## "IT'S THE CONFORMITY, STUPID" Explicit and Implicit Attitudes towards Norm-Conforming and Norm-Breaking Gay Men in the United States

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#### ABSTRACT

This thesis relies on the Stereotype Content Model (SCM) and the Implicit Association Test (IAT) in order to arrive at a more nuanced understanding of the explicit and implicit attitudes that liberals and conservatives exhibit towards gay men in contemporary American society. I argue on the basis of results from five online experimental studies that whereas both liberals and conservatives show clear explicit and implicit preferences for norm-conforming subgroups of the gay community over norm-breaking ones, the aspect of conformity trumps that of sexual orientation for liberals and the opposite is true for conservatives. That is, when faced with the choice between norm-conforming gay men and norm-breaking straight people, liberals tend to express both explicit and implicit preference for the former and conservatives for the latter. Moreover, ideology also influences explicit attitudes towards gay men indirect-ly, through the intervening variable of internal motivation to control prejudice against gay men. Since liberals tend to have stronger internal motivation to control prejudice, they are more susceptible to social desirability effects than conservatives when explicit measures are used.

*Keywords*: Stereotype Content Model (SCM), Implicit Association Test (IAT), intergroup social cognition, social conservatism, explicit attitudes, implicit attitudes, queer theory

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#### Chapter 1 INTRODUCTION—IS THERE ANY TROUBLE WITH NORMAL?

Upon being reelected President of the United States in November 2012, Barack Obama laid out a vision of America for his second term in office, combining references to the traditional idea of self-reliance with a progressive, liberal outlook that strives for full equality of all American citizens despite their considerable differences. In this ideal America, it does "not matter who you are or where you come from or what you look like or where you love (*sic*)" or "whether you're black or white or Hispanic or Asian or Native American or young or old or rich or poor, abled, disabled, gay or straight," you should be able to make it "if you're willing to try" (The New York Times, 2012).

Obama's victory speech, which followed a number of others in a similar vein, might herald something like the (imminent) triumph of the so-called "politics of normalization" that had been the semi-official credo of the American gay rights movement at least since the publication of the programmatic book *Virtually Normal: An Argument About Homosexuality* (1995/1996) by Andrew Sullivan. In this book, Sullivan contends that the way forward both for the gay rights movement and the United States in general lies in the full normalization of homosexuality, i.e., the elimination of all legal differences between homosexuals and heterosexuals.

Since the publication of *Virtually Normal*, "Don't Ask, Don't Tell" (DADT) has been repealed, nine states as well as the District of Columbia have passed marriage equality laws (Human Rights Campaign, 2012), the public support for gay marriage surged from 27 percent in favor and 65 percent opposed in 1996 to 46 percent in favor and 45 percent opposed in 2012 (PewResearch Center, 2012), and the overturn of California's "Proposition 8" as well as of the "Defense of Marriage Act" (DOMA) of 1996 by the Supreme Court seems a distinct possibility after oral arguments took place in March 2013. However, some would argue that these major steps towards full legal equality might prove illusory, since striving for the normalization of homosexuality had been a misguided strategy from the outset. One of the most prominent representatives of this stance is queer theorist Michael Warner whose *The Trouble with Normal: Sex, Politics, and the Ethics of Queer Life* (2000) delivers a powerful critique of the politics of normalization as the overarching aim of the American LGBTQ movement.

Warner points to two main problems with regard to the politics of normalization. Firstly, it creates the questionable impression in the straight majority that recognition of the full dignity of gay individuals is not an inherent natural right, since it can be made conditional on gay people behaving "normally." Secondly, and more importantly for our present purposes, it might give rise to a false dichotomy between the "good and acceptable face of the move-ment" (i.e., those homosexuals that are willing and able to comply with normative sexuality) and despised elements like sex workers, drag queens, fetishists—or, to put it more generally, "the queer."

However engaging its argument might be, *The Trouble with Normal* only provides selective anecdotal evidence for the existence of the dichotomous perception of gay men in American society. This thesis transforms this claim into testable hypotheses and carries out an empirical examination of its merits on the basis of five experimental studies. Thus, the main research question that I address is *whether conformity* (i.e., compliance with the social norm of a traditional monogamous middle-class lifestyle) *plays a role in attitudes towards various sub-groups within the gay community in the United States and whether liberals and conservatives differ in their attitudes towards norm-conforming and norm-breaking gay men.* 

In answering this research question, the thesis relies on the following structure. Chapter 2 features a critical review of the measures of social cognition used in my research, focusing on the Stereotype Content Model (SCM), the Implicit Association Test (IAT), and the visual priming of stereotypes. Based on the literature reviewed, I translate the overarching research question stated above into seven specific hypotheses. In Chapter 3, I present and analyze the results from three online experiments based on the Stereotype Content Model, starting out with the methods used, summarizing the empirical findings, and concluding with a discussion of the results. Chapter 4, which addresses the same hypotheses with a completely different methodology—the Implicit Association Test—, follows the same structure as Chapter 3. Chapter 5 concludes the thesis by providing an answer to the research question raised here and discussing the wider implications of the empirical findings.

#### Chapter 2

#### EXPLICIT AND IMPLICIT MEASURES OF SOCIAL COGNITION—THE STEREOTYPE CONTENT MODEL (SCM) AND THE IMPLICIT ASSOCIATION TEST (IAT)

In *The Nature of Prejudice* (1954/1958), Allport presented a pessimistic view of the "inevitable" nature of stereotyping and prejudice, remarking that "[o]nce formed, categories are the basis for normal prejudgment" (p. 20). However, since then, and especially since the "cognitive turn" in social psychology, this "inevitability of prejudice" perspective has often been criticized (Devine, 1989). Moreover, it seems that different experimental paradigms, especially explicit versus implicit measures of social cognition, can lead to vastly different substantive conclusions regarding the nature of intergroup attitudes.

The exact relationship between explicit and implicit measures of social cognition is, however, a lot less clear, although the main methodological difference certainly is. Explicit measures rely on explicit self-reports, while implicit measures use indirect behavioral measurements to make conclusions about the individual's attitudes. Early research found very strong (Wittenbrink, Judd, & Park, 1997) to moderate (Lepore & Brown, 1997) to zero (Karpinski & Hilton, 2001) relationships between participants' explicit and implicit attitudes towards various target groups. This led to something that Fazio and Olson (2003) have sarcastically described as the "will the real attitude please stand up?" debate. This debate focused mainly on the question of whether explicit and implicit attitudes are *conceptually* different) or are merely two ways of measuring the very same thing.

In this chapter, I review the most relevant portions of the literature on the explicit and implicit measures of social cognition that I have used to answer my research question formulated in Chapter 1, i.e., whether conservatives and liberals have different attitudes towards gay men in the United States and whether conformity and sexual orientation play a different role in forming those attitudes depending on the individual's political leanings. First, I review some of the literature on the Stereotype Content Model (SCM) (Section 2.1), followed by a review of the Implicit Association Test (IAT) (Section 2.2). I address some differences between both methods in Section 2.3 and then consider some relevant aspects of previous research on the visual priming of stereotypes in Section 2.4. I conclude the chapter with a summary of my hypotheses in Section 2.5.

#### 2.1 The Stereotype Content Model (SCM)

Allport (1954/1958) defines the process of stereotyping as "thinking ill of others without sufficient warrant." After guiding generations of researchers, this view of stereotyping has recently been challenged by Susan Fiske and her colleagues, who argue that in order to be able to accommodate ambivalent stereotypes, a more lenient and multifaceted concept of stereotyping is required (Cuddy, Fiske, & Glick, 2007; Fiske, Cuddy, Glick, & Xu, 2002; Glick & Fiske, 2001; Glick, Diebold, Bailey-Werner, & Zhu, 1997).

Initially, Fiske and her colleagues made this point in the context of sexist stereotypes. They posited that it was perfectly possible to endorse two conflicting stereotypes of women simul-taneously—on the one hand, about women as domineering demons who abuse their sexual powers and on the other hand, as helpless, dependent creatures who are in need of male protection (Glick et al., 1997; Glick & Fiske, 1996; 2001; 2011; Jost & Kay, 2005).

Later on, the conclusion that stereotypes are not always unequivocally negative (or positive) was extended to a number of other social groups as well. The Stereotype Content Model (SCM), also developed by Fiske and her colleagues, holds that social stereotypes can be captured along two dimensions (warmth and competence) and judgments on these two dimensions can be complementary or contradictory, with the latter leading to mixed stereotype con-

tent (Cuddy et al., 2007; Cuddy, Fiske, & Glick, 2008; Fiske et al., 2002; Fiske, Cuddy, & Glick, 2007).

Ratings along the twin dimensions of warmth and competence yield four stereotype clusters—low warmth–low competence (resented groups like the homeless and welfare recipients), low warmth–high competence (envied groups like Asians and Jews), high warmth–low competence (pitied groups like the elderly and housewives), and high warmth–high competence (admired in-groups and reference groups like Christians and the middle class). The SCM has been tested and confirmed in the context of a number of social groups, including the elderly (Cuddy & Fiske, 2004; Cuddy, Norton, & Fiske, 2005), immigrants (Lee & Fiske, 2006), Asian Americans (Lin, Kwan, Cheung, & Fiske, 2005), and Jews (Glick, 2002).

Gay men, however, did not seem to fit into any of the four stereotype clusters described above (Fiske et al., 2002). In a closer investigation, Clausell and Fiske (2005) concluded that because different kinds of stereotype content were associated with different subgroups within the gay minority, these had simply canceled each other out. However, this subgroup analysis is not entirely convincing, since it seems improbable that humans otherwise constantly falling back on cognitive heuristics (Kahneman, 2011) would—as Fiske and her colleagues argue routinely use over ten distinct subgroups to categorize gay men. Instead, I hypothesized that (1) *individuals rely on the much more easily accessible and universal dimension of conformity when distinguishing between subgroups of the gay community.* 

According to the SCM, warmth ratings are predicted by perceived economic competition with the target group, while the perceived status of the target group predicts assessments on the competence dimension (Cuddy et al., 2008; 2009; Fiske et al., 2002; 2007). Two important points should be mentioned however. First, although Fiske and her colleagues have provided some limited experimental evidence for this claim (Caprariello, Cuddy, & Fiske,

2009), the competition–warmth link has mainly been established on a correlational basis. Second, in the SCM for subgroups within the gay community, perceived competition did not predict warmth (Clausell & Fiske, 2005).

