1994). Stereotype content suggests some believe bisexual and gay/lesbian men and women violate masculine-feminine gender roles (Kite & Deaux, 1987); therefore, associating with LGBs could stigmatize heterosexuals as gender non-normative or as LGBs.

Evidence suggests that some individuals infer one's sexual orientation based on the sexual orientation of one's company. For example, Sigelman, Howell, Cornell, Cutright, and Dewey (1991) randomly assigned U.S. college men to read a vignette about a male college student and manipulated the target's association with a gay man. In the vignette, researchers either explicitly labeled the target's sexual orientation as gay or as unspecified, and if unspecified, researchers manipulated details about his roommate: The target had a heterosexual roommate, was assigned a gay roommate, or voluntarily chose a gay roommate. They then measured evaluations of the target, including perceived stereotypically gay personality traits (unaggressive, bad leader, gentle, weak, feminine, lonely, emotional, passive, unconventional, sensitive), perceived likelihood of being gay, and liking (favorability, desires to be friends, and willingness to live on the same dorm floor). They also measured individual differences in prejudice against gay men based on qualitative responses to the question “How do you feel about gays?”; researchers coded men reporting only negative responses as intolerant (47% of men) and men who gave positive or mixed reactions as tolerant (53%). Intolerant (but not tolerant) men assumed the target with an unspecified sexual orientation who voluntarily chose a gay roommate was just as likely to be gay as

the target explicitly labeled as gay, and more likely to be gay than targets assigned to a gay roommate or with a heterosexual roommate (all d effect size estimates = .79 for significant effects⁸). Further, intolerant men perceived the target who roomed with a gay man (regardless of choice) similarly to the gay target in terms of gay stereotype attributes and higher on the gay stereotype traits than the target explicitly labeled as heterosexual. This suggests that, for some perceivers, gay men pose a gay sexual orientation and “gay personality” stigma-by-association threat to other men.

Individuals stigmatized by association experience similar prejudices and discrimination as their stigmatized counterparts. Sigelman et al. (1991) found that intolerant men disliked and were less interested in being friends with and living on the same floor as the target who chose to live with a gay man—to the same extent as the gay target and more than the target with the heterosexual roommate. In another study, U.S. college men reported feeling less comfortable interacting with (estimated⁹ $d = .48$) and socially distanced themselves from a target by rating themselves as less similar to the target (estimated $d = .42$) if he was interacting with a gay friend relative to a heterosexual friend (Neuberg et al., 1994, Study 1). These findings suggest that, among men, interacting with a same-sex gay target stigmatizes one as more likely to be gay and those stigmatized as gay experience similarly elevated prejudices as LGBs.

Prediction 4: (a) If status concerns are active, and perceptions exist suggesting that same-sex LGBs pose stigma-by-association threats, then status concerns should activate perceptions of stigma-by-association threats, which should elicit anxiety and motivate avoidance of stigmatizing targets to minimize associated stigma. As previously noted, (2a): Active mating goals should activate preexisting perceptions that same-sex LGBs pose stigma-by-association threats, which should elicit anxiety and motivate avoidance of such targets to minimize associated stigma. (2b & 4b): Stigmatization as LGB or gender non-normative should increase anger and direct aggression toward the associated target to remove the stigma.

Indeed, some heterosexuals anticipate stigma-by-association threats from associating with LGBs. For example, a sample of heterosexual U.S. college men and women reported elevated concerns that associating with a gay/lesbian person (gender not specified) would cause others to view oneself as gay (testing relative to low concerns, i.e., against a score of 1: estimated $d = 1.60$ for men and .74 for women; Buck, Plant, Ratcliff, Zielaskowski, & Boerner, 2013, Study 2a, Table 1, p. 947).

Patterns of anxiety toward, and avoidance of, certain sexual orientation groups appear to map onto same-sex targets who could stigmatize the perceiver. As previously mentioned, heterosexuals, on average, report elevated anxiety toward same-sex gay/lesbian targets relative to opposite-sex gay/lesbian targets (Herek, 2000; Polimeni et al., 2000), and heterosexual men reported greater anxiety toward bisexual men than bisexual women, although het-

⁸ Calculated using the sample size of $n = 54$ intolerant men, presuming equal sample sizes of $n = 13.5$ per condition, and the pairwise comparison p values of $p = .05$ from Table 1, p. 52.

⁹ Calculated using the sample size of $n = 92$ men, presuming equal sample sizes of $n = 18.4$ per condition, using F values from p. 202.

erosexual women reported equal anxiety toward both bisexual men and women (Yost & Thomas, 2012). In addition, heterosexual U.S. college students reported elevated intentions to avoid a same-sex gay/lesbian target more than an opposite-sex gay/lesbian target (estimated¹⁰ $d = 1.49$ for heterosexual men, estimated $d = .79$ for heterosexual women; LaMar & Kite, 1998). Some heterosexual men and women also psychologically distance themselves more from a same-sex gay/lesbian target than a heterosexual target. For example, heterosexual U.S. undergraduate men rated themselves on a series of adjectives as less similar to a gay male partner than a heterosexual male partner (estimated¹¹ $d = .63$), and reported having less in common with the gay male partner relative to the heterosexual partner (estimated $d = .89$; Talley & Bettencourt, 2008, Study 1). Likewise, in a panel discussion including a heterosexual or lesbian female confederate, heterosexual U.S. college women rated themselves as less similar to the lesbian than the heterosexual confederate (estimated¹² $d = .67$), and highly sexist women publicly responded in ways that more frequently differed from the lesbian confederate (61% of the time) relative to the heterosexual confederate (49% of the time; estimated¹³ $d = .30$) and reported being less willing to be friends with the lesbian confederate relative to the heterosexual confederate (estimated¹⁴ $d = .55$; Swim, Ferguson, & Hyers, 1999). These findings suggest that some heterosexuals feel anxiety toward, and socially distance themselves from, same-sex gay/lesbian individuals, perhaps to avoid stigmatization.

Perceptions of stigma by associating with LGBs predict some heterosexuals' anxiety toward and avoidance of same-sex LGBs. Buck et al. (2013) found that heterosexual U.S. college students' anticipation of stigmatization from associating with same-sex gay men/lesbians predicted their anxiety toward interacting with a same-sex gay man or lesbian, including self-reported anticipated anxiety ($\beta = .55$, Study 3) and behavioral displays of anxiety (filming a video greeting for a same-sex gay/lesbian work partner; $\beta = .41$) compared with a heterosexual partner ($\beta = -.35$, Study 4). Furthermore, among heterosexual U.S. college students, the concern of stigma by association from same-sex gay/lesbian targets predicted increased desire to avoid same-sex gay/lesbian individuals, including avoiding socializing with an imagined same-sex gay/lesbian roommate ($\beta = .65$, Study 2b), avoiding future interactions with a same-sex gay/lesbian individual ($\beta = .42$, Study 3), and avoiding working together on a group project with a same-sex gay/lesbian individual ($\beta = .84$) but not a same-sex heterosexual individual ($\beta = .17$, Study 2a). Finally, anxiety statistically mediated the relationship between concerns of stigmatization and desires to avoid same-sex gay/lesbian individuals (Study 3). In all, evidence provided by Buck et al. (2013) demonstrates that some heterosexuals perceive stigma by association from interactions with same-sex gay/lesbian individuals, which predicts their anxiety and desires to publicly avoid interacting with a same-sex gay/lesbian individual.

Maintaining status motives and stigma by association. Beyond perceptions of stigmatization, research supports predictions that experimentally activating stigmatization concerns causes some heterosexual U.S. college students to feel anxiety about and to publicly avoid interacting with a same-sex gay/lesbian individual (Buck et al., 2013, Study 5). Experimentally activating concerns of stigma by association—by creating an LGB supportive poster and randomly assigning participants to either sign one's

name (the stigmatizing condition) or not—increased heterosexual college students' self-reported anxiety ($d = 1.03$), desires to avoid interacting with a gay man ($d = .84$), physical avoidance from a gay man (i.e., moving one's chair away, $d = .57$), public avoidance of LGB people (i.e., not supporting public gay rights causes like attending a gay pride parade, estimated¹⁵ $d = .59$), and refusal to sign a petition for LGBT rights (estimated¹⁶ $d = .64$). In all, these findings demonstrate that stigma-by-association threats attributed to LGBs increase anxiety and avoidance by heterosexuals, perhaps as strategies to minimize potential stigmatization.

In sum, we predicted that when status concerns are active, sexual orientation groups perceived to pose stigma-by-association threats should elicit anxiety and motivate avoidance of the targets to minimize stigmatization. Results demonstrated that some heterosexuals perceive LGB targets to pose stigma-by-association threats, and the salience of this perception (activated chronically or experimentally) predicted elevated anxiety toward and avoidance of these targets. Whether similar processes occur for same-sex bisexuals warrants additional research.

Mating motives and stigma by association. We also hypothesized (Prediction 2a) that, given the mating costs of being stigmatized as gay/bisexual or gender non-normative, salient mating goals should activate the preexisting perception that some LGB targets pose stigma-by-association threats, thus eliciting anxiety and motivating avoidance of same-sex LGBs to avoid stigmatization.

Indeed, mating goals increase some heterosexuals' concerns of stigmatization as gay/lesbian. Plant et al. (2014, Study 3) activated mating goals by showing heterosexual U.S. college students photos of members of the opposite sex who were attractive (mating condition) or unattractive (control condition) and then randomly assigned participants to interact with a same-sex heterosexual or gay/lesbian partner. As predicted, activating mating goals elevated stigma-by-association concerns (e.g., "I am concerned that my interaction partner will think that I am gay/lesbian"), relative to the control condition, for participants interacting with a same-sex gay/lesbian target (estimated¹⁷ $d = .72$) but not a same-sex heterosexual target (estimated $d = .09$). These findings confirm predictions that mating motives activate concerns of stigmatization by associating with a same-sex gay/lesbian individual.

Mating goals also increase some heterosexuals' negativity toward gay/lesbian individuals. Plant et al. (2014, Study 1) activated mating goals by asking heterosexual U.S. college students to write about a time they felt sexual arousal or a time they felt very happy, and then measured negativity and positivity toward gay men and lesbians and individual differences in concerns of stigma by association with a gay/lesbian person. Although the researchers did not report the main effect of mating motive activation on negativity, their depicted results (Figure 1, p. 636) suggest that activating mating motives elevated negativity toward gay men and lesbians,

¹⁰ Calculated using F values from p. 192 and M s from Table 3, p. 193.

¹¹ Calculated using M , SD from Table 2, p. 660, presuming equal sample sizes of $n = 45$ per condition.

¹² Calculated using the t value from p. 64.

¹³ Calculated by converting proportions to z scores.

¹⁴ Calculated using the t value from p. 64.

¹⁵ Calculated using M , SD from p. 954.

¹⁶ Estimated by converting proportions from p. 954 to z scores.

¹⁷ Calculated by using t value and df from p. 641.

especially among those with high stigma-by-association concerns. Mating motives also appear to have heightened the relationship between stigma-by-association concerns and negativity toward gay men and lesbians (mating condition, $\beta = -.80$, vs. control condition, $\beta = -.35$), thus suggesting that mating motives activate concerns of stigmatization by associating with LGB, which predicts negativity toward LGB

Finally, Plant et al. (2014, Study 3; see also Study 2) demonstrated that activating mating motivations (by showing photos of attractive vs. unattractive opposite-sex targets) increased heterosexual U.S. college students' desires to avoid interacting with a same-sex gay/lesbian target (estimated¹⁸ $d = .59$), but less so toward a same-sex heterosexual target ($d = .31$), and stigma-by-association concerns mediated the effect of mating motivations on desires to avoid interacting with a same-sex gay/lesbian partner. These findings suggest that for some heterosexuals, mating goals increase desires to publicly avoid same-sex LGB targets, likely to minimize potential stigmatization.

In sum, we predicted that salient mating goals should activate preexisting perceptions that certain sexual orientation groups pose stigma-by-association threats, and that these concerns increase anxiety and avoidance of such targets. The existing research supports these predictions: For some heterosexuals, experimentally activating mating motivations increased concern for stigma by association when associating with a same-sex gay/lesbian individual, enhanced negativity toward same-sex gay men and lesbians, and elevated desires to publicly avoid interacting with same-sex gay men and lesbians, likely to minimize stigmatization. Additional research should examine whether the same effects occur for same-sex bisexual targets.

Anger and aggression following stigmatization. To our knowledge, no research measured affective or behavioral reactions toward the responsible stigmatizing individual following stigmatization, although a large body of literature documents aggression against LGB. Aggressing against same-sex LGBs as a way of reasserting one's normative gender identity and heterosexuality might help explain the high prevalence of aggression against LGBs. A meta-analysis of victimization indicated that, relative to heterosexuals, LGBs were more likely to experience general aggression—including threats, verbal harassment, being followed, physical assault, robberies, sexual harassment, sexual assault, property violence, workplace victimization, school victimization, general victimization—and aggression from family, including verbal harassment, physical assault, and sexual assault (d s ranging from .11 to .58; Katz-Wise & Hyde, 2012). In addition, LGBs disproportionately experience hate crimes compared with heterosexuals. Of the 6,885 hate crimes reported by the U.S. Federal Bureau of Investigation in 2015, 18% of victims were targeted for a nonheterosexual sexual orientation (Federal Bureau of Investigation, 2016), despite the estimated prevalence of a nonheterosexual sexual orientation only being around 3–4% (e.g., Gates & Newport, 2012). In addition, comparing physically aggressive hate crimes based on sexual orientation with those based on race and religion reveal a greater occurrence of aggressive hate crimes against sexual orientation minorities compared with other groups—murder and simple and aggravated assault comprised 56% of hate crimes based on nonheterosexual sexual orientation versus 38% and 19% based on race and religion, respectively (Federal Bureau of Investigation, 2016).

Moreover, research demonstrates a link between aggression against LGBs and perceived threats of unwanted sexual interest, which, as previously noted (Prediction 2b), can pose stigma-by-association threats. Franklin (2000) surveyed a diverse group of community college students and found that 10% admitted to physically assaulting or threatening LGBs and 24% admitted to verbally harassing LGBs. Among physically aggressive attackers, one reason included “sexual identity display,” in that aggressors used physical attacks to reassert their heterosexual sexual orientation. In addition, the phenomenon of “gay panic defense”—violence in an act of purported temporary insanity induced by unwanted same-sex sexual advances—used as a legal defense justifying hate crime attacks against LGBs suggests the real-world significance of the effects of perceived unwanted sexual interest (Chuang & Addington, 1988).