Although the authors explain this deficiency with limited statistical power, I hypothesized that (II) *perceived conformity with social norms might be just as good a predictor of warmth as lack of perceived economic competition, especially in the context of target groups like gay men, where social conflicts are mainly of symbolic and value-centered, rather than of economic, nature.* 

#### 2.2 The Implicit Association Test (IAT)

One of the most frequently used implicit measure of stereotypical attitudes<sup>1</sup> is the Implicit Association Test (Greenwald, McGhee, & Schwartz, 1998; Greenwald, Nosek, & Banaji, 2003; Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Nosek, Greenwald, & Banaji, 2005), which measures differences in response latencies when matching evaluative attributes (e.g., "wonderful" and "horrible") to different target categories (e.g., gay and straight people). The IAT relies on the assumption that participants take longer to match positive attributes to target categories that they view negatively, i.e., if they harbor anti-gay stereotypes, they will need more time to assign positive adjectives to verbal or visual stimuli representing gay men than to assign negative ones.

Although the IAT has been widely used to tap into implicit attitudes towards gay men (Banse, Seise, & Zerbes, 2001; Nosek, Smyth, Hansen, Devos, Lindner, Ranganath, Smith, Olson, Chugh, Greenwald, & Banaji, 2007a), the visual stimuli representing this social group have been limited to wedding cake toppers, bathroom signs and other generic images. This practice

<sup>&</sup>lt;sup>1</sup> In the strict sense of both terms, the SCM measures *stereotypes*, while the IAT measures *attitudes*. However, because the BIAS map posits a direct stereotype-to-attitude relationship (Cuddy, Fiske, & Glick, 2007), I do not address this distinction further and use the expression "attitudes" in the wider sense, i.e., as including stereo-types as well.

might be problematic, since participants might be responding to mere category labels rather than to members of the relevant category (see Section 2.4.2 below). Moreover, the standard sexual orientation IAT contains mixed visual representations of gay men and lesbian women. Most importantly, however, symbolic representations do not enable the measurement of divergent attitudes towards different subgroups within the gay minority.

#### 2.3 Differences between the SCM and the IAT

In this section, I address some important differences between the Stereotype Content Model (SCM) and the Implicit Association Test (IAT), with special regard to social desirability concerns and predictions in terms of individual variation in attitudes towards social groups.

#### 2.3.1 Social desirability

In general, larger effect sizes are observed for the IAT than for the corresponding explicit self-report measures. The reason for this is believed to be that some participants are unwilling or unable to report their explicit attitudes. However, at the same time, implicit–explicit correlations vary considerably for different target groups, ranging from .13 for age to .43 for sexual orientation (Nosek et al., 2007a). Based on these results and the considerations outlined in Section 2.2 above, I hypothesized that (III) when using the same images of norm-conforming and norm-breaking gay and straight individuals in the SCM and the IAT, both methods would yield similar conclusions, although results of the IAT might be more unequivocal.

One of the advantages of implicit measures over explicit measures is that by entirely avoiding reliance on self-reports, they preclude the possibility of social conformity and self-presentational concerns contaminating the results (Burdein, Lodge, & Taber, 2006; Nosek et al., 2007a). Nosek (2005) argues that self-presentational biases exert a negative effect on implicit–explicit correspondence through two mechanisms—when participants want to hide

their attitudes (impression management) or when they genuinely dislike the attitude that they have (see also Nosek et al., 2007a).

Czellar (2006), however, found that the IAT is not entirely immune to social desirability effects either. When external evaluation was salient (i.e., respondents had been led to believe that an imminent evaluation was pending) or when the value of the self-presentational outcome was high (i.e., participants had a stake in making a good impression), they seemed to monitor their responses. At the same time, prior results regarding the possibility of consciously faking IAT results had been mixed, with some concluding that it is perfectly impossible (Banse et al., 2001) and others arguing that although it is possible, implicit measures are less susceptible to faking than self-reported measures (Steffens, 2004). However, since participants in this study completed the experimental sessions in a completely anonymous way, in the privacy of their homes, I did not find it necessary to pursue this issue in my research.

In contrast, as an explicit measure of stereotyping, the Stereotype Content Model might be heavily vulnerable to social desirability concerns (Blair & Banaji, 1996; Carver, Glass, & Katz, 1978; Fazio, 2001; Fazio, Jackson, Dunton, & Williams, 1995; M. A. Olson & Fazio, 2003). Fiske, Cuddy, Glick, and Xu (2002) argue that since stereotypes are consensual (see Section 2.3.2), an efficient way of overcoming social desirability might be to ask participants to provide meta-assessments of general perceptions of target groups rather than their own evaluations.

However, it has been shown that social desirability concerns are not all-pervasive in the context of explicit measures either. Importantly, Haidt and Hersh (2001) provide evidence that even liberals are more than ready to openly condemn certain kinds of consensual sexual behavior as long as they do not perceive the actors as members of a distinct social group. Therefore, I hypothesized that (IV) *social desirability concerns might be more salient for some tar*- get groups than for others and susceptibility to social desirability might be subject to individual-level variation.

#### 2.3.2 Ideology and attitudes towards gay men

Moreover, although Fiske and her colleagues concede the point that cultural (Cuddy et al., 2009) and structural (Caprariello et al., 2009; Durante et al., 2012) differences across societies can lead to cross-country differences in stereotype content, they maintain that stereotypes are largely universal (Cuddy et al., 2008; Fiske et al., 2007) and at any rate, widely shared within any given society (Fiske et al., 2002). The Implicit Association Test (IAT), on the other hand, has shown considerable individual-level variation in implicit attitudes towards social groups, including gay men (Nosek et al., 2007a).

I hypothesized that (v) *neither explicit nor implicit attitudes towards norm-conforming and norm-breaking gay men are consensual in the United States.* Rather, I assumed that different ideological leanings might lead to differences in stereotype content, both directly and through the intervening variable of social desirability, as well as to differences in implicit preferences.

The causal mechanism linking conservatism to an unfavorable attitude towards sexual minorities is far from clear, however. Competing explanations include motivated social cognition (Jost, Glaser, Kruglanski, & Sulloway, 2003), higher disgust sensitivity (Inbar, Pizarro, & Bloom, 2008; Inbar, Pizarro, Iyer, & Haidt, 2012; Inbar, Pizarro, Knobe, & Bloom, 2009; K. B. Smith, Oxley, Hibbing, Alford, & Hibbing, 2011), as well as differences in the moral foundations upon which liberals and conservatives rely (Graham, Haidt, & Nosek, 2009; Graham, Nosek, & Haidt, 2011; Haidt & Hersh, 2001). At the same time, the motivated social cognition (Jost et al., 2003), genetic heritability (Alford, Funk, & Hibbing, 2005) and moral foundations theories (Graham et al., 2009) all indicate that since ideological positions are multidimensional, their measurement on a unidimensional Likert scale might be problematic.

Moreover, self-reported measures of ideology tend to be unreliable predictors of behavior. Research on political attitudes and behavior of course suggests that the attitude-to-behavior link is mediated by a number of factors like attitude accessibility, with highly accessible attitudes yielding a stronger and more stable correspondence between attitudes and behavior (Bassili, 1995; Burdein et al., 2006).

However, previous research has shown quite unequivocally that self-placement on a unidimensional ideology scale is not always indicative of future behavior. For example, Piazza, Sniderman, and Tetlock (1989) used the so-called "counterargument technique" to demonstrate that self-confessed liberals are quite easily persuaded to give up on their commitment to the principle of equality in racial matters. Burdein (2007) conducted a series of studies to demonstrate that while responses to items measuring attitudes towards social issues reliably predict anti-Black bias in several American samples and using a variety of different experimental paradigms, economic conservatism items have no predictive validity whatsoever.

On the other hand, the results of more than 270,000 sexual orientation Implicit Association Tests (IAT) carried out between 2002 and 2006 suggest that self-reported ideological positions are a reliable predictor of implicit attitudes towards homosexuals—the more conservative someone's self-placement on a simple Likert scale, the stronger their implicit preference for heterosexuals over homosexuals (Nosek et al., 2007a; 2007b). However, the IAT is administered in such a way that participants are already aware of the topic of the IAT when they are asked to indicate their ideological positions, so one could reasonably argue that they use a

cognitive shortcut (Kahneman & Tversky, 1982) and report their positions on gay marriage or at least social conservatism instead.

Based on the considerations outlined in this section, ideology was measured twice in each experimental session. On the one hand, I used the standard 7-point Likert scale measure of ideology from the ANES (American National Election Studies). On the other hand, participants were asked to indicate their approval or disapproval of some Wilson–Patterson type items<sup>2</sup> (Littvay, Kurdi, & Hatemi, forthcoming). I hypothesized that (vi) *the Wilson–Patterson type social conservatism items might be a more reliable predictor of both explicit and implicit attitudes, especially when participants are asked to indicate their ideological preferences without awareness of the issues addressed in the upcoming experimental session.* 

#### 2.4 Visual priming of stereotype content

#### 2.4.1 Processing goals

Macrae et al. (1997) have found that stereotype activation is limited to those situations in which perceivers are interested in the social meaning of the stimuli that they encounter. Mere attention to the stimulus is not sufficient; for facilitation to occur, the priming stimulus must be processed semantically. When participants were merely asked to detect whether a white dot was present on the pictures (presemantic processing), gender stereotypes were not activated.

It seems, however, that instructions regarding specific semantic processing goals as well as the type of stimuli used can also have far-reaching consequences for the effects found. In Wheeler and Fiske's study (2005), participants viewed photographs of Black and White faces under three different goals, namely social categorization (by age), social individuation

<sup>&</sup>lt;sup>2</sup> The twelve items used included patriotism, nationalism, lower taxes, church authority, small government, obedience, legalized abortion, socialism, labor unions, labor strikes, sexual freedom, and corporate tax. For the purposes of this study, only responses to the three social conservatism items (i.e., "legalized abortion," "sexual freedom," and "church authority") were taken into account.