Research examining reactions to stigmatization as LGB or gender non-normative enables an indirect examination of the aftereffects of stigmatization (though not necessarily because of an association with a same-sex LGBs). Experimental evidence demonstrates that stigmatizing heterosexual men as gender non-normative elevates their prejudices against gay men. Rivera (2007, Study 2) randomly presented heterosexual U.S. college men false feedback about their masculinity (high or low in masculinity compared with most college-aged men, or received no feedback) based on their responses to a gender roles scale. Participants then reported explicit affective prejudices toward heterosexual and gay men and women (measured with a warm–cold feeling thermometer and the Attitudes Toward Lesbians and Gay Men [ATLG] scale; Herek, 1988, 1994) and completed an implicit measure of prejudice against gay men (the Implicit Association Test, i.e., IAT, comparing gay male couples with heterosexual couples paired with good-bad words; Greenwald, McGhee, & Schwartz, 1998). Stigmatizing heterosexual men as feminine (relative to control¹⁹) increased reported negativity toward gay men (estimated²⁰ $d = .54$) but less so toward lesbians (estimated $d = .24$), heterosexual men (estimated $d = .05$), and heterosexual women (estimated $d = .01$); increased general negative attitudes toward gay men (estimated $d = .34$) but less so toward lesbians (estimated $d = .15$); and increased implicit negativity toward gay men relative to heterosexuals among men who completed the IAT before the explicit measures (estimated $d = .54$). In all, these findings suggest that stigmatizing some heterosexual men as gender non-normative elevates negativity against gay men, perhaps to socially distance themselves to remove the stigma and reassert their masculinity.

Beyond negative prejudices, experimental research also provides evidence that some heterosexual men aggress against gay men after stigmatization as gender non-normative. For example, stigmatizing heterosexual U.S. college men as feminine (saying their masculinity score was lower than the average of a national

¹⁸ Calculated using t values and df from p. 641.

¹⁹ Interestingly, enhancing masculinity relative to no information control also increased negative affect toward gay men, but not lesbians or heterosexuals, and increased general negative prejudices toward gay men but not lesbians (Rivera, 2007). This could be as a result of the general activation of masculine gender roles and subsequent aggression against masculine gender role violators.

²⁰ Calculated using t values reported on pp. 28–32 and a presumed sample size of $n = 98$ for the two-condition contrast.

sample of college men or providing no feedback) increased behavioral aggression (i.e., noise blast intensity) toward a gay male interaction partner (estimated²¹ $d = .92$) but not a heterosexual male interaction partner (estimated $d = .05$; Talley & Bettencourt, 2008, Study 2). This suggests that heterosexual men might use aggression against gay men perhaps to remove the associated feminine and/or gay stigma by association.

In sum, we predicted that experiencing stigma by association elicits anger and facilitates aggression toward stigmatizing agents to remove the stigma (Predictions 2b and 4b). The existing research offers support for predictions (though some of these predictions have only been tested indirectly) that stigmatizing men as feminine increases negativity and aggression toward gay men. Future research would benefit from testing whether anger and aggression arise toward targets perceived to pose stigma-by-association threats to remove the stigma, whether these responses occur for heterosexual women, and should compare reactions with all sexual orientation targets.

Parenting and Child Development

Because the reproductive success of one's children extends one's own reproductive success (i.e., inclusive fitness; Hamilton, 1964), parents might be concerned with their children's development to ensure their offspring adopt behaviors conducive to successful reproduction. Non-normative gender and nonheterosexual development could undermine reproductive success to the extent that gender non-normative or nonheterosexual people are less likely to reproduce than gender "normative" or heterosexual people are. Regardless of whether socialization practices actually influence gender "normative" behavior and sexual orientation, parents might nonetheless be particularly sensitive to agents perceived to influence their children's gender and sexual orientation development (Gallup & Suarez, 1983; see Filip-Crawford & Neuberger, 2015, for a broader discussion of socialization concerns).

Prediction 5: If parenting concerns are active, and perceptions exist suggesting that LGBs influence children's gender and sexual orientation development and/or potentially molest children, then these parenting concerns should activate such threat perceptions, which should elicit moral disgust and anxiety and motivate avoidance of the target to minimize influence, and should elicit anger and motivate aggression to remove the socializing agent; these effects may be stronger toward LGBs of the same sex as the child.

Indeed, some heterosexuals believe LGBs pose a threat to children; for example, that LGBs lure others, particularly children, into a gay lifestyle (Herek, 1991). The intensity of this perceived threat launched a gay rights opposition movement in the United States—the 1970s Save Our Children campaign, with the slogan "homosexuals cannot reproduce, so they must recruit" (Bryant, 1977). This perceived threat persists, with some heterosexuals believing that LGBs influence children's gender and sexual orientation development by making them more likely to become gender-inverse or nonheterosexual. For example, Filip-Crawford (2016, Study 1) found that U.S. adults believed that mere contact with a gay man or lesbian was more likely to change a person's sexual orientation to become gay/lesbian than contact with a heterosexual man or woman (estimated²² $d = .10$), and Pirlott (2012) found that het-

erosexual U.S. college students perceived LGBs as more likely to socialize children to become LGBs and gender non-normative relative to heterosexual men and women (comparing heterosexual with LGB targets, $d = .50$). In addition, McLeod, Crawford, and Zechmeister (1999) found that heterosexual U.S. college students perceived an adopted son of a gay couple (relative to a heterosexual couple) as more likely to experience greater levels of sexual orientation confusion (estimated²³ $d = .75$) and gender identity confusion (estimated $d = .43$), as well as more likely to possess behavioral problems attributed to his parents (estimated $d = .36$). These concerns seem specific to socializing children into normative gender and sexual orientation roles as opposed to broader parenting abilities of LGB. Specifically, McLeod et al. (1999) also found that heterosexual U.S. undergraduates imagined a gay father as parenting better than a heterosexual father in terms of spending more quality time with his son, and as more loving, nurturing, and responsible (estimated d s range from .34 to .67), and not significantly different from a heterosexual mother's parenting abilities.

Beyond supposed socialization to "become" gay, some people believe LGBs molest children, although support for this perception is mixed, which may reflect changing cultural beliefs. For example, in a representative sample of heterosexual U.S. adults, 19% of men and 10% of women indicated beliefs that "about half," "most," or "all" of gay men molest or abuse children, yet only 9% of men and 6% of women believe the same about lesbians (gay men vs. lesbian contrast: estimated²⁴ $d = .46$ for men, $d = .27$ for women; Herek, 2002). One sample of heterosexual U.S. college men perceived gay and bisexual men as more likely to be pedophiles than heterosexual men (d s ranging from .26 to .30; Pirlott, 2012), but heterosexual women did not (d s ranging from $-.10$ to $-.11$; Pirlott, 2012); in another sample, heterosexual U.S. college students perceived *heterosexual men* to be more likely to sexually abuse children than gay men ($d = .63$; McLeod et al., 1999). In all, these findings suggest that some heterosexuals believe that LGBs can affect children's sexual orientation and gender development, and that some LGBs might molest children, although perceptions regarding molestation are mixed.

Perceptions that LGBs potentially pose a threat to children might explain some of heterosexuals' moral disgust toward LGBs. As previously noted, gay and bisexual male and female targets elicited greater moral disgust relative to respective heterosexual targets among both male and female heterosexual undergraduates (aggregated across targets and perceiver sex, $d = .73$; Pirlott, 2012). This moral disgust might stem from perceptions that LGBs influence children's sexual orientation. Among U.S. adults, beliefs that interacting with gay men and lesbians can change a person's sexual orientation to be gay or lesbian predicted disgust toward gay men and lesbians (estimated²⁵ $r = .10$; Filip-Crawford, 2016, Study 1).

Some heterosexuals report desires to keep LGBs away from children by keeping them out of roles that might enable intimate contact and/or opportunities for socialization. In one sample, U.S.

²¹ Calculated using F values on p. 674 with a presumed equal per cell sample size of $n = 13$ in each between-subjects condition.

²² Calculated using t value and df from p. 24.

²³ Estimated using F values and df from pp. 52–53.

²⁴ Estimated by converting proportions from Table 2, p. 51 to z scores.

²⁵ Estimated using r^2 from p. 24.

undergraduates reported less willingness to allow their imagined children to visit the home of a gay man relative to a heterosexual man (estimated²⁶ $d = .60$; St. Lawrence, Husfeldt, Kelly, Hood, & Smith, 1990). In another sample, heterosexual U.S. college students reported elevated discomfort with nonheterosexual medical doctors, teachers, and school bus drivers—professions that interact closely with children—relative to nonheterosexual construction workers, lawyers, sales clerks, auto mechanics, bank tellers, or airline pilots (Gallup, 1995, Study 1). Further, some U.S. university faculty and staff members refused to allow their son or daughter to be coached by a gay or lesbian individual, especially if the coach was the same sex as their child: 28% refused to allow their son to be coached by a gay man compared with 22% that refused to allow their son to be coached by a lesbian (estimated²⁷ $d = .19$); likewise, 32% refused to allow their daughter to be coached by a lesbian, whereas 25% refused to allow their daughter coached by a lesbian ($d = .21$). Follow-up questions suggested that concerns with unwanted sexual advances, pedophilia, and influencing the child drove this avoidance (Sartore & Cunningham, 2009, Study 2). Furthermore, heterosexual U.S. undergraduates were more likely to recommend the child of a gay couple for custody reassignment relative to a heterosexual couple (estimated²⁸ $d = .59$), despite, as discussed earlier, under “Parenting and Child Development,” viewing the gay man as possessing superior parenting abilities than the heterosexual man (McLeod et al., 1999). A 2012 national sample indicated that U.S. adults remain divided on whether to allow same-sex couples to adopt children, with 52% in favor of, 42% against, and 7% undecided about gay adoption (Pew Research Center, 2012), and only 22 countries allow same-sex marriage (ILGA, 2016). These data suggest support for behavioral tendencies to keep children away from LGBs, perhaps to prevent intimate contact and/or opportunities for non-normative socialization.

These discriminatory behaviors might stem, in part, from perceptions that LGBs negatively influence children by violating traditional family values. For example, among U.S. adults and college students, perceptions that gay men and lesbians violate traditional family values such as mature love, family security, sexual morality, religious faith, and tradition predicted less support for gay adoption ($r_s = .74$) and marriage (r_s range from .77 to .79; Reyna, Wetherell, Yantis, & Brandt, 2014, Studies 1 and 2). In addition, among U.S. college students and adults, Henry and Reyna (2007) found that perceptions that “gay people” violate traditional family values such as the importance of family, raising children appropriately, and maintaining traditional relationships predicted opposition to gay marriage (r_s range from .62 to .70). In all, these findings suggest that perceptions that LGBs might negatively influence children might motivate aggression to suppress their social influence.

Further, parenting concerns in particular seem to drive these prejudices against LGB. Gallup (1995, Study 4) operationalized sexual prejudice as discomfort and fear of having a gay/lesbian neighbor, friend, or teacher to one’s children, and disappointment if one’s child was homosexual, among a random sample of U.S. adults, and found that parents reported greater levels of sexual prejudice relative to nonparents, even when controlling for sex, number of nonheterosexual friends, religiosity, education, and age ($\beta = .26$). Similar findings occurred among U.S. heterosexual college students asked to imagine having children: They reported

how upset they felt in response to a scenario depicting their (imagined) 8- or 21-year-old child spending the night at a friend’s house; the friend’s parent was gay and either the same or opposite sex as the child (Gallup, 1995, Study 3). Participants expressed more concern over their young child staying overnight than their older child (estimated²⁹ $d = 1.58$) and with same-sex pairings over opposite-sex pairings (estimated $d = 1.47$). These results support predictions that parenting motivations elevate concerns of children’s safety around LGBs.

Experimental activation of parenting concerns likewise increases some heterosexuals’ prejudices and hostility against LGBs, especially in parenting- and childcare-related domains. Lehmillier, Law, and Tormala (2010) tasked U.S. heterosexual undergraduates with writing about the importance of family values (relative to the importance of one’s sense of humor), which increased general prejudices toward gay men and lesbians (assessed using the ATLG; estimated³⁰ $d = .59$, Study 2; estimated³¹ $d = .53$, Study 3), and was mediated by increased endorsement of traditional husband–wife family values (Study 3). In another experiment, activating traditional family roles (by viewing a photo of a traditional family vs. a garden) caused participants to judge gay fathers more harshly across a series of traits (e.g., intelligent, dislikable, thoughtful, kind, unfriendly, family oriented, corrupt, narrow-minded, dependable, good parent, interesting, honorable, immoral, respectable) than those in the control group (estimated³² $d = .30$) but did not affect judgments of a heterosexual father (estimated $d = .13$; Vescio & Biernat, 2003). These findings support predictions that parenting concerns might increase hostility and aggression against LGBs to prevent them from adversely influencing children.

In sum, we predicted that if parenting concerns are active, and perceptions exist suggesting that certain sexual orientation targets negatively influence children, then such perceptions should elicit anxiety and motivate avoidance of targets perceived to influence children’s gender and sexual orientation development, and elicit moral disgust and anger and motivate aggression to remove the socializing agent, and that these effects would be stronger toward LGBs of the same sex as the child. The existing research supports predictions that some believe that LGBs negatively influence children, and that LGBs elicit elevated moral disgust, anxiety, and avoidance, particularly among parents and in settings in which they could interact with children. Additional research is needed, however, to directly test the full pattern of predictions and to determine whether these reactions target bisexuals.

²⁶ Calculated using F value on p. 95 presuming equal sample sizes of $n = 150$ per condition.

²⁷ Calculated by converting proportions to z scores, aggregating across participant sex.

²⁸ Estimated using M , SD from p. 53 and presuming equal sample sizes of $n = 75.5$ per condition.

²⁹ Calculated using F values and df from pp. 61–62.

³⁰ Calculated using M , SD from Table 3 on p. 281 and assuming a per condition sample size of $n = 63$.

³¹ Calculated using F value and sample sizes from p. 282.

³² Calculated using M , SD from Table 2 on p. 840 and presumed equal sample size per condition of $n = 39.5$.

Avoiding Pathogenic Infection

The behavioral immune system (Schaller & Park, 2011) is a set of psychological mechanisms designed to detect indicators of pathogenic infection and elicit a syndrome of affective (i.e., disgust) and behavioral responses to facilitate the effective avoidance of pathogens. Ignoring pathogenic cues or having a poorly calibrated behavioral immune system imposes great costs: It places one at risk of contracting disease, potentially causing physical or neurological impairment and/or disfigurement, which potentially affects social status and/or mating opportunities, and can cause genetic deformities and/or death. Accordingly, the behavioral immune system engages physical avoidance of those associated with disease.

Prediction 6: If pathogenic avoidance concerns are active, and perceptions exist suggesting that certain sexual orientation groups pose health risks, then these pathogen avoidance concerns should activate such perceptions, which should elicit physical disgust and motivate avoidance of these targets to prevent contamination, and if contaminated, prompt aggressive expulsion to remove the contaminant.

Some heterosexuals perceive gay and bisexual men to pose health threats, perhaps because of an association with HIV/AIDS (Herek & Capitanio, 1999). For example, Cottrell and Neuberg (2005) found that college students perceived gay men to pose greater physical health threats than European Americans (estimated³³ $d = .74$).

Evidence suggests that some heterosexuals feel elevated disgust toward gay and bisexual men. Cottrell and Neuberg (2005) found that gay male targets elicited greater levels of disgust than European American targets among U.S. undergraduates ($d = .63$). Among a different sample of U.S. heterosexual undergraduates, comparisons across sexual orientation targets revealed that gay and bisexual male targets elicited greater reported levels of physical disgust relative to heterosexual male, heterosexual female, bisexual female, and lesbian targets (aggregated across targets, $d = .73$; Pirlott, 2012).

These feelings of disgust seem to arise from perceptions of contamination risk. For example, Cottrell and Neuberg (2005) found that U.S. undergraduates perceived gay men as posing greater ingroup contamination threats relative to European Americans (which included threats to group health and values, i.e., physical and moral contamination), which predicted elevated disgust ($\beta = .35$ while controlling for other perceived threats, and the measured relationship between threats and emotions was aggregated across multiple target groups).

Further, some heterosexuals report elevated desires to avoid physical contamination from associating with gay and bisexual men. For example, U.S. undergraduates reported decreased willingness to eat food prepared by a gay man relative to a heterosexual man (estimated³⁴ $d = .35$; St. Lawrence et al., 1990)—a behavior that minimizes contamination. Further, Golec de Zavala, Waldzus, and Cyprianska (2014) found that simply imagining an interaction on an elevator with a gay couple (relative to a heterosexual couple) increased desires for cleansing among undergraduates, activated implicit thoughts of cleansing (measured by a word fragment completion task) among U.K. undergraduates (estimated³⁵ $d = .74$; Study 1), increased the probability of selecting

a cleansing wipe over a pencil among heterosexual Portuguese undergraduates (estimated³⁶ $d = .58$; Study 2), and elevated the favorability of cleansing products among Polish undergraduates (estimated³⁷ $d = .52$; Study 3). In all, these findings suggest that, for some, gay men elicit behaviors aimed at minimizing risk of physical contamination.

Correlational and quasi-experimental evidence likewise demonstrate a relationship between pathogen concern and prejudices toward gay men. For example, among U.S. undergraduates, individual differences in disgust sensitivity predicted greater implicit negativity toward gay men (confounded with lesbians) relative to heterosexual men and women ($\beta = -.30$, Inbar, Pizarro, Knobe, & Bloom, 2009, Study 2), and decreased willingness to engage in contact with gay men (confounded with lesbians, $r = .34$; Terrizzi, Shook, & Ventis, 2009, Study 1). Furthermore, using a naturalistic quasi-experimental design, Inbar, Westgate, Pizarro, and Nosek (2016) demonstrated a small increase in negative attitudes toward gay men (confounded with lesbians, relative to heterosexual men and women) corresponding to the 2014 Ebola outbreak—a time of national pathogenic concern—among nearly 250,000 U.S. adults who completed the “sexuality” IAT hosted on the Project Implicit website, relative to the previous 2 years ($d = .04$). The small nature of the effect size could be as a result of confounding of gay male targets, who are stereotypically associated with disease, with lesbian targets, who are not. In all, these results suggest that chronic and temporary pathogen concerns increase negativity and desires to avoid gay men, potentially to avoid contamination.

Experimental evidence demonstrates that activating pathogen avoidance goals increases prejudices toward gay men. Priming pathogenic concern by exposing U.S. heterosexual undergraduates to a noxious odor (relative to a no-odor control) decreased warmth toward gay men but not toward other groups unassociated with disease (e.g., lesbians, heterosexuals, African Americans, and elderly people; Inbar, Pizarro, & Bloom, 2012³⁸). Similarly, activating pathogenic concern (by asking U.S. college students to write about a time in which they felt very angry, disgusted, or neutral) increased implicit negativity toward “homosexuals” relative to heterosexuals using the IAT, relative to anger and neutral conditions ($d = .43$; Dasgupta, Desteno, Williams, & Hunsinger, 2009, Study 2). These studies provide further evidence that activating pathogen concern enhances negativity toward gay men, likely to promote avoidance to prevent contamination.

We predicted that when pathogenic avoidance concerns are active, then preexisting stereotypical perceptions that some sexual orientation groups pose threats to health should elicit physical disgust and motivate avoidance of such targets to prevent contamination. The available evidence supports predictions, although research has mostly focused on gay men, often confounded gay

³³ Calculated using M , SD from Table 4, p. 780.

³⁴ Calculated using F value on p. 95 presuming equal sample sizes of $n = 150$ per condition.

³⁵ Calculated using t value and df on p. 4.

³⁶ Calculated using chi-square value from p. 5.

³⁷ Calculated using t value and df on p. 6.

³⁸ The authors reported comparisons between gay men and heterosexual men, lesbians and heterosexual women, African Americans and European Americans, and elderly and college students in each condition but did not report the means and standard deviations of each target group in each condition for us to demonstrate change or report effect sizes.

men with lesbians (i.e., measured responses to *homosexuals* or *gay people*), and/or omitted comparisons with bisexual men and other sexual orientation target groups. Future research could extend the current knowledge by examining the full pattern of predicted findings—for example, measuring individual differences in, and the causal effect of activation of, pathogenic concern on the salience of perceptions of health risks posed by, physical disgust elicited by, and desires to avoid gay and bisexual men, relative to heterosexuals, bisexual women, and lesbians.

Social Affiliation and Ingroup Cohesion

Evolutionary social psychologists argue that group living emerged as a strategic, evolved adaptation (Kurzban & Neuberg, 2005; Neuberg & Cottrell, 2008), as it enabled humans to more successfully manage environmental challenges. Humans reap a wide array of survival benefits afforded by group living—for example, increased access to valuable resources such as food and mates, assistance with child care, kin protection, hunting, and more (Kenrick, Griskevicius, et al., 2010; Kenrick, Neuberg, et al., 2010).

Ingroup cohesion threats. Successful group functioning can be undermined by its members. Individuals can maximize personal success by exploiting the group or its members (Cosmides & Tooby, 2005, 2008), and group functioning suffers if too many people exploit the group (Hardin, 1968). Further, dissenters, violators of group norms, and subgroups of members that may become nonconforming outgroups can disrupt social order, which threatens social cohesion and effective group functioning. Members who threaten ingroup values and cohesion potentially undermine group success by failing to adhere to norms that ostensibly facilitate important functions such as cooperation and reciprocity.

To maximize ingroup cohesion and success, members of a group should be particularly vigilant of threats to group functioning—that is, threats to trust, reciprocity, values, socialization, and authority (Cottrell & Neuberg, 2005; Neuberg & Cottrell, 2008; Neuberg, Smith, & Asher, 2000). To prevent individuals from undermining group performance, humans possess psychological adaptations to reject certain people from their groups, especially if those people pose fitness costs for individual members or harm group functioning by violating ingroup norms and values (Kurzban & Leary, 2001; Kurzban & Neuberg, 2005). Groups can assert social control over counternormative and noncooperative members by using aggression to try to stop or change the behavior and/or ostracism to prevent further influence and contamination (e.g., Williams & Nida, 2011).

Prediction 7: If ingroup cohesion concerns are active and perceptions exist suggesting that certain sexual orientation groups violate ingroup values, cohesion, and/or functioning, then ingroup cohesion concerns should activate such perceptions, which should elicit moral disgust and anger and motivate social ostracism and aggression toward transgressors (e.g., gender and heterosexual norm-violating LGBs) to suppress deviant behavior, enforce ingroup norms, and prevent social influence.

Nonheterosexual behavior inherently violates heterosexual norms; thus, some heterosexuals might perceive LGBs to pose threats to “traditional” values of parenting, romantic relationships,

and gender roles. Indeed, Italian college students perceived gay men to pose a greater threat to values and traditions than welfare recipients (estimated³⁹ $d = .98$; Brambilla & Butz, 2013, Study 1 Pretest). One sample of U.S. college students perceived gay men as more likely than European Americans to hold values inconsistent with the ingroup (estimated⁴⁰ $d = .48$) and to undermine social coordination (estimated $d = .47$; Cottrell & Neuberg, 2005). Another sample of heterosexual U.S. college students perceived LGB targets as more likely to violate normative gender roles (“act like the wrong gender” and “violate gender roles like ‘men should act like men and women should act like women’”) than heterosexual targets (aggregated across targets, $d = 1.11$; Pirlott & Neuberg, 2014). Likewise, U.S. adult men perceived gay men as more likely than heterosexual men to violate masculine gender roles, like being strong, dominant, masculine, and assertive (estimated⁴¹ $d = 1.68$; Winegard, Reynolds, Baumeister, & Plant, 2016, Study 1). Further, some U.S. adults believe not only that LGBs hold values inconsistent with the traditional ingroup but also that their values are “contagious”—for example, that interacting with gay men/lesbians compared with heterosexuals increases support for gay rights (estimated⁴² $d = .55$, Filip-Crawford, 2016, Study 1). In all, these results suggest some heterosexuals believe LGBs to violate ingroup norms and possess the power to spread their (counternormative) beliefs.

Existing research supports predictions that LGBs elicit disgust, avoidance, and aggression. For example, among both male and female heterosexual U.S. undergraduates, gay and bisexual male and female targets elicit greater moral disgust relative to male and female heterosexual targets (aggregated across targets, $d = .73$; Pirlott, 2012). As previously discussed, LGBs are more likely than heterosexuals and other minorities are to experience physically aggressive hate crimes (Federal Bureau of Investigation, 2016; Katz-Wise & Hyde, 2012). And around the world, heterosexuals socially ostracize LGBs, who inherently violate ingroup (i.e., heterosexual) norms—this ostracism ranges from banning them from social groups (e.g., churches, Boy Scouts) and military service, to imprisonment, to permanent social expulsion and death (ILGA, 2016).

Perceived threats to ingroup values seem to drive moral disgust and anger toward LGBs. As previously mentioned, Cottrell and Neuberg (2005) found that U.S. undergraduates perceived gay men, relative to European Americans, as posing greater ingroup contamination threats (which combined threats to group health, $d = .74$, with threats to values, $d = .48$), which predicted disgust as a primary emotional response ($\beta = .35$) and anger as a secondary response ($\beta = .11$), controlling for other perceived threats (although the relationship between threats and emotions was aggregated across multiple targets). They also found that perceived threats to ingroup cohesion (i.e., “obstacles,” which included threats to reciprocity, social coordination, trust, resources, property, and personal freedoms) predicted anger as a primary emotional response ($\beta = .58$) and disgust as a secondary response ($\beta = .36$; again, aggregated across multiple target groups). Patterns of

³⁹ Calculated using repeated F value, M_s , and n on p. 313.

⁴⁰ Calculated using M , SD from Table 4, p. 780.

⁴¹ Calculated by averaging across traits from Table 1, p. 251.

⁴² Calculated using t value and df from p. 25, presuming equal sample sizes per condition.

disgust, anger, avoidance, and aggression seem to indicate some heterosexuals' desires to prevent spreading of LGBs' counternormative values.

Disgust and perceived threats to ingroup values seem to motivate aggression against and avoidance of LGBs. Filip-Crawford (2016, Studies 2 and 3) found that (moral and physical) disgust toward gay men and lesbians predicted desires to avoid (avoid, end friendship, remove one's child from class) and aggress (use anti-gay/lesbian slurs, hit, damage property) against gay men and lesbians (estimated⁴³ r s range from .77 to .89 for avoidance, and from .58 to .68 for aggression) among U.S. adults and college students. Furthermore, perceived threats to normative behaviors and values predict increased physical and "symbolic" (e.g., rights restrictions) aggression against LGBs. For example, assessing reasons why U.S. college students physically and/or verbally aggressed against LGBs, Franklin (2000) found that perceptions that LGBs undermine moral values, and desire to feel close to a group of friends (i.e., group cohesion), predicted college students' use of verbal and physical aggression against gay/lesbian individuals. In addition, perceptions that gay men and lesbians violate traditional values related to relationships, sexual morality, religion, and family predict U.S. college students' and adults' opposition to same-sex marriage rights (r s range from .62 to .79; Henry & Reyna, 2007; Reyna et al., 2014, Studies 1 and 2), same-sex couples adopting children (r s = .74; Reyna et al., 2014, Studies 1 and 2), gay men and lesbians serving in the military (r s range from .38 to .58; Reyna et al., 2014, Studies 1 and 2), and laws prohibiting sexual orientation discrimination (r s range from .32 to .50; Reyna et al., 2014, Studies 1 and 2). In all, these aggressive responses restricting rights might stem from desires to correct ingroup values and normative behavior.

Perceptions that LGBs undermine ingroup values also predict avoidance and aggression against LGBs at the societal level. The U.S. military ban on gay and bisexual men and women in the military (and later, the ban on *openly* gay and bisexual men and women) argued specifically that LGBs undermine group cohesion and morale:

The presence in the armed forces of persons who demonstrate a propensity or intent to engage in homosexual acts would create an unacceptable risk to the high standards of morale, good order and discipline, and unit cohesion that are the essence of military capability. (Don't Ask, Don't Tell, 1994, p. 341)

Further, as of 2016, 17 countries have morality laws banning "promotion and propaganda" of sexual orientation expression and gay rights (ILGA, 2016). In all, it appears that social ostracism and aggression against LGBs serves to attempt to block the spreading of LGBs values or perceived degradation of traditional values.

Beyond correlational relationships, a growing body of research suggests that experimentally activating concerns for ingroup values elevates some heterosexuals' prejudices and aggression against LGB. Brambilla and Butz (2013, Study 2) primed ingroup values threat by randomly assigning a sample of heterosexual Italian undergraduates to read an editorial commenting on the worsening of values and traditions in their home country compared with a nonvalues threat condition (reading an editorial about climate change) or nonthreat condition (reading an editorial that Italians prefer to vacation seaside rather than mountainside). Priming ingroup values threats elevated negativity toward gay men relative to

the nonvalues threat (estimated⁴⁴ d = .85) and nonthreat conditions (estimated d = .78). Specific to symbolic aggression, experimentally activating values threats likewise suppressed Italian students' support for gay men's marriage, partner benefits, and adoption rights relative to an economic threat condition (reading an editorial about the financial crisis; estimated⁴⁵ d = .81) and nonthreat condition (reading an editorial about Italian seacoasts; estimated d = .84; Brambilla & Butz, 2013, Study 1), which suggests that the salience of ingroup values increases symbolic aggression against ingroup norm violators.