(guessing the person's vegetable preferences), and simple visual inspection (detecting a dot; see also Macrae et al. (1997), above). Participants' reactions to the same visual stimuli were recorded using fMRI and also using an implicit behavioral measure (a lexical priming paradigm).

In the "social categorization" condition, heightened amygdala activity was recorded for Black faces, in the "social individuation" condition, heightened amygdala activity was detected for White faces (suggesting conscious suppression of stereotypes), while in the "visual inspection" condition, no difference was recorded between Black and White faces. Moreover, presentation of Black faces seemed to prime stereotype knowledge only to the extent that participants were processing the faces categorically. This effect occurred irrespective of participants' long-term propensity to stereotypical behavior.

Olson and Fazio (2003) provide further evidence for the importance of categorization as a processing goal. In their study, White participants were asked to complete one of two versions of the "bona fide pipeline" (BFP) priming measure developed by Fazio, Jackson, Dunton, and Williams (1995). In one condition they were encouraged to categorize face primes in terms of race, while in the other they were not encouraged to do so. The participants then completed the Implicit Association Test. Correspondence between the two measures was found only when categorization by race was required on the priming measure. This leads to the conclusion that participants may differ in terms of the extent they spontaneously categorize faces on the basis of race. Moreover, it strongly suggests that evaluations of a category and evaluations of members of the category might be quite different (see also Fazio and Olson (2003) for a related criticism of the IAT).

#### 2.4.2 Norm-conforming and norm-breaking behavior

Implicit measures of social cognition are sensitive to changes in the situational context. In a study carried out by Wittenbrink, Judd, and Park (2001a), participants' IAT scores varied depending on whether they had been exposed to African American persons in a positive context (i.e., a family barbecue) or in a negative context (i.e., a gang-related incident). Similarly, different background pictures (a church interior vs. a dilapidated street corner) triggered different racial attitudes, as measured by a sequential priming task.

Schreiber and Iacoboni (2012) came to similar conclusions based on an fMRI study. The authors point out that the existing social priming and social cognitive neuroscience literatures rely almost entirely on disembodied faces. They argue that in the absence of any social context whatsoever, it is not the stimuli themselves but rather the salient, and thus highly accessible, negative stereotypes of African Americans as norm violators that are driving the differences in response times and amygdala activation. When images of African Americans engaging in norm-consistent behavior were displayed to participants, the stimuli neither significantly activated nor deactivated the amygdala. At the same time, norm-violating images of White Americans did trigger amygdala activation.

Based on these considerations, I hypothesized that (VII) the experimental design of the SCM could be modified by including a visual priming phase before participants provide their assessments of the relevant target group and visual primes of norm-conforming or norm-breaking individuals could be used to affect warmth and competence ratings, but priming would only be effective under social categorization as a processing goal.

#### 2.5 Summary of hypotheses

I formulated seven hypotheses in the chapter above. I hypothesized that in the Stereotype Content Model, (II) perceived conformity with social norms would predict warmth judgments ("conformity–warmth" hypothesis) and (1) individuals rely on conformity when distinguishing between subgroups in the gay community ("conformity" hypothesis). Moreover, I hypothesized that (VII) visual primes of norm-conforming or norm-breaking gay men might affect warmth and competence ratings in the SCM, provided that the processing goal is social categorization ("visual priming" hypothesis). Furthermore, I hypothesized that (IV) social desirability concerns would be more salient for some target groups than for others and they would be subject to individual-level variation ("social desirability" hypothesis).

I also assumed that (v) neither explicit nor implicit attitudes towards gay men would be consensual ("nonconsensuality" hypothesis) and (vi) social conservatism might be a more reliable predictor of attitudes than general ideological self-placement ("social conservatism" hypothesis).

Finally, I hypothesized that (III) the SCM and the IAT would yield the same conclusions with respect to the attitudes towards norm-conforming and norm-breaking gay and straight individuals ("explicit–implicit correspondence" hypothesis).

#### Chapter 3 LIBERALS' AND CONSERVATIVES' EXPLICIT ATTITUDES TOWARDS NORM-CONFORMING AND NORM-BREAKING GAY MEN

In this chapter, I report and analyze the results of three experiments that addressed the hypotheses set out in Chapter 2 above. All three experimental designs relied on the Stereotype Content Model (SCM) (see Section 2.1) with some important modifications described below.

#### 3.1 Methods shared across experiments

#### **3.1.1** Participants

Since random sampling was not viable due to financial and other limitations, Amazon's Mechanical Turk (MTurk) online platform seemed to offer a good alternative for recruiting participants. MTurk is an online service with the help of which workers can be recruited for any task that can be carried out entirely over the Internet. For the last few years, it has been used extensively to recruit participants for various psychological and social science studies (Berinsky, Huber, & Lenz, 2012; Buhrmester, Kwang, & Gosling, 2011; Mason & Suri, 2012).

Although samples drawn via MTurk are not perfectly representative, the differences *vis-à-vis* random samples are substantively quite small and at any rate a lot smaller than in the case of student samples routinely used in social psychology experiments (Henry, 2008; Peterson, 2001; Sears, 1986). On average, participants tend to be somewhat younger, somewhat more educated and somewhat more liberal than the general population (Berinsky et al., 2012). In addition, the lack of attention and motivation, as often experienced in online surveys, do not seem to present major problems (Berinsky et al., 2012; Buhrmester et al., 2011; Mason & Suri, 2012).

On the MTurk platform, individuals were recruited to participate in a study of "opinions about some social groups in the United States." Visitors with IP addresses from outside the United States were automatically excluded and IP-based duplicate protection was used over the three experiments (i.e., no one participated in more than one experimental session). At the end of the study, participants received a randomly generated code with which they were able to claim monetary compensation for their participation via MTurk. Participants received a modest sum of \$.50 per session.

#### 3.1.2 Procedure

The experimental sessions were administered using the SurveyGizmo online tool to which participants were redirected after they had agreed to participate in the study.

On the welcome screen, participants were greeted and asked to provide informed consent. They were informed that they would be free to withdraw their consent and discontinue their participation in the study at any time. The second screen contained some instructions regarding the structure of the study. Participants were told that first, they would be "asked some general questions" (this instruction referred to the ideology items); second, they would be "asked to provide [their] opinions regarding some social groups in the United States" (the Stereotype Content Model); and, finally, they would "answer some questions about [them-selves]" (standard demographic items and in Experiments 2 and 3, social desirability items). The survey was forward-only, i.e., participants were not allowed to return to the previous screen once they submitted their responses.

Participants first completed a Likert-scale measure of ideological position and a Wilson– Patterson type questionnaire (Wilson, 1985; Wilson & Patterson, 1968) capturing different aspects of conservatism. The ideological self-positioning item and the Wilson–Patterson items were administered on separate screens, in randomized order. The ideological selfpositioning item was identical to the one used in the ANES (American National Election Studies). On the Wilson–Patterson screen, participants were asked to evaluate whether they "approve or disapprove of some items or [they] are not sure." The twelve items (presented in randomized order) were listed below each other and participants used a green "thumbs up" sign to indicate approval, a red "thumbs down" sign to indicate disapproval, and a blue question mark sign to indicate "I don't know." These items were followed by party affiliation items from the ANES, also presented on a separate screen. (The items are displayed in Appendix A.)

In the second step, the SCM was administered to the participants. The SCM items were presented on a separate screen for each social group assessed. The screen with the SCM items was each time preceded by an introductory screen with the name of the target group and the instruction to "answer some questions regarding [the target group]." The order of the target groups as well as of the SCM items for each target group was randomized for each participant.

Participants responded to four warmth items, four competence items, two competition items, two status items, and two conformity items for each target group. Items for the warmth dimension included assessments of how "friendly," "well-intentioned," "trustworthy" and "good-natured" members of the given group are, while assessments of the competence dimension included the traits "competent," "capable," "efficient," and "skillful" (see Table 1). Assessments were made on a Likert scale whose two extreme points were marked "not at all" and "extremely," respectively. For competition and conformity items, the end points of the scale were marked "strongly disagree" and "strongly agree," respectively.

In order to avoid acquiescence bias, each adjective was included in the pool of items along with its antonym (i.e., "unfriendly," "ill-intentioned," "untrustworthy," "bad-natured," "in-competent," "incapable," "inefficient," and "unskillful"), and for each target group, only one

of the complementary items was displayed to any given participant. Each positive adjective and its negative counterpart were displayed with equal probability.

Dimension		Item					
Warmth	"Low social desirability"	As viewed by society, how friendly/well- intentioned/trustworthy/good-natured are [members of the					
	"High social desirability"	How friendly/well-intentioned/trustworthy/good-natured do you think [members of the target group] are?					
Competence	"Low social desirability"	As viewed by society, how compe- tent/capable/efficient/skillful are [members of the target group]?					
•	"High social desirability"	How competent/capable/efficient/skillful do you think [members of the target group] are?					
Competition	If [members of the target group] get special breaks (such as preference in hiring decision this is likely to make things more difficult for me. Resources that go to [members of the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for the target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for target group] are likely to take away resources for t						
Status	How prestigious are the jobs typically achieved by [members of the target group]? How economically successful have [members of the target group] been?						
Conformity	[Members of the tar [Members of the target group]	get group] embody important American values. usually live their lives in line with society's expectations.					

#### **Table 1: Items of the Stereotype Content Model**

(The phrase in square brackets was replaced with the name of each target group.)

After completing the SCM items, participants were asked to fill out a 5-item social desirability questionnaire that had been adapted from Nosek (2005) (Experiments 2 and 3 only). The first two items assessed internal motivation to avoid prejudice, items 3–4 assessed external motivation to avoid prejudice, and item 5 assessed participants' general impression of the pervasiveness of social desirability concerns in the context of the given target group (see Table 2 below). Participants were instructed to respond to each of the five social desirability items for each target group included in the study. Social desirability was measured on 7-point Likert scales, with the two endpoints marked "strongly disagree" and "strongly agree," respectively (for item 5, "not at all motivated" and "extremely motivated," respectively). This screen had been given the completely uninformative title "Attitudes."