If ingroup members are concerned about LGBs' social influence and "spread" of LGB values, then degree of community connectedness (an avenue for social influence) should affect behavioral intentions to suppress LGB influence. Filip-Crawford (2016, Study 3) manipulated community connectedness by telling U.S. college students at a large university that the college social scene is either highly or loosely connected and then asking participants to write about a time consistent with the prime. Participants then reported their intentions to aggress against gay men and lesbians (e.g., damage their property, hit them). High community connectedness, relative to low connectedness, increased intentions to use aggression against gay men and lesbians among participants who reported high levels of disgust (moral and physical) toward gay men and lesbians. That community connectedness affects intentions to aggress against gay men and lesbians suggests a desire to aggressively suppress the social influence of nonheterosexuals.

In sum, we predicted that if ingroup cohesion concerns are active, then preexisting perceptions that LGBs undermine ingroup values and cohesion should elicit moral disgust and anger and motivate behaviors to suppress violators' social influence or deviant behavior. The current evidence supports predictions that LGBs are perceived to violate ingroup norms, elicit moral disgust and anger, experience aggression and social ostracism, and that threats to the ingroup increase hostility and aggression toward LGBs. Future research could further test whether gender- and heterosexual-norm violations are perceived to degrade ingroup functioning; whether moral disgust specifically elicits social avoidance or ostracism and anger specifically elicits aggression to reinforce ingroup norms and block the deviant behavior; whether chronic and temporary activation of ingroup concern engages perceptions of threats to ingroup cohesion, elevates moral disgust and anger, and increases desires to eliminate norm violating behavior; and extend the findings to include bisexual male and female targets and comparing with heterosexual targets.

Ingroup cohesion threats: Religion as ingroup. Religion serves traditional group functions while advocating specific values and norms to live by, and religious affiliations provide an ingroup of particular importance for many people (Norenzayan & Shariff, 2008). Thus, religion acts as an important ingroup for many people, and ingroup cohesion concerns should apply for religious adherents.

⁴³ Calculated using r^2 from pp. 28–29, 32–33.

⁴⁴ Calculated using M , SD from Table 2, p. 316.

⁴⁵ Calculated using M , SD from Table 1, p. 314, assuming equal sample sizes per condition of $n = 24$.

Many religions decry homosexual behavior as violating religious doctrine.⁴⁶ For example, religious texts for all three Abrahamic religions—Judaism, Christianity, and Islam, together comprising approximately 55% of the world's population (Pew Research Center, 2017a)—explicitly denounce homosexual behaviors. The Jewish Torah and Christian Old Testament dictates that sex between men is detestable and violators should be put to death (Leviticus 18:22, 20:13). The Christian New Testament condemns sex between men as shameful (Romans 1:27), and the Qur'an considers the act an abomination (7:81) punishable by death (4:16). These passages not only denounce homosexual behavior (although arguably only male homosexual behavior) but also prescribe the appropriate course of action—violence and/or death toward persons involved in such behaviors.

Prediction 8: If religious ingroup cohesion motives are active, and perceptions exist suggesting that some LGB groups undermine religious ingroup values, then salient religious ingroup cohesion motivations will activate such perceptions, which should elicit moral disgust toward LGBs and motivate social ostracism of LGBs to prevent social influence, and should elicit anger and motivate aggression toward LGBs to remove ingroup threats.

As previously mentioned, LGB targets elicit greater levels of moral disgust (Pirlott, 2012) and experience greater levels of ostracism and aggression (Katz-Wise & Hyde, 2012) relative to heterosexual targets. Further, perceptions that LGBs violate religious values appear to fuel aggression targeting LGBs. For example, Franklin's (2000) research examining U.S. college students' reasons given for verbally or physically aggressing against LGBs identified a moral values factor, which included reasons such as "because of my religious beliefs" and "because of my moral beliefs." These results suggest that aggression against LGBs might function to suppress behaviors violating religious ingroup values.

A large body of evidence suggests individual differences in religiosity predict prejudices against LGBs. For example, in a meta-analysis of the relationship between religiosity and sexual prejudice, Whitley (2009) found that six of seven common measures of religious orientation consistently predicted prejudices toward gay men and lesbians, including religious fundamentalism ($r = -.45$), frequency of religious attendance ($r = -.32$), endorsement of Christian orthodoxy ($r = -.29$), religiosity ($r = -.24$), intrinsic religiosity ($r = -.23$), and extrinsic religiosity ($r = -.04$); however, quest orientation (the perception of religion as a tool for seeking truth) predicted more positive attitudes toward gay men and lesbians ($r = .24$). Additionally, Vincent, Parrott, and Peterson (2011) found that religious fundamentalism predicted self-reported anger in response to male-male public affection and self-reported history of antigay/lesbian aggression ($r_s = .39$ and $.16$, respectively). Beyond explicit prejudices, in a sample of Protestant and Catholic U.S. college students, religious fundamentalism and Christian Orthodoxy predicted implicit negativity toward gay men relative to heterosexuals ($r_s = -.23$ and $-.13$, respectively; Rowatt et al., 2006). These results support predictions that chronic salience of ingroup religious identity predicts hostility toward LGBs who violate religious ingroup norms.

Beyond individual differences, experimentally activating religious ingroup identity increases prejudices against LGBs. Johnson, Rowatt, and LaBouff (2012, Study 2) subliminally activated religious ingroup identity among a sample of U.S. college students by exposing them to either religious words (e.g., *Bible, faith, Christ*) or neutral words during a lexical-decision task. Priming religious identity (relative to control) suppressed positivity toward gay men relative to heterosexual men, controlling for preexisting positivity toward gay men (estimated⁴⁷ $d = .64$).

In all, the available evidence supports predictions that perceptions that LGB groups undermine the religious ingroup drive prejudices and aggression toward LGBs, likely as a result of perceived violations of religious values and a desire to "correct" religious norm-violating behavior. Future research can further test the full pattern of predicted findings by examining both temporarily and chronically activated religious ingroup identity and its relationship to the salience of perceived religious ingroup threats, moral disgust, anger, social ostracism, and aggression toward LGB targets relative to heterosexual targets.

Social affiliation opportunities. To facilitate interdependent group living, humans developed an inherent need to form and maintain at least a minimum amount of meaningful social relationships (Baumeister & Leary, 1995)—that is, a social affiliation motive (Kenrick, Griskevicius, et al., 2010; Kenrick, Neuberg, et al., 2010). Although group living facilitates survival, people also gain a number of specific benefits from close interpersonal relationships (i.e., friendships). Social relationships help fulfill different affiliation-related goals, including self-protection, mating opportunities, shared resources, and material and social support (Kenrick et al., 2010).

Prediction 9: When social affiliation motives are active, and perceptions exist suggesting that certain sexual orientation groups make good companions, then friendship motivations should activate such perceptions, which should elicit positive affect and motivate approach behaviors to engage such targets for friendship.

Although little research has examined friendships across sexual orientation and gender, the existing research tentatively supports these predictions. Heterosexual men and women report having more same-sex and same-sexual-orientation friends, although they nonetheless report close cross-sex friendships (Baiocco et al., 2014; Galupo, 2007; Lenton & Webber, 2006). In particular, cross-orientation friendships occur frequently between heterosexual women and gay men (Nardi, 1999; Rumens, 2012; Shepperd, Coyle, & Hegarty, 2010),⁴⁸ perhaps as a result of the lack of unwanted sexual interest threats from gay men. Recent research (Russell, Ickes, & Ta, 2018) found that undergraduate women reported greater comfort interacting with a male stranger labeled as

⁴⁶ The degree to which specific denominations and churches of Judaism, Christianity, and Islam interpret passages as anti-homosexuality and/or enforce these laws, of course, varies.

⁴⁷ Calculated using F value from $p. 161$ and $n = 73$.

⁴⁸ Limited evidence suggests bisexuals also report greater likelihood of close friendships with heterosexuals than with other bisexuals or gay men and lesbians, but researchers did not separate these friendships by perceiver or target gender (Galupo, 2009).

gay relative to heterosexual (estimated⁴⁹ $d = .88$) because of reduced concern for his sexual intentions.

The existing evidence supports predictions regarding friendship pairings. Future research can further test the relationship between perceived friendship affordances, positivity, and friendship behavior toward all sexual orientation targets, as well as investigate whether chronic or temporarily activated social affiliation motivations activate perceptions that certain sexual orientation groups pose friendship opportunities and increase positivity and approach behaviors to facilitate affiliation.

Discussion

Preventing LGBs from serving in the military, forbidding same-sex couples from marrying or adopting children, carrying out sexual-orientation-based hate crimes, blocking LGBs from working with children, and outlawing gay behavior to the penalty of death are examples that paint a dark picture of the costs of sexual prejudice. These discriminatory policies and interpersonal behaviors also illustrate the complicated nature of sexual prejudices. Some prejudices elicit social avoidance (e.g., keeping LGBs out of the military or away from children), whereas others spur aggression (e.g., hate crimes and penalizing gay behavior with the death penalty).

Understanding the complexities of sexual prejudices requires a multifaceted framework, which the affordance management perspective provides. We argue that these complex behaviors arise predictably as interpersonal and societal responses to stereotypes that articulate perceived threats. Further, we suggest that the determination of which threat is relevant (and, therefore, which behavior is engaged) depends upon chronically or temporarily activated goals related to evolved mechanisms promoting human survival and reproduction. Thus, affective reactions and behaviors engaged should be related to fundamental human motivations, such as protecting oneself, avoiding disease, maintaining sexual autonomy, parenting and kin care, mating, gaining and maintaining status, and maintaining ingroup functioning and cohesion. This perspective generates specific detailed predictions regarding the circumstances under which heterosexual individuals will likely view certain sexual orientation groups with positivity, fear, anxiety, moral disgust, physical disgust, or anger, and the specific approach and avoidant behaviors, both positive and negative, elicited by these emotions. Applying this approach enables researchers to predict and understand the heretofore unexplained nuances in responses toward different sexual orientation groups beyond the abilities of other commonly used generalized models of prejudice.

Contrasting Against Other Sexual Prejudice Perspectives

The extant literature contains several hypotheses to explain prejudice against LGBs. Each hypothesis proposes an explanation for a particular element of sexual prejudice and rests upon supporting empirical evidence. Accordingly, our perspective does not necessarily challenge the veracity of such evidence, as each hypothesis explains different aspects of sexual prejudice. Instead, we cast our perspective as a broader theory with wide-ranging explanatory power and highlight the ways in which other hypotheses are congruent with, or orthogonal to, our perspective's predictions.

Gender role violation hypothesis. The gender role violation hypothesis contends that heterosexual individuals reject gay men and lesbians because they fail to follow the particular gender roles appointed to their biological sex, that is, because gay men are perceived as feminine and lesbians as masculine (Kite & Deaux, 1987; Kite & Whitley, 1996, 1998). Research shows that heterosexuals generally endorse stereotypes that LGBs violate gender norms (Kite & Deaux, 1987; Pirlott & Neuberg, 2014) and that this endorsement generally predicts elevated sexual prejudices (Lehavot & Lambert, 2007; Whitley, 2001), especially toward gay men (Parrott, Peterson, Vincent, & Bakeman, 2008).

Our affordance management approach does not dispute the gender role violation hypothesis but goes further to explain why perceptions of gender role violations are viewed negatively (gender role violations might be perceived to undermine ingroup norms and/or threaten one's gender-normative and heterosexual-normative status vis-à-vis stigma by association), which specific affective emotions should arise (moral disgust, anger, anxiety), and which specific behaviors should emerge (avoidance and expulsion to prevent social influence and stigmatization, and aggression to change targets' behavior or reassert one's status). It also explains when and for whom ingroup gender role violations should be perceived as threatening—among people for whom ingroup cohesion and functioning is either chronically or temporarily activated, and among heterosexuals, especially men, who may perceive loss of social status and its potential rewards (e.g., mating opportunities).

Sexual stigma framework. Herek (2007) defines sexual stigma as the “negative regard, inferior status, and relative powerlessness that society collectively accords any non-heterosexual behavior, identity, relationship, or community” (pp. 906–907), and his framework describes prejudice against LGBs on different structural levels. At the societal level exists heterosexism, which assumes that all people are heterosexual and thus ignores nonheterosexuals, renders nonheterosexuality as abnormal and unnatural, and inherently embeds institutional and ideological practices favoring heterosexuals and disfavoring and disenfranchising nonheterosexuals, even in the absence of interpersonal prejudices. This framework also focuses on the implications of sexual stigma. The cultural devaluation of nonheterosexuals can lead to enacted stigma (behavioral discrimination against nonheterosexuals), felt stigma (expectations about discrimination), stereotype threat, courtesy stigma (i.e., being devalued because of associating with a nonheterosexual individual and/or being stigmatized as nonheterosexual by associating with a nonheterosexual), and internalized stigma (internalizing the devaluation of one's sexual identity and thus viewing one's sexuality negatively).

The sexual stigma framework is largely orthogonal to the affordance management perspective for several reasons. First, it focuses on the negative evaluation of nonheterosexuals at the cultural level, which then has implications at the interpersonal level, whereas our perspective focuses on understanding *why* prejudices and discrimination against different sexual orientation groups exist by focusing on the interpersonal level but extending to societal levels. Second, the sexual stigma framework defines and requires prejudices and discrimination against nonheterosexual people to be

⁴⁹ Calculated using M , SD from p. 290.

negative. The affordance management perspective does not. Differential emotional and behavioral reactions toward someone based on their social group membership can be positively connoted (e.g., heterosexual women's positivity toward gay men). Last, although Herek (2007) notes that heterosexuals can technically experience prejudice, his model requires social disempowerment to define sexual stigma, which he claims heterosexuals cannot experience (see pp. 911–912). In contrast, our definitions of prejudice and discrimination include the differential emotional and behavioral reactions toward another simply as a result of their membership in a particular social category and do not require power differentials. Although we acknowledge that power differentials can have an important impact upon the meaning of prejudice and discrimination, the *requirement* of power ignores ways in which differential emotional and behavioral reactions affect those traditionally defined as “powerful.” For example, preferring (heterosexual) mothers over (heterosexual) fathers in custody battles is a prime example of discrimination against (heterosexual) men, despite men holding more societal power than women hold in many Western cultures.

Contrasting Against Major Prejudice Perspectives

Below we compare our perspective with other commonly used intergroup relations theories to demonstrate that the affordance management perspective is better equipped to account for nuances observed in the sexual prejudice literature.

Stereotype content model and behavior from intergroup affect and stereotypes. A widely applied model for exploring emotional reactions toward outgroups is the stereotype content model (SCM) and the behavior from intergroup affect and stereotypes (BIAS map; Cuddy, Fiske, & Glick, 2007, 2008; Fiske, Cuddy, Glick, & Xu, 2002). Part of the appeal of this approach is the ability to designate a diverse array of outgroups into quadrants of affective reactions based on stereotypical perceptions at the intersection of warmth and competence: People express admiration toward groups characterized by high warmth and high competence, pity toward groups with high warmth but low competence, envy toward groups with low warmth but high competence, and contempt for groups with low warmth and low competence. Cuddy et al. (2007, 2008) and Fiske et al. (2002) also categorize behavioral responses on positive–negative and passive–active dimensions, and link those behavioral reactions to the warmth–competence stereotypes. Perceptions of high warmth predict active facilitation and low warmth predicts active harm, whereas high competence predicts passive facilitation and low competence predicts passive harm. The combined perspectives allow classification of a wide range of prejudices, especially toward groups associated with ambivalent stereotypes and affective reactions, such as elderly people, housewives, feminists, Jews, and Asians (e.g., Cuddy et al., 2008).

However, these perspectives do not easily apply to prejudice and discrimination against LGBs, as many sexual minority groups are not clearly categorized along these dimensions. For example, Fiske et al. (2002, Study 1) found that U.S. students and adults viewed gay men neutrally in the SCM—moderately high in warmth and competency—with similar results emerging for lesbians among U.S. college students (Brambilla, Carnaghi, & Ravenna, 2011), despite robust societal evidence of antigay prejudice. Further,

Clausell and Fiske (2005, Main Study) found U.S. college students' perceptions of warmth and competency varied across the SCM when focusing on perceived subgroups of gay men (e.g., feminine, flamboyant, “in-the-closet”), as did Brambilla et al. (2011) when evaluating subgroups of lesbians (e.g., butch, feminine). Where the stereotypes of bisexual men and women fit within the SCM domain also remains unclear.

This perspective also lacks explanatory power. As noted by Cottrell and Neuberg (2005), these quadrants aggregate across discrete emotions associated with various outgroups, such as anger, fear, and disgust, and thus lose some of their predictive ability, as evolutionary approaches to emotions argue that *specific* emotions arise functionally to perceived threats and opportunities and engage *specific* behavioral responses to act upon such threats and opportunities. Although the SCM is a useful tool for capturing a range of generalized emotions toward various outgroups, the model lacks the predictability of specific emotional and behavioral responses created when focusing on the respective affordances associated with stereotypes of each group or subgroup.

Intergroup threat theory. Intergroup threat theory (ITT; Stephan, Ybarra, & Rios, 2016). ITT describes intergroup threats (defined as perceptions that a group member might cause harm) associated with outgroups and explores the reasons for and consequences of these perceptions. Stephan and colleagues (2016) argue that two classes of threats exist—realistic and symbolic—which target toward two levels of intergroup interactions—toward the ingroup and the individual. Realistic threats to the group include threats to a group's power, resources, and general welfare, and to the individual include threats of harm and loss of resources; symbolic threats to the group include threats to the group's values, beliefs, worldview, and religion, and to the individual include threats to one's self-identity, self-esteem, or self-honor. Similar to our approach, Stephan and colleagues suggest emotional and behavioral responses follow from the perception of these threats. They state, for example, that “emotional reactions to threat are likely to be negative. They include fear, anxiety, anger, and resentment, collective guilt, and in all likelihood other emotions such as rage, hatred, humiliation, dread, helplessness, despair, righteous indignation, and panic” (Stephan, Ybarra, & Morrison, 2009, p. 51) and that

behavioral responses to intergroup threats include: attack, flight, inactivity, freezing, appeasement, and negotiation . . . at the individual level, behavioral responses to intergroup threat range from avoidance and submission, to harassment and aggression. At the group level, responses to intergroup threat range from enacting laws that harm outgroups to non-violent protests, strikes, warfare, and genocide. (p. 270)

However, we see a number of shortcomings in ITT and therefore believe the affordance management approach provides a better and broader explanation for prejudices and discrimination. First, although it may be useful to differentiate threats to the ingroup versus threats to the self, we see no value in constraining threats into categories of realistic or symbolic, because regardless of whether threats are physical or abstract, both feel “real” and engage emotional and behavioral reactions. Indeed, Stephan et al. (2016) claim that symbolic threats are not real: “Symbolic threats are often inferred without a firm basis in reality. That is, they are readily perceived when they do not exist” (p. 257). We make no

such argument or distinction. Instead, we organize threats as relevant to the extent that they arise from key fundamental human motivations: threats to physical safety, sexual autonomy, mating opportunities, social status, health, parenting and child development, and ingroup functioning. Using these more focused, yet broadly applicable, categories (i.e., organized by fundamental motives yet able to account how each motive might yield different perceived threats) enables a launching point for other researchers to conceptualize specific threats within the fundamental motives domains as relevant to other intergroup (and intragroup) relations.

Second, ITT merely catalogs possible emotional and behavioral reactions without specifying expected connections between threats, emotions, and behaviors. They clarify whether they arise from perceived threats to the individual (fear) or group (anger, resentment, and collective guilt) without articulating *why* specific emotions are likely to arise. Likewise, they catalog possible behavioral outcomes without explaining why and under what circumstances the behaviors are most likely to occur. They loosely tie the catalog of behaviors to cognitions, emotions, and physiological processes—“these behavioral responses are fueled by negative cognitions and emotions, as well as the physiological arousal elicited by intergroup threats” (Stephan et al., 2016, p. 270)—but fail to make clear connections between specific perceived threats, specific emotional reactions, and specific behavioral responses. There is limited utility and limited predictive ability in simply listing potential emotional and behavioral responses. *Which* perceived threats elicit *which* emotions and engage *which* behaviors, and *why*? Our perspective provides these explanations based on functional evolutionary approaches to emotions and links specific perceived threats to specific patterns of emotional and behavioral responses.

Last, under what circumstances, and for whom, is a particular threat relevant? ITT lists a series of relevant variables that can help answer these questions, such as intergroup contact, relative power differentials, group sizes, history, cultural dimensions, features of interpersonal contexts (e.g., support of authority figures), and broad individual differences measures such as strength of ingroup identity, social dominance orientation, right-wing authoritarianism, religiosity, political conservatism, and belief in a dangerous world (Stephan et al., 2009, 2016). These are certainly useful starting points to capture individual differences in prejudices broadly. Our perspective, however, offers a more parsimonious explanation: A perceived threat is likely to engage emotional and behavioral reactions when relevant to a fundamental motive; whether the threat is relevant depends upon whether that motive is currently or chronically activated (i.e., activated situationally or individual differences influential to that motive). Our perspective does not try to catalog every possible individual difference or situational variable relevant to prejudice but instead provides a clear framework linking threats as stemming from fundamental motives and guiding effective emotional and behavioral responses. In this way, the affordance management approach offers a more focused perspective to intergroup relations and provides stronger predictive ability. In sum, although there are similarities between the intergroup threat theory and the affordance management approach to prejudice, our perspective yields a tighter, more specific, and more parsimonious explanation for why and for whom certain prejudices and discrimination arise.

Limitations and Future Directions

Limitations of the current literature. Although a substantial body of research supports the patterns outlined in our general predictions, our theoretical framework also identifies numerous novel predictions that remain untested. In addition, the existing body of literature has some shortcomings, which provide new avenues for future research.

First, the existing sexual prejudice research often fails to differentiate among gay men, lesbians, bisexual men, and bisexual women relative to heterosexual men and women. Many measures confound attitudes toward gay men and lesbians (e.g., the ATLG scale and the gay-straight IAT). Likewise, most research ignores assessments of attitudes, emotions, and behaviors toward bisexual men and women. Although some areas of our theory make predictions about combined groups (e.g., gay and bisexual men, or LGBs), research should nonetheless provide evidence of the specificity of findings as a function of target group (e.g., “the findings emerge for gay and bisexual male targets, but not bisexual and lesbian female targets”).

Second, much research confounds attitudes, emotions, and behaviors in a single measure or confounds multiple emotions into one emotion construct (e.g., anger and disgust, as noted by Filip-Crawford & Neuberg, 2015). This practice suppresses the variation across emotions, attitudes, and behaviors, and/or assumes that sexual prejudice is a unidimensional construct (e.g., negative attitudes), and undermines the ability to fully understand the multifaceted nature of sexual prejudices.

Third, much of the support for predictions emerged by linking patterns of findings *across* studies. Rarely did studies test and measure *all* constructs predicted by our perspective to demonstrate the experimental effects of fundamental motives on perceptions, emotions, and behaviors as well as measure the relationships among these constructs.

In addition, our approach predicted that a certain emotion-behavior pattern would emerge *if* a particular fundamental motive was active *and* a particular existing stereotype relayed threat or opportunity information relevant to that fundamental motive. Although much of the literature measured general affective and behavioral reactions to certain sexual orientation groups, rarely did researchers activate or measure fundamental motives to determine the relevance of perceived affordance stereotypes. We therefore simply inferred when affordances were relevant to explain a pattern of findings.

Last, additional experimental work is imperative. Experimental research that activates each fundamental motive can provide causal evidence of its effect on perceptions and emotion-behavior responses. Much of the discussed research, if examining multiple aspects of sexual prejudice (e.g., the relationship between targets, perceptions, and prejudices), used *statistical* (i.e., correlational) mediation to examine the statistical effect of the proposed mediator. *Experimental* mediation designs, which experimentally activate proposed mediators, provide robust evidence of the causal effects of the mediator on the proposed outcome variables beyond the evidence provided by statistical mediation designs (Pirlott & MacKinnon, 2016).

We therefore believe the next crucial step is for researchers to test these specific predictions by using experimental methods, measuring all relevant variables, and comparing all relevant

groups. Examining a larger set of individual differences, emotions, behaviors, and targets enables a demonstration of whether the findings are specific to certain perceivers, targets, emotions, and behaviors, and not others, to provide evidence of the functional specificity underlying emotional and behavioral reactions. Our perspective predicts a direct link from fundamental motive to perception activation, to emotional reaction, and to behavioral response toward specific targets, yet little research examines all of these components using an experimental paradigm or advanced modeling procedures.

Explaining variances in sexual prejudices across cultures and over time. Our theory rests upon empirically supported evolutionary approaches of emotions (e.g., Keltner et al., 2006; Nesse & Ellsworth, 2009). Broad evidence points to the universality of primary emotions (disgust, fear, anger, sadness, happiness) across cultures, which includes universality of emotional expression (e.g., facial expressions and their recognition), emotion triggers, subjective emotional experiences, physiological responses, and behavioral reactions (e.g., Elfenbein & Ambady, 2003; Matsumoto, 2001; Matsumoto & Hwang, 2012; Matsumoto, Nezlek, & Koopmann, 2007; Scherer & Wallbott, 1994). Further, these emotions directly connect to fundamental human motives: Physical disgust facilitates disease avoidance goals, fear facilitates physical and sexual safety goals, and moral disgust facilitates ingroup cohesion goals. Accordingly, our theory predicts the process of perceived affordances—those that threaten or facilitate fundamental human motives—engaging affective and behavioral reactions to be universal. However, beliefs about LGB individuals, and corresponding perceived affordances, vary according to socio-cultural contexts, and the relevance of affordances vary individually and eco-culturally according to active fundamental motives. Therefore, given our predictions rest upon affordance perceptions, which vary culturally, and active fundamental motives, which vary eco-culturally (in addition to varying across individuals), our theory predicts that prejudices and discrimination vary over time and across cultures in accordance with changes in societal perceptions and active fundamental motives.

Explaining variances in sexual prejudices across cultures. A growing body of literature examines cultural differences in attitudes toward LGBs and their sociocultural correlates. We interpret these sociocultural variables as cultural-level indicators of the salience of different fundamental motives and/or perceived affordances attributed to LGBs. Collier, Horn, Bos, and Sandfort (2015) tested differences between heterosexual American and Dutch high school students' attitudes toward LGs. Students reported how wrong they believe it is to be gay or lesbian and then selected reasons for their beliefs. Americans were more likely than the Dutch to believe that being gay or lesbian is wrong (estimated⁵⁰ $d = .37$), and that being LG goes against societal norms (21% vs. 5%, estimated⁵¹ $d = .51$) and against their religious beliefs (33% vs. 6% estimated $d = .75$), both of which mediated cultural differences in attitudes toward LGs. Similarly, Nierman, Thompson, Bryan, and Mahaffey (2007, Study 2) tested cultural differences in general attitudes toward LGs (using the ATLG) and traditional gender role endorsement between heterosexual Chilean and American college students. Chileans reported more negative attitudes than Americans toward gay men (estimated⁵² $d = .82$) and lesbians (estimated $d = .42$), and more strongly endorsed traditional gender roles (estimated $d = .61$), which mediated

cultural differences in attitudes toward gay men and lesbians. Together, the results of these studies suggest that cultural differences in perceptions of affordances posed by LGBs and cultural differences in the salience of different fundamental motives might help explain cultural differences in prejudices expressed toward LGBs.

Beyond bicultural comparisons, other researchers sought to explain variances in attitudes toward LGBs across numerous cultures. Adamczyk and Pitt (2009) found across a sample of 33 countries that importance of religion predicted disapproval of homosexuality, with similar findings replicating in cross-cultural studies examining religiosity and disapproval of LGBs among European countries (Donaldson, Handren, & Lac, 2017; Kuntz, Davidov, Schwartz, & Schmidt, 2015; van den Akker, van der Ploeg, & Scheepers, 2013). Although these studies did not explicitly measure perceptions that LGBs undermine religious ingroup norms and values, the robust relationship between religiosity and LGB prejudice nonetheless might suggest that differential salience of religious ingroup identity and/or perceptions that LGBs undermine religious ingroups explain cross-cultural variance in prejudices toward LGBs.

The sociocultural construction of “homosexual” differs across cultures, and some cultures tolerate and encourage some aspects of nonheterosexuality to the extent they facilitate fundamental motives. For example, in Samoa, some biological male children are raised female and are recognized as a third gender called *fa'afafine* (Bartlett & Vasey, 2006), and are highly valued within Samoan culture (VanderLaan, Petterson, Mallard, & Vasey, 2015). Although Samoans accept *fa'afafine* and *fa'afafine's* relationships with men, they nonetheless condemn homosexual behavior and criminalized it in 2013 (Crimes Act, 2013). Pairing the affordance management approach with the sociocultural context creates a lens through which to understand these seemingly contradictory norms. On the one hand, *fa'afafine* who engage in relationships with men do not violate normative sexual behavior and accordingly are not met with prejudices; on the other hand, gender-conforming men who engage in relationships with other men do violate sexual norms and are met with prejudices, which highlights the importance of considering the influence of sociocultural context on perceptions of threat. Further, nonheterosexual traits and behaviors might be considered acceptable to the extent that they are perceived within a culture to serve fundamental motives. For example, VanderLaan, Ren, and Vasey (2013) argue that nonheterosexual orientations are more likely to be tolerated and appreciated in communal societies that rely on close interdependence among members (as opposed to individualistic and/or Western cultures), as nonheterosexual males often invest more than heterosexual males in helping kin raise children, thus benefitting ingroup functioning and inclusive fitness within such communities.