Participants then filled out a standard demographic questionnaire containing items for gender, year of birth, educational attainment, annual household income, race/ethnicity, and sexual

orientation (Experiments 2 and 3). Then they received a randomly generated ID number to be able to claim compensation on MTurk and on the final screen, they were thanked for their participation and provided with an email address for questions and comments.

Internal	Item 1	Being accepting of [the target group] is important to my self-concept.
motivation to avoid prejudice	Item 2	Because of my personal values, I believe that making negative judgments about [the target group] is wrong.
External motivation	Item 3	I try to hide negative thoughts about [the target group] to avoid negative reac- tions from others.
to avoid prejudice Item 4		I attempt to appear accepting of [the target group] to avoid disapproval from others.
General	Item 5	How motivated is the average person to conceal negative feelings about [the target group]?

#### Table 2: Items of the social desirability scale

(The phrase in square brackets was replaced with the name of each target group.)

#### 3.1.3 Experimental conditions

Upon entering the survey, participants were assigned to different experimental conditions using SurveyGizmo's "hidden value" (i.e., random number generator) functionality.

Each participant in all experiments was assigned to either the "low social desirability" or "high social desirability" condition. In the "low social desirability" condition, the assessment items were formulated in the same way as in the original SCM, i.e., participants were asked to provide meta-evaluations of society's evaluations of the target groups (see Table 1 above). Participants assigned to this condition received the additional instruction to "remember that we are **not** asking you to provide your own opinions, but rather your assessment of how this group is generally viewed by American society" before completing the SCM items for each target group. By contrast, participants in the "high social desirability" condition were simply asked to provide their own evaluations and did not receive any additional instruction.

Additionally, some (Experiments 1 and 2) or all participants (Experiment 3) were exposed to images of the target group before completing the corresponding SCM items. The images (300x200 pixels) were displayed in a centered position, below each other on a separate

screen. In some conditions, participants were simply asked to look at some pictures, in which case five images were displayed. In other conditions, participants were instructed to select images of members of the target group. In this case, ten images were displayed in two columns, with two pictures in each row. Five pictures depicted members of the relevant target group and five other pictures had been drawn with equal probability from other target groups included in the study. All images used were visually rich in order to avoid that participants merely respond to category labels rather than to members of the relevant category (Schreiber & Iacoboni, 2012; Wittenbrink, Judd, & Park, 2001a; 2001b). (Sample stimuli are presented in Appendix B.)

#### 3.2 Experiment 1—Replication and methodological validation

Experiment 1 addresses five questions: first, whether the main findings of prior SCM studies are replicable using an MTurk sample; second, whether scores on the warmth dimension are predicted by perceived economic competition, perceived conformity with social norms, or both ("conformity–warmth hypothesis"); third, whether social desirability affects evaluations of target groups on the warmth and competence dimensions and if so, whether these effects are different across target groups ("social desirability" hypothesis); fourth, whether ideology affects evaluations of target groups on the warmth and competence dimensions ("nonconsensuality" and "social conservatism" hypotheses); and fifth, whether exposure to images of members of the target group affects evaluations on the warmth and competence dimensions under different task demand conditions ("visual priming" hypothesis).

Thus, the central objectives of Experiment 1 were the replication of the central findings of prior applications of the Stereotype Content Model using an online non-student sample as well as the investigation of the effects of different experimental manipulations in the SCM framework. Therefore, Experiment 1 can be understood as a prestudy that did not address gay

men as a target group directly, but was rather aimed at laying a substantive and methodological groundwork for Experiments 2 and 3.

#### 3.2.1 Method

#### 3.2.1.1 Participants

The sample included 399 participants. 36.8 percent of participants were female. The mean age of participants was 32.28 years, with a standard deviation of 9.85 years and a median age of 28 years. Participants represented a broad cross-section of educational attainment, with 13.1 percent high school graduates, 35.9 percent with some college education but no college degree, and 51 percent with a college or graduate degree. In terms of annual household income, the sample was equally heterogeneous, with 24.8 percent earning below \$25,000 a year, 33.1 percent \$25,000 to \$44,999, 21.3 percent \$50,000 to \$69,999, 12.5 percent \$70,000 to \$99,999, and 8.3 percent \$100,000 or more. 79.4 percent of the participants were White, 8.3 percent Asian, 6.5 percent Black/African American, 4.5 percent Hispanic/Latino, and .8 percent American Indian.

Since the study involved making assessments of African Americans, the results of African American participants were excluded from all subsequent analyses. Those participants who scored below 80 percent on the picture selection task (see Section 3.2.1.2), suggesting insufficient attention, were excluded as well. Thus, while the effective sample size was reduced 362, the distributions of key demographic variables remained similar to the ones described above (36.7 percent female, mean age 31.07 years). The share of racial minorities dropped to 14.9 percent.

#### 3.2.1.2 Procedure

The procedure of the experiment is described in great detail in Section 3.1 above. Upon entering the survey, participants were assigned to either the "low social desirability" or "high social desirability" condition and one of the "no image," "image exposure" and "image selection" conditions (see Section 3.1.3). Moreover, those in the "image exposure" and "image selection" conditions were assigned to a further condition that determined whether they received images of norm-conforming or norm-breaking African American individuals ("normconforming African American" and "norm-breaking African American" conditions). Sample stimuli are presented in Appendix B.

All the target groups assessed were identical across all conditions. Four groups served as anchors for each of the four clusters of the SCM (the homeless for low warmth–low competence, professionals for low warmth–high competence, the elderly for high warmth–low competence, and the middle class for high warmth–high competence). Moreover, participants were asked to evaluate African Americans as well—a social group that, similarly to gay men (Clausell & Fiske, 2005), had received ambiguous ratings in previous applications of the SCM (Fiske et al., 2002).

#### 3.2.2 Results

# 3.2.2.1 Replication results—Four clusters emerge; competition does not always predict warmth

Just as in the original study, the four items of the warmth dimension (i.e., "friendly," "wellintentioned," "trustworthy," and "good-natured") formed an acceptably reliable scale (Cronbach's  $\alpha = .73$ ), and so did the four items of the competence dimension (i.e., "competent," "capable," "efficient," and "skillful"; Cronbach's  $\alpha = .75$ )<sup>3</sup>. The competition scale was even more reliable (Cronbach's  $\alpha = .81$ ), while the status scale was somewhat less reliable than the others but still close to acceptable (Cronbach's  $\alpha = .67$ ). Moreover, the newly introduced conformity dimension was fairly reliable as well (Cronbach's  $\alpha = .76$ ). Accordingly, the scores

<sup>&</sup>lt;sup>3</sup> All statistical analyses presented here and in subsequent chapters were performed in R version 2.15.0, complemented by version 1.7-9 of the JGR graphical user interface (Helbig, Urbanek, & Fellows, 2009) and the "Psych" package (Revelle, 2009).

for each dimension were collapsed on the participant level into a single warmth, competence, competition, status, and conformity score for each target group.

	Middle class	Homeless	<b>Professionals</b> Elderly		African Amer- icans
Warmth	3.96 (.69)	2.23 (.75)	3.39 (.76)	3.98 (.70)	2.97 (.81)
Competence	4.07 (.55)	1.68 (.67)	4.25 (.68)	2.59 (.77)	3.03 (.76)
Status	3.41 (.60)	1.26 (.65)	4.50 (.68)	2.73 (.74)	2.58 (.81)
Competition	2.24 (1.17)	2.51 (1.24)	2.91 (1.15)	2.50 (1.10)	3.17 (1.26)
Conformity	4.34 (.65)	1.59 (.72)	3.93 (.88)	3.86 (.96)	2.85 (.89)

# Table 3: Mean scores (standard deviations) for each target group on each dimension (replication subsample only)

As shown in Table 3, the "low social desirability" and "no image" conditions (i.e., those that did not contain any modification to the original SCM design) yielded a complete replication of the findings of previous Stereotype Content Model studies. Members of the middle class were perceived as both warm and competent; the homeless, as low on both warmth and competence; professionals, as highly competent but less warm; and the elderly, as very warm, but not very competent. As expected, African Americans did not fit into any of the four clusters.

	Middle class	Homeless	Professionals	Elderly	African Americans	
Mean of differences	.112	.551	857	1.387	.061	
Test statistic	<i>t</i> = 1.6198	t = 6.607	t = 8.758	t = 12.065	t = 1.006	
Degrees of free- dom	df = 69	df = 69	df = 69	df = 69	<i>df</i> = 69	
p value	<i>p</i> = .1098	<i>p</i> < .0001	<i>p</i> < .0001	<i>p</i> < .0001	<i>p</i> = .318	

#### Table 4: Repeated measures *t* tests—warmth vs. competence (replication subsample only)

In order to express the same findings somewhat more formally, repeated measures *t* tests were conducted, comparing the mean warmth and competence ratings received by each target group. As shown in Table 4, mean warmth and competence ratings did not differ significantly for the middle class and African Americans. Homeless people were rated significantly more warmly than competently, and the same was true for elderly people—of course, with the caveat that elderly people were rated considerably higher on both dimensions (see Table 3). The

only target group that was rated significantly higher on the competence dimension than on the warmth dimension was the group of professionals.

Moreover, as expected, statistically significant and moderate to moderately strong correlations (.430 to .702) were found between responses to the status and competence items. However, the replication study failed to reproduce one central finding of the Stereotype Content Model—in the present experiment, the lack of perceived economic competition with a given social group did not consistently predict warm attitudes towards the same group (see Table 5). Correlations between the competition and warmth dimensions were fairly strong and in the expected direction for the elderly and African Americans; however, the two dimensions did not correlate at all for the remaining target groups.