Explaining variances in sexual prejudices over time. Prejudices, of course, change over time. In his review of the current state of “homophobia” in U.S. culture, Herek (2015) noted numerous trends demonstrating increased acceptance of LGB rights, including Supreme Court recognition of same-sex mar-

⁵⁰ Calculated using F value from p. 145 and sample size.

⁵¹ Calculated using percentages from Table 2, p. 145.

⁵² Calculated using F values and sample size from pp. 64–65.

riages, federal prosecution of hate crimes based on sexual orientation, and antidiscrimination policies in the workplace. National polling data support such trends and show an increase in support of LGBs: For example, disapproval of gay/lesbian couples raising children dropped from 50% in 2007 to 35% in 2011 (Pew Research Center, 2011); opposition to same-sex marriage dropped from 57% in 2001 to 32% in 2017 (Pew Research Center, 2017b); and distress over one's child coming out as gay plummeted from 89% in 1985 to 39% in 2015 (Pew Research Center, 2015).

A growing body of literature examined changes in attitudes toward LGBs over time in relation to other changing sociocultural attitudes, which we again interpret as indicators of the salience of different fundamental motives and/or perceived affordances attributed to LGBs. Jaspers, Lubbers, and de Graaf (2007) examined changing attitudes in the Netherlands from 1970 to 1998—with about 25% of people opposing homosexuals (i.e., “Do you think homosexuals should be allowed as much as possible to live their own lives or should they be discouraged?”) in 1970 dropping to about 10% opposing homosexuals in 1998 (Figure 1, p. 455)—and found that decreasing religiosity (i.e., religious or not and frequency of church attendance) predicted the decreasing opposition toward LGBs. These results perhaps suggest that the decreasing salience of religious ingroup identity decreased the relevance of perceptions that LGBs undermine the religious ingroup and/or decreased the actual perception that LGBs undermine the religious ingroup, thus resulting in decreased prejudices toward LGBs. Another short-term change in attitudes toward LGBs—linked with the salience of disease avoidance mechanisms, as previously discussed—was increased implicit prejudice toward gay men (and lesbians) in the United States corresponding with the 2014 Ebola outbreak relative to the 2 years previous, suggesting that even temporary activation of disease avoidance goals on a cultural level can influence attitudes toward targets perceived to pose disease threats (Inbar et al., 2016).

In all, our perspective does not require prejudices to remain stagnant over time or consistent across cultures, because our theory suggests that when perceived affordances are known *and* relevant to the activated motives of the perceiver, they will engage a particular course of action. As perceptions change, so, too, should affective and behavioral reactions; likewise, if certain threat or opportunity perceptions are not relevant in a certain culture or point in time, they should not engage the proposed affective and behavioral reactions. The relationship between perceptions, affective responses, and behavioral reactions depends upon the relevance of the perceptions to currently active fundamental motives. Accordingly, as perceptions change, so, too, will their ability to predict emotional and behavioral reactions, and the affordance management perspective is uniquely equipped to account for such changes. Exploring variances over time and across cultures presents exciting opportunities for new research.

Causal order? Our theoretical position argues that perceptions causally drive emotion and behavioral reactions when relevant to salient fundamental motives. However, rarely (if ever) does research attempt to demonstrate the experimental effects of perceptions on emotions and behaviors, thus making it challenging to rule out reverse causality predictions (e.g., prejudice justification processes; Crandall & Eshleman, 2003). Direct and indirect social learning over time creates stereotypical perceptions of groups and their members (Mackie, Hamilton, Susskind, & Rosselli, 1996),

thus making experimental manipulations of stereotypes challenging. Nonetheless, we find reverse-causality explanations improbable. Our approach predicted specific patterns of perceptions, emotions, and behaviors directed toward certain targets, and specific relationships between exact affordances, emotions, and behaviors, as informed by functional evolutionary perspectives on emotions. That certain emotions and behaviors arise in predictable patterns to respond to perceived affordances makes a strong case for affordances driving emotions and behaviors, rather than vice versa. The proposed processes have been supported in experimental paradigms that find an increase in prejudiced responses following experimental activation of relevant motives (e.g., activating pathogenic avoidance concerns elevates prejudice toward gay men; Inbar et al., 2012), and in statistical mediation models suggesting that individual differences in threat-related concerns predict prejudice and discrimination toward LGB groups stereotypically perceived to pose relevant threats, mediated through such threat perceptions and relevant emotional reactions (e.g., individual differences in stigma-by-association concerns predict anxiety toward and avoidance of LGBs; Buck et al., 2013). Further, if affordances arise simply to justify prejudices and discrimination, then any perceived affordance could be used to justify prejudiced responses (e.g., stigma-by-association threats could predict physical disgust) rather than specific affordances predicting specific affective and behavioral responses, which is not supported by the extant literature. In sum, the specificity of relationships informed by the affordance management approach largely rules out the case for reverse-causality arguments.

Numerous drivers of prejudice. Finally, our approach does not presume the perceptions identified are the *only* drivers of sexual prejudice, as prejudices are innately complex and driven by a variety of factors. Our perspective, for example, proposed multiple explanations for feelings of anxiety, moral disgust, physical disgust, anger, and positivity, and a series of explanations for (mainly negative) behaviors broadly defined as avoidant and aggressive, directed at sexual orientation groups. We do not claim that only one factor will explain what drives a specific emotion and behavior. Our perspective, rather, explains a portion of the variances in those affective and behavioral responses by identifying under what circumstances certain affordance-related perceptions might propel certain affective and behavioral reactions as ways to respond to such threats and opportunities.

Extensions. Our goal was to explain variances in prejudices and discrimination—across different targets, different perceivers, and different contexts. We argued that prejudices arise as specific emotions to engage functional behavioral responses to perceived threat and opportunity affordances posed by a particular target, with the relevance of those affordances determined by the perceiver's currently activated fundamental motives. We presented a body of literature in support of our perspective applied to explaining prejudices based on sexual orientation. The broader perspective, however, easily applies to explain a wider variety of prejudices. For example, Cook, Li, Newell, Cottrell, and Neel (2018) found that fear and avoidance characterize Americans' prejudices against Muslims and “illegal” immigrants, stemming from perceptions that these groups threaten physical safety, especially among Americans sensitive to ingroup threats. Similarly, fear and avoidance characterize prejudices against African Americans—based on perceptions that African Americans pose physical safety threats—espe-

cially among people with high belief in a dangerous world and under contexts eliciting fear for safety (e.g., in a dark room; Schaller, Park, & Mueller, 2003). Thus, this perspective holds far-reaching potential to explain a wide variety of prejudices and discriminatory responses and with the potential to spark new directions in the intergroup relations literature more broadly.

Our approach considered the interaction among target and perceiver sexual orientation and biological sex to predict a nuanced pattern of perceptions, emotions, and behaviors. However, implicit in our review was the presumed convergence of biological sex, gender identity, and gender expression (e.g., that a target's biological sex is easily identified and converges with their gender identity and expression). Nonetheless, considering the interaction of biological sex, gender identity, and gender expression of the target and perceiver provides an interesting avenue for new research. For example, what threats might cisgender individuals perceive noncisgender individuals to pose, and how might these perceptions vary as a function of the fundamental motives of the perceiver? Perceived gender role violations (i.e., perceived threats to ingroup norms and values) offer a good starting point, but recent gender-neutral bathroom debates suggest that cisgender individuals might perceive noncisgender individuals to pose other threats as well, including possible physical and sexual safety threats.

Implications

If one's goal is to reduce or eliminate discrimination based on sexual orientation, we argue that this action requires a focus on perceived threats as the source of prejudices and work to minimize these threats. Herein lies the bigger challenge, changing these perceptions—some of which arise as cultural stereotypes, whereas others arise from interpersonal interactions. For example, to change beliefs that gay and bisexual men transmit HIV/AIDS likely requires conscious collective efforts to minimize the association of these threats with the stigmatized groups. Other threats, however, like the perception that certain groups direct unwanted sexual interest or stigmatize heterosexual individuals by association, more likely fall upon interpersonal strategies to mitigate these perceptions and their consequences. For example, in general, gay men report romantic interest toward men, lesbians toward women, and bisexuals toward both men and women across sexual orientations, although the degree of attraction varies as a function of the target's sexual orientation (Young & Pirlott, 2014). This suggests that heterosexuals' perceptions that some LGBs direct (unwanted) sexual interest toward them are valid, although likely overgeneralized, and therefore general perceptions of unwanted sexual interest from one sexual orientation group to another remain unlikely to change. However, LGBs' *general* romantic interest toward heterosexuals is not the same as romantic interest toward *every* heterosexual. Just as heterosexual women report romantic interest in heterosexual men *in general*, but not *all* heterosexual women direct romantic interest toward *all* heterosexual men, not *all* gay men feel romantic interest toward *all* heterosexual men. Thus, these perceptions rely on an understanding of individuals' romantic interests on an interpersonal level and getting to know others on an individual level. In fact, research consistently shows that having friendships with LGB individuals is one of the most effective ways of reducing sexual prejudice (Herek, 2015).

Conclusion

The affordance management approach is not the only theory to explain sexual prejudice. However, a comparison with other theories demonstrates that the affordance management approach is the best equipped to account for nuances observed in the sexual prejudice literature (and in the prejudice literature more broadly), while also generating new questions for future research (including research outside the realm of sexual prejudice). This perspective generates fine-grained predictions that focus on the interaction between the perceiver and target (e.g., sexual orientation, sex, and motivational states) to determine the relevance of threat- and opportunity-affordances; these affordances elicit specific emotional reactions meant to engage a specific, predictable behavioral response to effectively act upon the threat or opportunity. To our knowledge, this is the first prejudice theory to articulate specific links between stereotyped affordances, specific emotion reactions, and certain behavioral inclinations, and to argue which stereotype affordances are likely to engage reactions and for whom. It therefore provides a degree of explanatory power heretofore missing from the sexual prejudices literature and the prejudice literature more generally (see Table 2).

Although the goal of our analysis focused specifically on explaining sexual prejudices, the goal of the affordance management perspective is to explain prejudice and discrimination more broadly. Explaining the causes and consequences of prejudice relies on an understanding of the interaction between the goals of the perceiver with the perceived affordances of the target, which elicit specific, strategic emotional and behavioral reactions to effectively manage the affordances posed by the target. Understanding this interaction helps explain social processes at both an interpersonal and intergroup level. We believe this article provides a blueprint for the explanation and remediation of sexual prejudices and discrimination broadly construed, and the explanatory power underlying this model extends beyond sexual prejudices as a launching point to explain the myriad of prejudices more generally.

References

- Adamczyk, A., & Pitt, C. (2009). Shaping attitudes about homosexuality: The role of religion and cultural context. *Social Science Research, 38*, 338–351. <http://dx.doi.org/10.1016/j.ssresearch.2009.01.002>
- Anderson, C., Hildreth, J. A. D., & Howland, L. (2015). Is the desire for status a fundamental human motive? A review of the empirical literature. *Psychological Bulletin, 141*, 574–601. <http://dx.doi.org/10.1037/a0038781>
- Baiocco, R., Santamaria, F., Lonigro, A., Ioverno, S., Baumgartner, E., & Laghi, F. (2014). Beyond similarities: Cross-gender and cross-orientation best friendship in a sample of sexual minority and heterosexual young adults. *Sex Roles, 70*, 110–121. <http://dx.doi.org/10.1007/s11199-014-0343-2>
- Bartlett, N. H., & Vasey, P. L. (2006). A retrospective study of childhood gender-atypical behavior in Samoan fa'afafine. *Archives of Sexual Behavior, 35*, 659–666. <http://dx.doi.org/10.1007/s10508-006-9055-1>
- Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. *Psychological Bulletin, 117*, 497–529. <http://dx.doi.org/10.1037/0033-2909.117.3.497>
- Brambilla, M., & Butz, D. A. (2013). Intergroup threat and outgroup attitudes: Macro-level symbolic threat increases prejudice against gay