	Middle class	Homeless	Professionals	Elderly	African Americans	
Competition-	056	.165	050	352	524	
warmth	varmth [287; .181] [072; .385]		[282; .187]	[543;129]	[676;331]	
Conformity-	.411 .451		.594	.313	.488	
warmth	warmth [.195; .589] [.241; .620		[.417; .728]	[.084; .510]	[.286; .649]	
Status-	.506	.620	.702	.430	.445	
competence	[.307; .662]	[.451; .746]	[.559; .804]	[.217; .604]	[.234; .615]	

 Table 5: Pearson's product-moment correlations between the status-competence, competition-warmth, and conformity-warmth dimensions for each target group (replication subsample only)

(With 95-percent confidence intervals in brackets.)

Correlations between the conformity and warmth dimensions, on the other hand, were statistically significant and moderate to moderately strong throughout all target groups (.313 to .594). In the case of the middle class, the homeless, and professionals, perceived conformity with social norms (or the lack thereof) was a reliable predictor of scores on the warmth dimension, while perceived economic competition (or the lack thereof) was not. Moreover, while correlations between the competition and warmth dimensions were somewhat stronger than correlations between the conformity and warmth dimensions for the elderly and African Americans, the difference between the correlations was negligible, especially taking into account the 95-percent confidence intervals.

#### 3.2.2.2 Further results—Social desirability and ideology matter

Whereas Section 3.2.2.1 only addressed results for the subsample where the procedure had been completely identical to the procedure used in the original SCM—i.e., no experimental manipulation of social desirability and no visual priming—, the following section presents results for the entire sample, i.e., including all experimental manipulations.

Just as for the replication subsample, the items of the warmth dimension formed a reliable scale (Cronbach's  $\alpha = .78$ ), and so did the four items of the competence dimension (Cronbach's  $\alpha = .80$ ) as well as of the competition dimension (Cronbach's  $\alpha = .82$ ). The status and the conformity scales were less reliable than the others but still not unacceptable (Cronbach's  $\alpha = .64$  and .62, respectively). Accordingly, the scores for each dimension were collapsed on the participant level for all further analyses.

	Middle class	Homeless	Professionals	Elderly	African Americans
Competition-	310242		262	306	526
warmth	warmth [214;400] [337]		[355;163]	[397;210]	[597;447]
Conformity-	nformity– .558		.445	.456	.660
warmth [.482; .625]		[.298; .473]	[.359; .524]	[.371; .534]	[.598; .715]
Status-	.341	.436	.587	.400	.549
competence	[.248; .430]	[.348; .516]	[.515; .651]	[.309; .483]	[.473; .617]

Table 6: Pearson's product-moment correlations between the competition–warmth, conformity–warmth, and status–competence dimensions for each target group (entire sample)

(With 95-percent confidence intervals in brackets; p < .0001 for all correlations.)

As shown in Table 6, correlations between the status and competence dimensions were moderate to moderately strong (.341 to .587) for the entire sample as well. Moreover, results from the complete sample also seem to indicate that perceived conformity with social norms might be an equally strong predictor of warmth as perceived economic competition. Point estimates of the conformity–warmth prediction are reliably higher than point estimates of the competi-

	Middle class			Homeless		Professionals		Elderly				
	Social Desirability	15.453	.000 ***	Social Desirability	97.105	.000 ***	Social Desirability	.380	.538	Social Desirability	6.461	.011 *
	Images	.856	.426	Images	.197	.821	Images	2.431	.089	Images	1.947	.144
	Ideology	.015	.903	Ideology	2.288	.131	Ideology	2.666	.103	Ideology	.984	.322
	Social Desirability x	.419	.658	Social Desirability x	.086	.918	Social Desirability x	.015	.986	Social Desirability x	1.414	.244
	Images			Images			Images			Images		
Warmth	Images x Ideology	.766	.466	Images x Ideology	.839	.433	Images x Ideology	1.438	.239	Images x Ideology	.666	.514
	Social Desirability x Ideology	.241	.624	Social Desirability x Ideology	22.701	.000 ***	Social Desirability x Ideology	1.002	.318	Social Desirability x Ideology	.002	.964
	Social Desirability x Images x Ideology	.083	.921	Social Desirability x Images x Ideology	.848	.429	Social Desirability x Images x Ideology	.452	.637	Social Desirability x Images x Ideology	.483	.618
	Social Desirability	6.624	.010 *	Social Desirability	141.955	.000 ***	Social Desirability	1.467	.001 **	Social Desirability	77.208	.000 ***
	Images	2.195	.113	Images	.137	.872	Images	.145	.865	Images	.320	.726
	Ideology	.234	.628	Ideology	.001	.970	Ideology	.161	.689	Ideology	5.392	.020 *
	Social Desirability x Images	4.899	.008 **	Social Desirability x Images	.089	.915	Social Desirability x Images	.198	.820	Social Desirability x Images	.585	.558
Competence	Images x Ideology	1.421	.243	Images x Ideology	2.062	.129	Images x Ideology	.894	.410	Images x Ideology	.385	.681
	Social Desirability x Ideology	.386	.535	Social Desirability x Ideology	2.571	.000 ***	Social Desirability x Ideology	2.492	.115	Social Desirability x Ideology	11.837	.000 ***
	Social Destrability x Haages x Heology	.492	.612	Social Desirability x Images x Ideology	.002	.998	Social Desirability x Images x Ideology	.250	.779	Social Desirability x Images x Ideology	.385	.680

#### Table 7: Three-way social desirability-images-ideology ANOVAs for each target group

(Main effects followed by two-way interactions followed by three-way interactions; with F statistics in the first column and p values in the second column, respectively)
tion-warmth correlation. For the middle class and professionals, not even the 95-percent confidence intervals overlap.

In order to assess the effects of social desirability, exposure to or selection of images representing the target groups and of participants' ideological leanings on evaluations of warmth and competence, separate three-way ANOVAs were carried out for each target group and each dimension. The factors included social desirability (with participants providing their own assessments in the "high social desirability" condition and their perception of the assessment of society at large in the "low social desirability" condition) and visual priming (with participants not being exposed to any images in the "no image" condition, merely looking at some pictures of the target group in the "image exposure" condition, and selecting images of the target group in the "image selection" condition). Moreover, although a selfselected group rather than a factor, ideology was taken into account as well. For this purpose, responses to the ANES ideology item had been recoded into a binary variable ("conservative" vs. "non-conservative," with the latter including ideological moderates as well).

Overall, one can observe that the independent variables had quite different effects across the four target groups (see Table 7). The main effect of social desirability was statistically significant for all but one dimension and one target group (the warmth dimension for professionals), although effect sizes displayed considerable variation. By contrast, no statistically significant difference was observed across the different image conditions. (However, as I will argue below, this does not indicate that participants' assessments cannot be influenced by priming them with images of the target group; rather, it shows that the images selected for these groups were in line with the stereotypes held by most participants.) No main effect was recorded for ideology either, except for a substantively quite negligible difference between conservatives and non-conservatives in terms of the competence ratings that they gave to the el-

derly. Moreover, none of the images-ideology two-way interactions and none of the threeway interactions between social desirability, images, and ideology were statistically significant.

Target group	Dimension	Cone	dition	Me	ans
	Warmth	Low social	High social	3 998	3 7 3 5
Middle class	,, annun	desirability	desirability	5.770	5.755
Windune endby	Competence	Low social	High social	3 965	3 814
	competence	desirability	desirability	5.705	5.011
		Low social High social		2 241	3 000
		desirability	desirability	2.211	5.000
		Low social	Low social		
	Warmth	desirability;	desirability;	2.179	2.514
	vv armun	liberal	conservative		
		High social	High social		
		desirability;	desirability;	3.119	2.468
Homologa	liberal conservativ		conservative		
nomeress	Low social High social		1 605	2 702	
	desirability desirability		1.065	2.702	
		Low social	Low social		
	Competence desirability; desirability;		1.559	2.244	
	Competence	liberal	conservative		
		High social	High social		
		desirability; desirability;		2.804	2.247
		liberal	conservative		
Professionals	Competence	Low social	High social	4 151	2 0 5 0
rioressionais	Competence	desirability	desirability	4.131	5.959
	Wormth	Low social	High social	4 031	3 8/7
	vv armun	desirability	desirability	4.031	5.647
		Low social	High social	2 781	2 1 1 0
		desirability	desirability	2.704	5.440
Eldonly		Low social	Low social		
Elderly	Competence	desirability;	desirability;	2.691	3.193
	Competence	liberal	conservative		
		High social	High social		
		desirability;	desirability;	3.415	3.551
	liberal conservat				

 Table 8: Group means for statistically significant effects

As shown in Table 8, social desirability had a small effect on assessments of the middle class and professionals and a large effect on assessments of the homeless and the elderly. Moreover, those effects worked in different directions.

In the case of the middle class (both warmth and competence dimensions) and professionals (competence dimension only), those in the "low social desirability" condition gave somewhat higher ratings than those in the "high social desirability" condition. The most plausible ex-

planation for this difference is that participants' own personal assessments of these target groups might be somewhat more negative than what they believe society's assessments at large are.

In the case of the homeless, social desirability had quite considerable effects on assessments on both the warmth and the competence dimensions. Moreover, it entered into an interaction effect with ideology as well (see Figure 1).



Figure 1: Interaction effect of social desirability and ideology on warmth (above) and competence (below) assessments of homeless people

(Boxes on the left represent liberals and boxes on the right represent conservatives; dots on the left show "low social desirability" condition, dots on the right show "high social desirability" condition.)

Participants in the "low social desirability" condition rated homeless people both considera-

bly less warmly and a lot less competently than participants in the "high social desirability"

condition (group means 2.24 vs. 3.00 and 1.69 vs. 2.70, respectively). However, as shown in Figure 1, these differences were entirely due to liberal participants. While for conservative participants, absolutely no difference was found across social desirability conditions, liberals rated homeless people both more warmly and more competently when they were asked to provide their own assessments rather than the assessments of society at large. The differences are quite staggering—above one full point on a 5-point scale for both dimensions.



Low social desirability High social desirability Low social desirability High social desirability

**Figure 2: Interaction effect of social desirability and ideology on competence assessments of the elderly** (The box on the left represents liberals and the box on the right represents conservatives; dots on the left show "low social desirability" condition, dots on the right show "high social desirability" condition.)