- men. *Social Psychology*, 44, 311–319. <http://dx.doi.org/10.1027/1864-9335/a000127>
- Brambilla, M., Carnaghi, A., & Ravenna, M. (2011). Status and cooperation shape lesbian stereotypes: Testing predictions from the stereotype content model. *Social Psychology*, 42, 101–110. <http://dx.doi.org/10.1027/1864-9335/a000054>
- Bryant, A. (1977). *The Anita Bryant story: The survival of our nation's families and the threat of militant homosexuality*. Old Tappan, NJ: Fleming H. Revell.
- Buck, D. M., Plant, E. A., Ratcliff, J., Zielaskowski, K., & Boerner, P. (2013). Concern over the misidentification of sexual orientation: Social contagion and the avoidance of sexual minorities. *Journal of Personality and Social Psychology*, 105, 941–960. <http://dx.doi.org/10.1037/a0034145>
- Buss, D. M. (1989). Sex differences in human mate preference: Evolutionary hypotheses tested in 37 cultures. *Behavioral and Brain Sciences*, 12, 1–49. <http://dx.doi.org/10.1017/S0140525X00023992>
- Chuang, H. T., & Addington, D. (1988). Homosexual panic: A review of its concept. *The Canadian Journal of Psychiatry*, 33, 613–617. <http://dx.doi.org/10.1177/070674378803300707>
- Clausell, E., & Fiske, S. T. (2005). When do subgroup parts add up to the stereotypic whole? Mixed stereotype content for gay male subgroups explains overall ratings. *Social Cognition*, 23, 161–181. <http://dx.doi.org/10.1521/soco.23.2.161.65626>
- Collier, K. L., Horn, S. S., Bos, H. M. W., & Sandfort, T. G. M. (2015). Attitudes toward lesbians and gays among American and Dutch adolescents. *Journal of Sex Research*, 52, 140–150. <http://dx.doi.org/10.1080/00224499.2013.858306>
- Cook, C. L., Li, Y. J., Newell, S. N., Cottrell, C. A., & Neel, R. (2018). The world is a scary place: Individual differences in belief in a dangerous world predict specific intergroup prejudices. *Group Processes & Intergroup Relations*, 21, 584–596. <http://dx.doi.org/10.1177/1368430216670024>
- Cosmides, L., & Tooby, J. (2005). Neurocognitive adaptations designed for social exchange. In D. M. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 584–627). Hoboken, NJ: Wiley.
- Cosmides, L., & Tooby, J. (2008). Can a general deontic logic capture the facts of human moral reasoning? How the mind interprets social exchange and detects cheaters. In W. Sinnott-Armstrong (Ed.), *Moral psychology* (pp. 53–119). Cambridge, MA: MIT Press.
- Cottrell, C. A., & Neuberg, S. L. (2005). Different emotional reactions to different groups: A sociofunctional threat-based approach to “prejudice.” *Journal of Personality and Social Psychology*, 88, 770–789. <http://dx.doi.org/10.1037/0022-3514.88.5.770>
- Crandall, C. S., & Eshleman, A. (2003). A justification-suppression model of the expression and experience of prejudice. *Psychological Bulletin*, 129, 414–446. <http://dx.doi.org/10.1037/0033-2909.129.3.414>
- Crimes Act, 10 Samoa § 67, 68, 71 (2013).
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2007). The BIAS map: Behaviors from intergroup affect and stereotypes. *Journal of Personality and Social Psychology*, 92, 631–648. <http://dx.doi.org/10.1037/0022-3514.92.4.631>
- Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in Experimental Social Psychology*, 40, 61–149. [http://dx.doi.org/10.1016/S0065-2601\(07\)00002-0](http://dx.doi.org/10.1016/S0065-2601(07)00002-0)
- Dasgupta, N., Desteno, D., Williams, L. A., & Hunsinger, M. (2009). Fanning the flames of prejudice: The influence of specific incidental emotions on implicit prejudice. *Emotion*, 9, 585–591. <http://dx.doi.org/10.1037/a0015961>
- Donaldson, C. D., Handren, L. M., & Lac, A. (2017). Applying multilevel modeling to understand individual and cross-cultural variations in attitudes toward homosexual people across 28 European countries. *Journal of Cross-Cultural Psychology*, 48, 93–112. <http://dx.doi.org/10.1177/0022022116672488>
- Don't Ask, Don't Tell, 10 U.S.C. § 654 (1994).
- Elfenbein, H. A., & Ambady, N. (2003). Universals and cultural differences in recognizing emotions. *Current Directions in Psychological Science*, 12, 159–164. <http://dx.doi.org/10.1111/1467-8721.01252>
- Eliason, M., Donelan, C., & Randall, C. (1992). Lesbian stereotypes. *Health Care for Women International*, 13, 131–144. <http://dx.doi.org/10.1080/07399339209515986>
- Federal Bureau of Investigation. (2016). *Hate crime statistics, 2015*. Retrieved from https://ucr.fbi.gov/hate-crime/2015/topic-pages/incident-sandoffenses_final
- Filip-Crawford, G. (2016). Community interconnectedness and anti-gay behavior: A test of the lay disease-spread model of homosexuality. *Dissertation Abstracts International: Section B, Sciences and Engineering*, 76(9-B)(E). Retrieved from http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:3701481
- Filip-Crawford, G., & Neuberg, S. L. (2015). Homosexuality and pro-gay ideology as pathogens? Implications of a disease-spread lay model for understanding anti-gay behaviors. *Personality and Social Psychology Review*, 20, 332–364. <http://dx.doi.org/10.1177/1088868315601613>
- Fiske, S. T., Cuddy, A. J. C., Glick, P., & Xu, J. (2002). A model of (often mixed) stereotype content: Competence and warmth respectively follow from perceived status and competition. *Journal of Personality and Social Psychology*, 82, 878–902. <http://dx.doi.org/10.1037/0022-3514.82.6.878>
- Franklin, K. (2000). Antigay behaviors among young adults: Prevalence, patterns, and motivators in a noncriminal population. *Journal of Interpersonal Violence*, 15, 339–362. <http://dx.doi.org/10.1177/088626000015004001>
- Gallup, G. G., Jr. (1995). Have attitudes toward homosexuals been shaped by natural selection? *Ethology & Sociobiology*, 16, 53–70. [http://dx.doi.org/10.1016/0162-3095\(94\)00028-6](http://dx.doi.org/10.1016/0162-3095(94)00028-6)
- Gallup, G. G., Jr., & Suarez, S. D. (1983). Homosexuality as a by-product of selection for optimal heterosexual strategies. *Perspectives in Biology and Medicine*, 26, 315–322. <http://dx.doi.org/10.1353/pbm.1983.0018>
- Galupo, M. P. (2007). Friendship patterns of sexual minority individuals in adulthood. *Journal of Social and Personal Relationships*, 24, 139–151. <http://dx.doi.org/10.1177/0265407506070480>
- Galupo, M. P. (2009). Cross-category friendship patterns: Comparison of heterosexual and sexual minority adults. *Journal Of Social And Personal Relationships*, 26(6–7), 811–831. <http://dx.doi.org/10.1177/0265407509345651>
- Gates, G. J., & Newport, F. (2012). Special report: 3.4% of U.S. adults identify as LGBT. *Gallup*. Retrieved from <https://news.gallup.com/poll/158066/special-report-adults-identify-LGBT.aspx>
- Gibson, J. J. (1979). *The ecological approach to visual perception*. Boston, MA: Houghton Mifflin.
- Golec de Zavala, A., Waldzus, S., & Cyprianska, M. (2014). Prejudice toward gay men and a need for physical cleansing. *Journal of Experimental Social Psychology*, 54, 1–10. <http://dx.doi.org/10.1016/j.jesp.2014.04.001>
- Greenwald, A. G., McGhee, D. E., & Schwartz, J. K. (1998). Measuring individual differences in implicit cognition: The implicit association test. *Journal of Personality And Social Psychology*, 74, 1464–1480. <http://dx.doi.org/10.1037/0022-3514.74.6.1464>
- Hamilton, W. D. (1964). The genetical evolution of social behavior. I. *Journal of Theoretical Biology*, 7, 1–16. [http://dx.doi.org/10.1016/0022-5193\(64\)90038-4](http://dx.doi.org/10.1016/0022-5193(64)90038-4)
- Hardin, G. (1968). The tragedy of the commons: The population problem has no technical solution; it requires a fundamental extension in morality. *Science*, 162, 1243–1248.
- Haselton, M. G., & Buss, D. M. (2000). Error management theory: A new perspective on biases in cross-sex mind reading. *Journal of Personality*

- and *Social Psychology*, 78, 81–91. <http://dx.doi.org/10.1037/0022-3514.78.1.81>
- Henry, P. J., & Reyna, C. (2007). Value judgments: The impact of perceived value violations on political attitudes. *Political Psychology*, 28, 273–298. <http://dx.doi.org/10.1111/j.1467-9221.2007.00569.x>
- Herek, G. M. (1988). Heterosexuals' attitudes toward lesbians and gay men: Correlates and gender differences. *Journal of Sex Research*, 25, 451–477. <http://dx.doi.org/10.1080/00224498809551476>
- Herek, G. M. (1991). Stigma, prejudice, and violence against lesbians and gay men. In J. C. Gonsiorek & J. D. Weinrich (Eds.), *Homosexuality: Research implications for public policy* (pp. 60–80). Newbury Park, CA: Sage. <http://dx.doi.org/10.4135/9781483325422.n5>
- Herek, G. M. (1994). Assessing heterosexuals' attitudes toward lesbians and gay men: A review of empirical research with the ATLG scale. In B. Greene & G. M. Herek (Eds.), *Lesbian and gay psychology: Theory, research, and clinical applications* (pp. 206–228). Thousand Oaks, CA: Sage. <http://dx.doi.org/10.4135/9781483326757.n11>
- Herek, G. M. (2000). Sexual prejudice and gender: Do heterosexuals' attitudes toward lesbians and gay men differ? *Journal of Social Issues*, 56, 251–266. <http://dx.doi.org/10.1111/0022-4537.00164>
- Herek, G. M. (2002). Gender gaps in public opinion about lesbians and gay men. *Public Opinion Quarterly*, 66, 40–66. <http://dx.doi.org/10.1086/338409>
- Herek, G. M. (2007). Confronting sexual stigma and prejudice: Theory and practice. *Journal of Social Issues*, 63, 905–925. <http://dx.doi.org/10.1111/j.1540-4560.2007.00544.x>
- Herek, G. M. (2015). Beyond “homophobia”: Thinking more clearly about stigma, prejudice, and sexual orientation. *American Journal of Orthopsychiatry*, 85, S29–S37. <http://dx.doi.org/10.1037/ort0000092>
- Herek, G. M., & Capitano, J. P. (1999). AIDS stigma and sexual prejudice. *American Behavioral Scientist*, 42, 1130–1147. <http://dx.doi.org/10.1177/0002764299042007006>
- Inbar, Y., Pizarro, D. A., & Bloom, P. (2012). Disgusting smells cause decreased liking of gay men. *Emotion*, 12, 23–27. <http://dx.doi.org/10.1037/a0023984>
- Inbar, Y., Pizarro, D. A., Knobe, J., & Bloom, P. (2009). Disgust sensitivity predicts intuitive disapproval of gays. *Emotion*, 9, 435–439. <http://dx.doi.org/10.1037/a0015960>
- Inbar, Y., Westgate, E. C., Pizarro, D. A., & Nosek, B. A. (2016). Can a naturally occurring pathogen threat change social attitudes? Evaluations of gay men and lesbians during the 2014 Ebola epidemic. *Social Psychological and Personality Science*, 7, 420–427. <http://dx.doi.org/10.1177/19485506166639651>
- International Lesbian, Gay, Bisexual, Trans, and Intersex Association (ILGA). (2016, May). *State-sponsored homophobia: A world survey of sexual orientation laws: Criminalization, protection, and recognition*. Retrieved from http://ilga.org/downloads/02_ILGA_State_Sponsored_Homophobia_2016_ENG_WEB_150516.pdf
- Jaspers, E., Lubbers, M., & de Graaf, N. D. (2007). “Horrors of Holland”: Explaining attitude change towards euthanasia and homosexuals in the Netherlands, 1970–1998. *International Journal of Public Opinion Research*, 19, 451–473. <http://dx.doi.org/10.1093/ijpor/edm029>
- Johnson, M. K., Rowatt, W. C., & LaBouff, J. P. (2012). Religiosity and prejudice revisited: In-group favoritism, out-group derogation, or both? *Psychology of Religion and Spirituality*, 4, 154–168. <http://dx.doi.org/10.1037/a0025107>
- Katz-Wise, S. L., & Hyde, J. S. (2012). Victimization experiences of lesbian, gay, and bisexual individuals: A meta-analysis. *Journal of Sex Research*, 49, 142–167. <http://dx.doi.org/10.1080/00224499.2011.637247>
- Keltner, D., Haidt, J., & Shiota, L. (2006). Social functionalism and the evolution of emotions. In M. Schaller, D. Kenrick, & J. Simpson (Eds.), *Evolution and social psychology* (pp. 115–142). New York, NY: Psychology Press.
- Kenrick, D. T., Griskevicius, V., Neuberg, S. L., & Schaller, M. (2010). Renovating the pyramid of needs: Contemporary extensions built upon ancient foundations. *Perspectives on Psychological Science*, 5, 292–314. <http://dx.doi.org/10.1177/1745691610369469>
- Kenrick, D. T., Li, N. P., & Butner, J. (2003). Dynamical evolutionary psychology: Individual decision rules and emergent social norms. *Psychological Review*, 110, 3–28. <http://dx.doi.org/10.1037/0033-295X.110.1.3>
- Kenrick, D. T., Neuberg, S. L., Griskevicius, V., Becker, D. V., & Schaller, M. (2010). Goal-driven cognition and functional behavior: The fundamental-motives framework. *Current Directions in Psychological Science*, 19, 63–67. <http://dx.doi.org/10.1177/0963721409359281>
- Kite, M. E., & Deaux, K. (1987). Gender belief systems: Homosexuality and the implicit inversion theory. *Psychology of Women Quarterly*, 11, 83–96. <http://dx.doi.org/10.1111/j.1471-6402.1987.tb00776.x>
- Kite, M. E., & Whitley, B. E., Jr. (1996). Sex differences in attitudes toward homosexual persons, behaviors, and civil rights: A meta-analysis. *Personality and Social Psychology Bulletin*, 22, 336–353. <http://dx.doi.org/10.1177/0146167296224002>
- Kite, M. E., & Whitley, B. E., Jr. (1998). Do heterosexual men and women differ in their attitudes toward homosexuality? A conceptual and methodological analysis. In G. M. Herek (Ed.), *Stigma & sexual orientation* (pp. 39–61). Newbury Park, CA: Sage. <http://dx.doi.org/10.4135/9781452243818.n3>
- Kuntz, A., Davidov, E., Schwartz, S. H., & Schmidt, P. (2015). Human values, legal regulation, and approval of homosexuality in Europe: A cross-country comparison. *European Journal of Social Psychology*, 45, 120–134. <http://dx.doi.org/10.1002/ejsp.2068>
- Kurzban, R., & Leary, M. R. (2001). Evolutionary origins of stigmatization: The functions of social exclusion. *Psychological Bulletin*, 127, 187–208. <http://dx.doi.org/10.1037/0033-2909.127.2.187>
- Kurzban, R., & Neuberg, S. (2005). Managing ingroup and outgroup relationships. In D. Buss (Ed.), *The handbook of evolutionary psychology* (pp. 653–675). Hoboken, NJ: Wiley.
- LaMar, L., & Kite, M. (1998). Sex differences in attitudes toward gay men and lesbians: A multidimensional perspective. *Journal of Sex Research*, 35, 189–196. <http://dx.doi.org/10.1080/00224499809551932>
- Lehavot, K., & Lambert, A. J. (2007). Toward a greater understanding of antigay prejudice: On the role of sexual orientation and gender role violation. *Basic And Applied Social Psychology*, 29, 279–292. <http://dx.doi.org/10.1080/0197353070150339>
- Lehmiller, J. J., Law, A. T., & Tormala, T. T. (2010). The effect of self-affirmation on sexual prejudice. *Journal of Experimental Social Psychology*, 46, 276–285. <http://dx.doi.org/10.1016/j.jesp.2009.11.009>
- Lenton, A. P., & Webber, L. (2006). Cross-sex friendships: Who has more? *Sex Roles*, 54, 809–820. <http://dx.doi.org/10.1007/s11199-006-9048-5>
- Mackie, D. M., Hamilton, D. L., Susskind, J., & Rosselli, F. (1996). Stereotype formation and development. In C. N. Macrae, C. Stangor, & M. Hewstone (Eds.), *Stereotypes and stereotyping* (pp. 41–78). New York, NY: Guilford Press.
- Matsumoto, D. (2001). Culture and emotion. In D. Matsumoto (Ed.), *The handbook of culture and psychology* (pp. 171–194). New York, NY: Oxford University Press.
- Matsumoto, D., & Hwang, H. S. (2012). Culture and emotion: The integration of biological and cultural contributions. *Journal of Cross-Cultural Psychology*, 43, 91–118. <http://dx.doi.org/10.1177/00220222.111420147>
- Matsumoto, D., Nezlek, J. B., & Koopmann, B. (2007). Evidence for universality in phenomenological emotion response system coherence. *Emotion*, 7, 57–67. <http://dx.doi.org/10.1037/1528-3542.7.1.57>
- McArthur, L. Z., & Baron, R. M. (1983). Toward an ecological theory of social perception. *Psychological Review*, 90, 215–238. <http://dx.doi.org/10.1037/0033-295X.90.3.215>

- McDonald, M. M., Donnellan, M. B., Lang, R., & Nikolajuk, K. (2014a). Treating prejudice with imagery: Easier said than done? *Psychological Science*, 25, 837–839. <http://dx.doi.org/10.1177/0956797613516010>
- McDonald, M. M., Donnellan, M. B., Lang, R., & Nikolajuk, K. (2014b). [Treating prejudice with imagery: Easier said than done? Study 2a data]. Unpublished raw data.
- McLeod, A. C., Crawford, I., & Zechmeister, J. (1999). Heterosexual undergraduates' attitudes toward gay fathers and their children. *Journal of Psychology & Human Sexuality*, 11, 43–62. http://dx.doi.org/10.1300/J056v11n01_03
- Nardi, P. M. (1999). *Gay men's friendships: Invincible communities*. Chicago, IL: University of Chicago Press.
- Nesse, R. M., & Ellsworth, P. C. (2009). Evolution, emotions, and emotional disorders. *American Psychologist*, 64, 129–139. <http://dx.doi.org/10.1037/a0013503>
- Neuberg, S. L., & Cottrell, C. A. (2008). Managing the threats and opportunities afforded by human sociality. *Group Dynamics: Theory, Research, and Practice*, 12, 63–72. <http://dx.doi.org/10.1037/1089-2699.12.1.63>
- Neuberg, S. L., Kenrick, D. T., & Schaller, M. (2011). Human threat management systems: Self-protection and disease avoidance. *Neuroscience and Biobehavioral Reviews*, 35, 1042–1051. <http://dx.doi.org/10.1016/j.neubiorev.2010.08.011>
- Neuberg, S. L., Smith, D. M., & Asher, T. (2000). Why people stigmatize: Toward a biocultural framework. In T. F. Heatherton, R. E. Kleck, M. R. Hebl, J. G. Hull, T. F. Heatherton, R. E. Kleck, . . . J. G. Hull (Eds.), *The social psychology of stigma* (pp. 31–61). New York, NY: Guilford Press.
- Neuberg, S. L., Smith, D. M., Hoffman, J. C., & Russell, F. J. (1994). When we observe stigmatized and "normal" individuals interacting: Stigma by association. *Personality and Social Psychology Bulletin*, 20, 196–209. <http://dx.doi.org/10.1177/0146167294202007>
- Nierman, A. J., Thompson, S. C., Bryan, A., & Mahaffey, A. L. (2007). Gender role beliefs and attitudes toward lesbians and gay men in Chile and the U.S. *Sex Roles*, 57, 61–67. <http://dx.doi.org/10.1007/s11199-007-9197-1>
- Norenzayan, A., & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science*, 322, 58–62. <http://dx.doi.org/10.1126/science.1158757>
- Parrott, D. J., Peterson, J. L., Vincent, W., & Bakeman, R. (2008). Correlates of anger in response to gay men: Effects of male gender role beliefs, sexual prejudice, and masculine gender role stress. *Psychology Of Men & Masculinity*, 9, 167–178. <http://dx.doi.org/10.1037/1524-9220.9.3.167>
- Petersen, J. L., & Hyde, J. S. (2010). A meta-analytic review of research on gender differences in sexuality, 1993–2007. *Psychological Bulletin*, 136, 21–38. <http://dx.doi.org/10.1037/a0017504>
- Pew Research Center. (2011, June 2). *Disapprove of gay and lesbian couples raising children*. Retrieved from <http://www.pewresearch.org/fact-tank/2011/06/02/disapprove-of-gay-and-lesbian-couples-raising-children/>
- Pew Research Center. (2012, July 31). *Section 2: Long-term views of homosexuality, gay marriage, and adoption*. Retrieved from <http://www.pewforum.org/2012/07/31/two-thirds-of-democrats-now-support-gay-marriage-long-term-views-gay-marriage-adoption/>
- Pew Research Center. (2015, June 29). *Most Americans now say learning their child is gay wouldn't upset them*. Retrieved from <http://www.pewresearch.org/fact-tank/2015/06/29/most-americans-now-say-learning-their-child-is-gay-wouldnt-upset-them/>
- Pew Research Center. (2017a, April 5). *The changing global religious landscape*. Retrieved from <http://www.pewforum.org/2017/04/05/the-changing-global-religious-landscape/>
- Pew Research Center. (2017b, June 26). *Changing attitudes on gay marriage*. Retrieved from <http://www.pewforum.org/fact-sheet/changing-attitudes-on-gay-marriage/>
- Pirlott, A. G. (2012). Sexual prejudices fluctuate according to active fundamental life goals. *Dissertation Abstracts International: Section B, Sciences and Engineering*, 78(8-B)(E). Retrieved from http://gateway.proquest.com/openurl?url_ver=Z39.88-2004&rft_val_fmt=info:ofi/fmt:kev:mtx:dissertation&res_dat=xri:pqm&rft_dat=xri:pqdiss:3505691
- Pirlott, A. G., & Cook, C. L. (2019). Homophobia. In T. K. Shackelford & V. A. Weekes-Shackelford (Eds.), *Encyclopedia of evolutionary psychological science*. New York, NY: Springer.
- Pirlott, A. G., & MacKinnon, D. P. (2016). Design approaches to experimental mediation. *Journal of Experimental Social Psychology*, 66, 29–38. <http://dx.doi.org/10.1016/j.jesp.2015.09.012>
- Pirlott, A. G., & Neuberg, S. L. (2014). Sexual prejudice: Avoiding unwanted sexual interest? *Social Psychological and Personality Science*, 5, 92–101. <http://dx.doi.org/10.1177/1948550613486674>
- Plant, E. A., Zielaskowski, K., & Buck, D. M. (2014). Mating motives and concerns about being misidentified as gay or lesbian: Implications for the avoidance and derogation of sexual minorities. *Personality and Social Psychology Bulletin*, 40, 633–645. <http://dx.doi.org/10.1177/0146167214521467>
- Polimeni, A., Hardie, E., & Buzwell, S. (2000). Homophobia among Australian heterosexuals: The role of sex, gender role ideology, and gender role traits. *Current Research In Social Psychology*, 5(4). Retrieved from <https://uiowa.edu/crisp/sites/uiowa.edu.crisp/files/5.4.pdf>
- Reyna, C., Wetherell, G., Yantis, C., & Brandt, M. J. (2014). Attributions for sexual orientation vs. stereotypes: How beliefs about value violations account for attribution effects on anti-gay discrimination. *Journal of Applied Social Psychology*, 44, 289–302. <http://dx.doi.org/10.1111/jasp.12226>
- Rivera, L. M. (2007). When feeling good is bad: The detrimental effect of self-affirmation on prejudice. *Dissertation Abstracts International: Section B: The Sciences and Engineering*, 67, 6773. (Accession No. 2007-99010-161)
- Rowatt, W. C., Tsang, J., Kelly, J., LaMartina, B., McCullers, M., & McKinley, A. (2006). Associations between religious personality dimensions and implicit homosexual prejudice. *Journal for the Scientific Study of Religion*, 45, 397–406. <http://dx.doi.org/10.1111/j.1468-5906.2006.00314.x>
- Rumens, N. (2012). Queering cross-sex friendships: An analysis of gay and bisexual men's workplace friendships with heterosexual women. *Human Relations*, 65, 955–978. <http://dx.doi.org/10.1177/0018726712442427>
- Russell, E. M., Ickes, W., & Ta, V. P. (2018). Women interact more comfortably and intimately with gay men—but not straight men—after learning their sexual orientation. *Psychological Science*, 29, 288–303. <http://dx.doi.org/10.1177/0956797617733803>
- Sartore, M. L., & Cunningham, G. B. (2009). Gender, sexual prejudice and sport participation: Implications for sexual minorities. *Sex Roles*, 60, 100–113. <http://dx.doi.org/10.1007/s11199-008-9502-7>
- Schaller, M., & Neuberg, S. L. (2012). Danger, disease, and the nature of prejudices. *Advances in Experimental Social Psychology*, 46, 1–54. <http://dx.doi.org/10.1016/B978-0-12-394281-4.00001-5>
- Schaller, M., & Park, J. H. (2011). The behavioral immune system (and why it matters). *Current Directions in Psychological Science*, 20, 99–103. <http://dx.doi.org/10.1177/0963721411402596>
- Schaller, M., Park, J. H., & Mueller, A. (2003). Fear of the dark: Interactive effects of beliefs about danger and ambient darkness on ethnic stereotypes. *Personality and Social Psychology Bulletin*, 29, 637–649. <http://dx.doi.org/10.1177/0146167203029005008>
- Scherer, K. R., & Wallbott, H. G. (1994). Evidence for universality and cultural variation of differential emotion response patterning. *Journal of*

- Personality and Social Psychology*, 66, 310–328. <http://dx.doi.org/10.1037/0022-3514.66.2.310>
- Schmitt, D. P., Shackelford, T. K., & Buss, D. M. (2001). Are men really more 'oriented' toward short-term mating than women? A critical review of theory and research. *Psychology, Evolution & Gender*, 3, 211–239. <http://dx.doi.org/10.1080/14616660110119331>
- Shepperd, D., Coyle, A., & Hegarty, P. (2010). Discourses of friendship between heterosexual women and gay men: Mythical norms and absence of desire. *Feminism & Psychology*, 20, 205–224. <http://dx.doi.org/10.1177/0959353509349604>
- Sigelman, C. K., Howell, J. L., Cornell, D. P., Cutright, J. D., & Dewey, J. C. (1991). Courtesy stigma: The social implications of associating with a gay person. *The Journal of Social Psychology*, 131, 45–56. <http://dx.doi.org/10.1080/00224545.1991.9713823>
- Stephan, W. G., Ybarra, O., & Morrison, K. R. (2009). Intergroup threat theory. In T. M. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (pp. 43–59). New York, NY: Psychology Press.
- Stephan, W. G., Ybarra, O., & Rios, K. (2016). Intergroup threat theory. In T. M. Nelson (Ed.), *Handbook of prejudice, stereotyping, and discrimination* (2nd ed., pp. 255–278). New York, NY: Psychology Press.
- St. Lawrence, J. S., Husfeldt, B. A., Kelly, J. A., Hood, H. V., & Smith, S., Jr. (1990). The stigma of AIDS: Fear of disease and prejudice toward gay men. *Journal of Homosexuality*, 19, 85–101. http://dx.doi.org/10.1300/J082v19n03_05
- Swim, J. K., Ferguson, M. J., & Hyers, L. L. (1999). Avoiding stigma by association: Subtle prejudice against lesbians in the form of social distancing. *Basic and Applied Social Psychology*, 21, 61–68. http://dx.doi.org/10.1207/s15324834basp2101_6
- Talley, A. E., & Bettencourt, B. A. (2008). Evaluations and aggression directed at a gay male target: The role of threat and antigay prejudice. *Journal of Applied Social Psychology*, 38, 647–683. <http://dx.doi.org/10.1111/j.1559-1816.2007.00321.x>
- Terrizzi, J. A., Shook, N. J., & Ventis, W. L. (2009). Disgust: A predictor of social conservatism and prejudicial attitudes toward homosexuals. *Personality and Individual Differences*, 49, 587–592. <http://dx.doi.org/10.1016/j.paid.2010.05.024>
- Tooby, J., & Cosmides, L. (2008). The evolutionary psychology of emotions and their relationship to internal regulatory variables. In M. Lewis, J. M. Haviland-Jones, & L. F. Barrett (Eds.), *Handbook of emotions* (3rd ed., pp. 114–137). New York, NY: Guilford.
- Trivers, R. L. (1972). Parental investment and sexual selection. In B. Campbell (Ed.), *Sexual selection and the descent of man* (pp. 136–179). Chicago, IL: Aldine.
- van den Akker, H., van der Ploeg, R., & Scheepers, P. (2013). Disapproval of homosexuality: Comparative research on individual and national determinants of disapproval of homosexuality in 20 European countries. *International Journal of Public Opinion Research*, 25, 64–86. <http://dx.doi.org/10.1093/ijpor/edr058>
- VanderLaan, D. P., Petterson, L. J., Mallard, R. W., & Vasey, P. L. (2015). (Trans.) Gender role expectations and child care in Samoa. *Journal of Sex Research*, 52, 710–720. <http://dx.doi.org/10.1080/00224499.2014.884210>
- VanderLaan, D. P., Ren, Z., & Vasey, P. L. (2013). Male androphilia in the ancestral environment. An ethnological analysis. *Human Nature*, 24, 375–401. <http://dx.doi.org/10.1007/s12110-013-9182-z>
- Vescio, T. K., & Biernat, M. (2003). Family values and antipathy toward gay men. *Journal of Applied Social Psychology*, 33, 833–847. <http://dx.doi.org/10.1111/j.1559-1816.2003.tb01927.x>
- Vincent, W., Parrott, D. J., & Peterson, J. L. (2011). Effects of traditional gender role norms and religious fundamentalism on self-identified heterosexual men's attitudes, anger, and aggression toward gay men and lesbians. *Psychology of Men & Masculinity*, 12, 383–400. <http://dx.doi.org/10.1037/a0023807>
- Whitley, B. E., Jr. (2001). Gender-role variables and attitudes toward homosexuality. *Sex Roles*, 45, 691–721. <http://dx.doi.org/10.1023/A:1015640318045>
- Whitley, B. E., Jr. (2009). Religiosity and attitudes toward lesbians and gay men: A meta-analysis. *International Journal for the Psychology of Religion*, 19, 21–38. <http://dx.doi.org/10.1080/10508610802471104>
- Williams, K. D., & Nida, S. A. (2011). Ostracism: Consequences and coping. *Current Directions in Psychological Science*, 20, 71–75. <http://dx.doi.org/10.1177/0963721411402480>
- Winegard, B., Reynolds, T., Baumeister, R. F., & Plant, E. A. (2016). The coalitional value theory of antigay bias. *Evolutionary Behavioral Sciences*, 10, 245–269. <http://dx.doi.org/10.1037/ebs0000077>
- Yost, M. R., & Thomas, G. D. (2012). Gender and binegativity: Men's and women's attitudes toward male and female bisexuals. *Archives of Sexual Behavior*, 41, 691–702. <http://dx.doi.org/10.1007/s10508-011-9767-8>
- Young, T., & Pirlott, A. G. (2014, February). *The sexual interests and perceptions of gay/lesbian and bisexual men and women toward heterosexual, bisexual, and gay/lesbian men and women*. Poster presented at the Society for Personality and Social Psychology Conference, Austin, TX.

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