As shown in Figure 2, assessments of the elderly displayed a similar pattern; however this time only with respect to the competence dimension. Neither social desirability, nor ideology affected the warmth ratings of elderly people too much—they were rated very warmly across the board. At the same time, elderly people received higher competence ratings from participants in the "high social desirability" condition than from participants in the "low social desirability" condition (the group means were 3.44 and 2.78, which makes for a sizeable difference of around .7 points). However, social desirability concerns affected liberal and conservative participants differently. The difference across social desirability conditions was larger for liberals (around .5 points) than for conservatives (around .3 points).

This subsection will conclude with a detailed analysis of the results for the target group of African Americans, where the study involved a further experimental manipulation, i.e., participants were showed different sets of images of African Americans. Thus, as opposed to the four target groups discussed above, the "images" factor had five different levels rather than three. Some participants did not receive pictures ("no image" condition), others received and were only asked to look at pictures of norm-conforming African Americans ("norm-conforming exposure" condition), still others received and were asked to select pictures of norm-conforming African Americans ("norm-conforming African Americans ("norm-breaking exposure" condition) and, finally, some received and were asked to select pictures of norm-breaking exposure" condition) african Americans ("norm-breaking exposure" condition) and, finally, some received and were asked to select pictures of norm-conforming African Americans ("norm-breaking selection" condition).

	Social Desirability	64.640	.000 ***		Social Desirability	62.553	.000 ***
	Images	4.108	.003 ***		Images	4.922	.001 ***
	Ideology	.259	.611		Ideology	.051	.822
	Social				Social		
	Desirability x	2.160	.073		Desirability x	.981	.417
Warmth	Images				Images		
	Images x Ideology	.145	.827	Competence	Images x Ideology	1.094	.359
	Social Desirability x Ideology	.374	.703		Social Desirability x Ideology	.278	.598
	Social Desirability x Images x Ideology	.242	.914		Social Desirability x Images x Ideology	.169	.954

Table 9: Three-way social desirability-images-ideology ANOVAs for African Americans

(Main effects followed by two-way interactions followed by three-way interactions; with F statistics in the first column and p values in the second column, respectively)

As shown in Table 9 above, the "social desirability" and "images" factors had significant main effects on both warmth and competence ratings. Ideology, on the other hand, did not have a statistically significant effect and none of the interaction effects were statistically significant. The effect of social desirability was quite substantive and in the expected direction. In the "high social desirability" condition, African Americans were rated as both more warmly (3.47) and competently (3.59) than in the "low social desirability" condition (group means 2.80 and 2.87, respectively).

The effect of the exposure to images of different subgroups of the target group is somewhat more complex. As shown in Table 10, norm-breaking images significantly decreased warmth ratings of African Americans—by about .5 points when participants were merely exposed to them and by .7 points when participants were asked to select them. However, the difference between the "norm-breaking exposure" and "norm-breaking selection" conditions failed to reach statistical significance. Moreover, three of the four "norm-conforming" vs. "norm-breaking" contrasts reached statistical significance as well, but none of the "norm-conforming" vs. "no image" contrasts did.

		Warmth		C	Competence	!
	Estimate	t statistic	p value	Estimate	t statistic	p value
"norm-breaking exposure" vs. "no image"	473	-2.466	.014 *	380	-1.625	.105
"norm-breaking selection" vs. "no image"	688	-3.542	.0004 ***	631	-2.660	.008 **
"norm-conforming exposure" vs. "no image"	.114	.594	.552	072	310	.757
"norm-conforming selection" vs. "no image"	186	932	.352	458	-1.879	.061
"norm-breaking selection" vs. "norm-breaking exposure"	216	955	.340	250	913	.362
"norm-conforming exposure" vs. "norm-breaking exposure"	.587	2.626	.009 **	.307	1.131	.259
"norm-conforming selection" vs. "norm-breaking exposure"	.286	1.242	.215	079	280	.780
"norm-conforming selection" vs. "norm-breaking exposure"	.802	3.555	.0004 ***	.558	2.033	.043 *
"norm-conforming selection" vs. "norm-breaking selection"	.502	2.157	.032 *	.172	.608	.544
"norm-conforming selection" vs. "norm-conforming exposure"	300	-1.302	.194	386	-1.376	.170

 Table 10: Tukey's tests contrasting the effects of different visual priming conditions on the warmth and competence ratings of African Americans

On the competence dimension, the picture is somewhat more blurred, since only the "normbreaking selection" vs. "no image" and "norm-breaking exposure" vs. "norm-conforming selection" contrasts are statistically significant. This suggests that in this case, the priming measure worked less unambiguously well than in the context of the warmth dimension. However, the modalities of the task did not make any difference, i.e., no contrasts emerged between the mere exposure and selection conditions using the same images.

#### 3.2.3 Discussion

Experiment 1 addressed five issues—the replicability of prior SCM studies using an MTurk sample, links between the warmth dimension and the dimensions of competition and conformity, social desirability effects in different target groups, the effects of ideology in different target groups, as well as the malleability of evaluations using visual primes.

In line with previous research (Buhrmester et al., 2011), Experiment 1 demonstrated that participants recruited via Amazon's MTurk platform do not behave all that differently from participants in laboratory studies. The experiment yielded a perfect replication of the warmth and competence clusters originally established by Fiske, Cuddy, Glick, and Xu (2002). However, results from both the replication subsample and the entire sample suggest that the conformity dimension—not included in the original SCM—emerges as a possible contender to the competition dimension as a predictor of warmth.

It seems that social desirability does indeed affect responses, but social desirability effects are of a different magnitude in different target groups. Only mild social desirability effects emerged for the high warmth-high competence group (i.e., the middle class) and the low warmth-high competence group (i.e., professionals), while social desirability had a sizeable effect on both dimensions in the low warmth-low competence group (i.e., the homeless) and the competence dimension in the high warmth-low competence group (i.e., the elderly). Moreover, although ideology did not have a significant main effect, social desirability seemed to have a different impact on ratings of the homeless and the elderly among liberals and conservatives. In both cases, liberals were more vulnerable to social desirability. Importantly, however, liberals' and conservatives' ratings also differed in the low social desirability condition, thus providing even stronger support for the "nonconsensuality" hypothesis.

The data provide mixed evidence for the "visual priming" hypothesis. On the one hand, exposure to images of norm-conforming African Americans had a sizeable positive effect and images of norm-breaking African Americans had a sizeable negative effect, especially on warmth ratings. On the other hand, surprisingly, the modalities of the task did not seem make any difference, i.e., images produced the same effect both when participants had been merely exposed to them and when they had completed a social categorization task.

This suggests that it is possible to influence SCM ratings by priming participants with pictures of a norm-conforming or norm-breaking subgroup of the target group in question, without labeling it explicitly as such. The results thus appear promising both from a methodological and a substantive perspective. It seems that participants need not be verbally alerted of the fact that they are about to see images of a norm-conforming or a norm-breaking subgroup, which improves the external validity of the findings (see Section 2.4). Moreover, if the normconforming vs. norm-breaking dichotomy affects warmth and competence ratings of gay men, it should be possible to offer evidence for this on the basis of Experiment 2, which relies on the same methodology.

## 3.3 Experiment 2—Visual priming of conformity and non-conformity

Experiment 2 addresses five questions: first, whether conformity emerges as a stable predictor of warmth scores, as it did in Experiment 1 ("conformity–warmth" hypothesis); second, how gay men fit into the cluster structure established in Experiment 1 ("conformity" hypothesis); third, to what extent social desirability affects evaluations of gay men on the warmth and competence dimensions ("social desirability" hypothesis); fourth, to what extent ideology affects evaluations of gay men ("nonconsensuality" hypothesis); and fifth, whether—in line with the findings of Experiment 1—priming participants with images of norm-conforming and norm-breaking subgroups affects warmth and competence evaluations of gay men ("visual priming" hypothesis).

#### 3.3.1 Method

#### 3.3.1.1 Participants

The sample included 308 participants. 50.2 percent were female. The mean age of participants was 33.61 years, with a standard deviation of 12.1 years and a median age of 29 years. The youngest participant was 18 years old and the oldest participant was 73 years old. Participants represented a broad cross-section of educational attainment, with 13.0 percent high school graduates, 33.8 percent with some college education but no college degree, and 51.6 percent with a college or graduate degree. Annual household incomes ranged from below \$25,000 (29.3 percent) to \$100,000 and above (8.5 percent), with most participants (29.6 percent) falling into the \$25,000 to \$44,999 category. 77.3 percent of the participants were White, 9.4 percent Black/African American, 7.1 percent Asian, 4.2 percent Hispanic/Latino, and 1.0 percent American Indian. In terms of sexual orientation, 88.6 percent identified as heterosexual/straight, 7.1 percent as bisexual and 3.6 percent as homosexual, gay, or lesbian. Since some of the items required participants to make assessments of gay men or of African Americans as a target group, those who did not identify as heterosexual and those who identified as African American were excluded from all subsequent analyses of the relevant items. However, their responses to items concerning other target groups were retained.

In terms of ideological positions, the sample exhibited a pronounced liberal bias, especially when considering the responses to three Wilson–Patterson type items assessing the dimension of social conservatism (Littvay, Kurdi, & Hatemi, forthcoming), i.e., "sexual freedom," " legalized abortion," and "church authority."<sup>4</sup>

Ideological self-positioning had a mean of 3.36 with a standard deviation of 1.58 and a median of 3, while after conversion to a 7-point scale, social conservatism had a mean of 2.34 with a standard deviation of 1.79 and a median of 1 (i.e., the majority of participants ranked 1 out of 7 on the social conservatism dimension). The correlation between ideological selfpositioning and social conservatism was .580 (with .500 and .650 as the lower and upper limits of the 95-percent confidence interval, respectively), suggesting that both measurements tapped into related but not completely identical concepts.

#### 3.3.1.2 Procedure

The procedure was identical to the one described in Section 3.1 above, with the target groups including straight people, gay men, the homeless, professionals, the elderly, and African Americans.

Participants were assigned to the "low social desirability" or "high social desirability" conditions (see Section 3.1.3 above) as well as either the "no image" or the "image exposure" condition. In the "no image" condition, participants did not see any images of the target group before completing the SCM items, whereas in the "image exposure" condition, they were asked to "take a few seconds to look at some pictures" of the target group before progressing to the next page to complete the SCM items. Since no differences had emerged between the "image exposure" and "image selection" conditions in Experiment 1, the latter was eliminated from this study.

<sup>&</sup>lt;sup>4</sup> The "sexual freedom" and "legalized abortion" items were reverse-scored.

Because the "image exposure" condition was subdivided into two further conditions for three target groups (straight people, gay men, and African Americans), participants were assigned to the "image exposure" condition with twice the probability than to the "no image" condition. In the "norm-conforming straight" condition, they received pictures of norm-conforming straight people, whereas in the "norm-breaking straight" condition, they received pictures of straight people engaging in norm-breaking behavior. The "norm-conforming gay" and "norm-breaking gay" as well as the "norm-conforming African American" and "norm-breaking African American" conditions differed from each other in a similar way. Assignment to the "conformity" conditions was carried out independently for the three target groups. All participants in the "image exposure" condition were given the same images of professionals, the elderly, and the homeless. (Sample stimuli are presented in Appendix B.)

#### 3.3.2 Results

#### 3.3.2.1 Replication results—Same clusters emerge; gay men receive mixed ratings

As shown in Table 11 below, straight people were rated as equally warm and competent<sup>5</sup>. They were rated more warmly than gay men, the homeless, professionals, and African Americans, and just as warmly as the elderly. Moreover, they were rated as more competent than any other group except professionals. Thus, straight people fell into the high warmth–high competence cluster. Homeless people were rated as somewhat warmer than competent, but less warmly and less competently than any other target group included in the study, falling into the low warmth–low competence cluster.

Professionals were rated as significantly more competent than warm, and more competent than any other target group. However, they were rated as less warm than straight people and

<sup>&</sup>lt;sup>5</sup> As before, the warmth (Cronbach's  $\alpha = .84$ ), competence ( $\alpha = .85$ ), and competition ( $\alpha = .86$ ) scales had excellent reliability, while the status ( $\alpha = .69$ ) and conformity scales ( $\alpha = .61$ ) had acceptable reliability. Scores for the individual items were therefore averaged on the participant level.

the elderly, just as warm as gay men, and only warmer than the homeless and African Americans. Thus, they fell into the low warmth-high competence cluster. The elderly were rated as less competent than warm and warmer than any other target group included in the study. At the same time, they were seen as less competent than any other group except the homeless. Thus, they fell into the high warmth-low competence cluster.

	Straight people	Gay men	Homeless	Professionals	Elderly	African Americans
Straight	096	651 ***	-2.218	.356	-1.458 ***	-1.152
Gay men	.558 ***	.012	-1.608	.979 ***	833	640 ***
Homeless	1.596	1.154	.525	2.574	.760	1.128
	***	***	***	***	***	***
Professionals	.523	.000	-1.073	976	-1.815	-1.537
	***	n.s.	***	***	***	***
Elderly	052	571	-1.648	575	1.413	.340
	n.s.	***	***	***	***	*
African	1.191	.733	497	.640	1.246	099
Americans	***	***	***	***	***	n.s.

 Table 11: Repeated measures t tests comparing warmth and competence ratings for all target groups (replication subsample only)

(Warmth is below and competence is above the diagonal; the diagonal compares warmth and competence for the same target group.)

Moreover, as expected, African Americans and gay men received mixed ratings. African Americans were rated as equally warm and competent, and less warmly than any other group except the homeless, but more competently than the homeless and the elderly. Gay men were also rated as equally warm and competent (with a mean warmth rating of 3.29 and a mean competence rating of 3.27, respectively), somewhat more warmly than African Americans and a lot more warmly than the homeless, and more competently than any group other than straight people and professionals.

# 3.3.2.2 Further results—Social desirability has strong effects; ideology influences evaluations through social desirability

A comparison of intragroup differences in the replication subsample (Table 11) and the entire sample (Table 12) yields interesting insights and foreshadows many of the conclusions of the more complete analysis carried out later. Most importantly from our perspective, when the analysis is not limited to the "low social desirability" condition, differences between straight and gay men tend to disappear. While in the replication subsample, straight people were rated both as significantly warmer and more competent than gay men, the difference in warmth ratings in favor of straight people becomes both substantively very small and statistically insignificant (.032 vs. .558 points) and the difference in competence ratings in favor of straight people becomes negligible (.179 vs. .651 points)<sup>6</sup>.

	Straight people	Gay men	Homeless	Professionals	Elderly	African Americans
Straight	090	179	-1.488	.352	708	610
people	<i>n.s.</i>	**	***	***	***	***
Cay man	.032	.055	-1.333	.517	549	509
Gay men	<i>n.s.</i>	<i>n.s.</i>	***	***	***	***
Homologa	.949	.954	.448	1.840	.780	.916
nometess	***	***	***	***	***	***
Dueferstenels	.409	.392	540	851	-1.060	972
Professionals	***	***	***	***	***	***
Fldorder	274	300	-1.224	684	.893	.107
Elderly	***	***	***	***	***	<i>n.s.</i>
African	.559	.587	390	.143	.834	034
Americans	***	***	***	*	***	n.s.

 Table 12: Repeated measures t tests comparing warmth and competence ratings for all target groups (entire sample)

(Warmth is below and competence is above the diagonal; the diagonal compares warmth and competence for the same target group.)

The more general pattern that one might notice is that marginalized groups seem to gain *vis*- $\dot{a}$ -*vis* reference groups, with differences becoming considerably smaller. Homeless people gain both in competence *vis*- $\dot{a}$ -*vis* straight people and in warmth *vis*- $\dot{a}$ -*vis* professionals and the elderly. The elderly gain in competence *vis*- $\dot{a}$ -*vis* straight people and professionals, and

<sup>&</sup>lt;sup>6</sup> For the sake of simplicity, mean ratings are not reported for all target groups.

the difference between their warmth and competence ratings shrinks. African Americans gain in both warmth and competence *vis-à-vis* straight people and in competence *vis-à-vis* professionals.

	Straight people	Gay men	Homeless	Professionals	Elderly	African Americans
Competition-	344	335	351	325	314	534
warmth	[439;242]	[437;226]	[446;250]	[422;222]	[411;210]	[614;445]
Conformity-	.398	.368	.408	.323	.559	.711
warmth	[.300; .488]	[.261; .467]	[.310; .497]	[.220; .420]	[.478; .632]	[.647; .764]
Status-	.564	.535	.429	.578	.450	.492
competence	[.483; .636]	[.444; .614]	[.333; .516]	[.450; .648]	[.357; .535]	[.398; .577]

 Table 13: Pearson's product-moment correlations between the status-competence, competition-warmth, and conformity-warmth dimensions for each target group (entire sample)

(With 95-percent confidence intervals in brackets; p < .0001 for all correlations.)

Correlations between competition and warmth, conformity and warmth as well as between status and competence were calculated again (see Table 13 above), with similar results as in Experiment 1. Scores on the competence dimension predict scores on the status dimension fairly well; however, the conformity dimension predicts scores on the warmth dimension just as well and in almost all cases better than scores on the competition dimension. At the same time, when residuals from regression equations predicting warmth scores on the basis of competition and conformity and status on the basis of competence were regressed on demographic and attitudinal variables, no effects were detected. Thus, one cannot say that the attitudes of some demographic group or of individuals with certain ideological leanings appear more economically-based, value-based, or meritocratic than those of others.

In order to assess the effects that the experimental conditions and beyond and above the experimental conditions, some of the attitudinal measures had on warmth and competence ratings, two-way ANOVAs were conducted separately for each target group, with the "social desirability" and "image" conditions as between-participant factors and social conservatism, ideological self-placement, and the social desirability score for the given target group entered as covariates. Since the social desirability scales had acceptable internal reliability<sup>7</sup>, scores had been averaged on the participant level.

As shown in Table 14 below, social desirability had a major impact on both warmth and competence ratings—both as an experimental condition and as a covariate (i.e., self-reported social desirability value for the given target group). The only notable exceptions are warmth scores for the elderly and competence scores for professionals. These two values seem to be practically unshakeable. High social desirability as an experimental condition had an especially notable positive effect on both warmth and competence scores for the homeless (+.681 points for the former and +.909 points for the latter), African Americans (+.653 and +.571 points, respectively), and gay men (+.424 points for both dimensions). High social desirability gave a considerable boost to competence ratings for the elderly (+.720 points) as well.

Self-reported social desirability scores had the most pronounced impact beyond social desirability as an experimental condition for gay men as a target group. A one-point increase on the social desirability measure led to a .171-point increase on the warmth dimension and a .187-point increase on the competence dimension, making for an approximately 1-point difference on both the warmth and competence dimensions between both endpoints of the social desirability scale.

<sup>&</sup>lt;sup>7</sup> Cronbach's  $\alpha = .60$  for African Americans,  $\alpha = .67$  for the homeless,  $\alpha = .59$  for the elderly,  $\alpha = .76$  for professionals, and  $\alpha = .65$ . The only exception were social desirability scores for gay men, which had a low internal reliability of  $\alpha = .54$ . However, when the scale was separated into two scales, one measuring internal motivation to avoid prejudice (Items 1–2), and the other measuring external motivation to avoid prejudice (Items 3–4), reliability reached  $\alpha = .85$  and  $\alpha = .87$ , respectively, for the two separate scales. Unless otherwise noted, only internal motivation to avoid prejudice against gay men was used in the remaining analyses.

		Straight people		Gay r	nen	Home	less	Professi	onals	Elde	rly	African Americans	
		F	р	F	р	F	р	F	р	F	р	F	р
	Social desirability	6.809	.010 **	25.703	.000 ***	74.948	.000 ***	2.112	.147	.002	.964	45.378	.000 ***
Warmth	Image condition	.838	.434	1.201	.303	.382	.537	1.383	.241	4.238	.040 *	.512	.600
	Image condition x Social desirability	.314	.731	2.995	.052	2.866	.092	5.236	.023 *	.008	.931	2.281	.104
	Social conservatism	.158	.692	.081	.776	1.925	.166	2.294	.131	.317	.574	1.754	.186
	Ideology	.006	.941	.085	.771	.880	.349	.058	.810	.018	.894	4.026	.046 *
	Social desirability score	6.919	.009 **	37.023	.000 ***	3.941	.000 ***	13.833	.000 ***	3.844	.051	6.784	.010 **
	Social desirability	1.425	.234	22.344	.000 ***	93.856	.000 ***	1.972	.001 ***	61.218	.000 ***	42.007	.000 ***
	Image condition	.178	.837	.633	.532	.12	.729	1.693	.194	3.062	.081	1.634	.197
	Image condition x Social desirability	.571	.566	1.339	.264	.573	.45	1.542	.215	1.381	.241	1.244	.29
Competence	Social conservatism	.139	.710	2.412	.122	8.269	.004 **	1.224	.269	6.156	.014 *	1.816	.179
	Ideology	.642	.424	.053	.819	1.163	.282	.027	.870	.201	.654	4.530	.034 *
	Social desirability score	1.434	.001 **	38.646	.000 ***	19.880	.000 ***	.154	.695	3.037	.082	4.651	.032 *

 Table 14: Two-way between-participant ANOVAs assessing the effects of the "social desirability" and "image" conditions on warmth and competence scores, with social conservatism, ideological self-placement, and the social desirability score for the given target group entered as covariates

However, ideology and social conservatism had little to no impact on either warmth or competence scores and—even more surprisingly—the images that participants had been exposed to before completing the SCM items failed to produce an effect as well. Thus, the findings from Experiment 1 could not be reproduced for African Americans as a target group and they did not extend to straight people or gay men either. The visual priming measure did not work.

The conclusion that ideology does not have any influence on warmth and competence ratings seems to be premature, however, at least in the context of gay men as a target group. As shown in Table 15 below, both ideology as measured on a Likert scale and social conservatism calculated on the basis of responses to the Wilson–Patterson type items are fairly good predictors of internal motivation to control prejudice (IMCP) against gay men. A one-point increase in conservatism corresponds to a .228-point decrease, whereas a one-point increase in social conservatism corresponds to a .414-point decrease in IMCP (with all three measured on 7-point scales.) Thus, this analysis seems to indicate that ideology exerts its influence on attitudes towards gay men through the intervening variable of internal motivation to control prejudice.

Moreover, all demographic variables included seem to have a considerable effect on internal motivation to control prejudice as well. Women average .810 points higher on internal motivation than men and both those with some college education and a college or graduate degree average about 1.4 points higher than those who did not finish high school.

However, the same cannot be said about external motivation to control prejudice against gay men, on which ideology, social conservatism, and gender do not seem to have any noticeable impact. Education, on the other hand, has the opposite effect than in the case of internal motivation—high school graduates, those with some college, and college graduates seem to feel less external pressure to hide negative feelings towards gay men than those with some high school or grade school education only.

		Estimate	Std. error	t value	р	
	Intercept	5.174	.714	7.249	.000	***
	Ideology	228	.068	-3.348	.001	***
Internal	Social conservatism	414	.059	-6.997	.000	***
motivation to control	Gender (female)	.810	.176	4.616	.000	***
prejudice	Education (high school)	.532	.708	.752	.453	
	Education (college)	1.391	.681	2.043	.042	*
	Education (college degree)	1.411	.673	2.096	.037	*
	Intercept	4.261	.806	5.290	.000	***
	Ideology	.117	.077	1.530	.127	
External	Social conservatism	048	.067	715	.475	
motivation to control	Gender (female)	146	.198	736	.462	
prejudice	Education (high school)	-1.898	.799	-2.376	.018	*
	Education (college)	-1.782	.768	-2.319	.021	*
	Education (college degree)	-1.422	.760	-1.872	.062	

 Table 15: Linear regressions of internal and external motivation to control prejudice against gay men on attitudinal and demographic variables

In order to be able to determine whether asking participants to provide their meta-level evaluations of society's evaluations of gay men instead of their own assessments is an efficient way of overcoming—or at least mitigating—social desirability concerns, two further threeway ANOVAs were conducted, with social desirability (as an experimental condition) as well as internal motivation to control prejudice (IMCP) and external motivation to control prejudice (EMCP) against gay men as the three independent variables, and warmth and competence scores as dependent variables (see Table 16 below). IMCP and EMCP were recoded into binary variables so as to enable the assessment of their interaction effects with the experimental conditions.

The results are straightforward. The "social desirability" condition and IMCP had strong main effects on assessments along both the warmth and the competence dimensions. Those in the "high social desirability" condition rated gay men by about .4 points warmer and more

competent than those in the "low social desirability" condition. Moreover, those high on IMCP rated gay men more positively on both dimensions as well. The difference was about +.6 points on the warmth dimension and about +.5 points on the competence dimension. Interestingly, EMCP did not seem to affect the responses in any significant way.

		SS	Df	F	р	
	Social desirability	11.948	1	22.446	.000	***
	IMCP	24.301	1	45.654	.000	***
	EMCP	.032	1	.061	.806	
Warmth	Social desirability x IMCP	2.019	1	3.793	.053	
(gay men)	IMCP x EMCP	.053	1	.100	.752	
	Social desirability x EMCP	.923	1	1.735	.189	
	Social desirability x IMCP x EMCP	SSDf $F$ $p$ 11.948122.446.00024.301145.654.000.0321.061.8062.01913.793.053.0531.100.752.92311.735.189.3891.730.394141.057265 $18.638131.327.000.2841.477.4904.6371.057.812.0341.057.812.5941.998.319.0671.112.738$				
	Residuals	141.057	265			
	Social desirability	11.714	1	19.688	.000	***
	IMCP	18.638	1	P         p           22.446         .000         3           45.654         .000         3           .061         .806         3.793         .053           .100         .752         1.735         .189           .730         .394         3         3           .100         .752         1.735         .189           .730         .394         3         3           .730         .394         3         3           .730         .394         3         3           .730         .394         3         3           .730         .394         3         3           .730         .394         3         3           .730         .394         3         3           .730         .394         3         3           .7794         .006         .057         .812           .998         .319         .112         .738	***	
	EMCP	.284	1			
Competence	Social desirability x IMCP	4.637	1	7.794	.006	**
(gay men)	IMCP x EMCP	.034	1	.057	.812	
	Social desirability x EMCP	.594	1       3.793       .053         1       .100       .752         1       1.735       .189         1       .730       .394         265       .000       **         1       19.688       .000         1       31.327       .000         1       .477       .490         1       .057       .812         1       .998       .319         1       .112       .738         266			
	Social desirability x IMCP x EMCP	.067	1	.112	.738	
	Residuals	158.262	266			-

Table 16: The effects of social desirability (as an experimental condition), internal motivation to control prejudice (IMCP) against gay men and external motivation to control prejudice (EMCP) against gay men on warmth and competence scores

Most importantly, however, the "social desirability" condition and IMCP also entered into an interaction effect. For those low on IMCP, it did not matter very much to which experimental condition they had been assigned. The difference was +.25 points on the warmth dimension and only +.15 points on the competence dimension in favor of those who were assigned to the "high social desirability" condition. At the same time, for those high on IMCP the difference between both experimental conditions was markedly more pronounced, with +.60 on the warmth dimension and +.67 on the competence dimension.

Thus, one can conclude that insofar as social desirability concerns distort answers in the "high social desirability" condition, this is due to internal, rather than external, motivation to

control prejudice. Differences between those high on IMCP and low on IMCP are decidedly smaller in the "low social desirability" condition than in the "high social desirability" condition (.43 vs. .77 points on the warmth dimension and .25 vs. .77 points on the competence dimensions). However, whether this is mostly due to the fact that those high on IMCP also have genuinely more positive attitudes towards gay men or rather mostly due to the fact that social desirability concerns are more salient in one group than in the other seems impossible to decide on an empirical basis.

#### 3.3.3 Discussion

Experiment 2 addressed five issues—the replicability of results from Experiment 1 showing that conformity predicts warmth, the place of gay men in the cluster structure established in Experiment 1, the impact of social desirability on evaluations of gay men, the impact of ideology on evaluations of gay men, and the effects of priming with images of norm-conforming and norm-breaking subgroups on evaluations of gay men.

Just as in Experiment 1, conformity seemed to predict warmth ratings just as well (and in some cases even better) than perceived economic competition and this finding extended to gay men as a target group. However, no relationship could be established between the standard demographic and attitudinal variables and competition or conformity as a more reliable predictor of warmth.

The "low social desirability" and "no image" conditions, i.e., where the methods used were identical to the original ones, again yielded a perfect replication of the cluster structure described in Fiske, Cuddy, Glick, and Xu (2002), including gay men's place in it as a group with mixed ratings.

Social desirability as an experimental condition had sizeable effects on warmth and competence ratings of gay men, although these effects were smaller than for the homeless, African Americans, and the elderly. Overall, one can observe that high social desirability tends to eliminate large differences between social groups by giving a boost to those ratings that are comparatively negative in the low social desirability condition. However, social desirability did not affect participants equally. Those high on internal motivation (but not those high on external motivation) to control prejudice against gay men tended to give higher ratings in both the high and the low social desirability conditions, but the differences between those high and those low on internal motivation to control prejudice were especially pronounced in the high social desirability condition.<sup>8</sup> Internal motivation to control prejudice was, in turn, predicted by demographic and attitudinal variables, most notably gender, education, and ideological positions. Women, highly educated individuals, and liberals were more likely to be high in internal motivation to control prejudice than men, less educated individuals, and conservatives.

Finally, Experiment 2 failed to replicate the main finding of Experiment 1 (i.e., influencing evaluations by priming participants with images of norm-conforming or norm-breaking subgroups of the target group). However, as I will argue in Section 3.4.2 below, this does not mean that conformity as a substantive dimension does not influence warmth and competence ratings. Rather, it seems that participants either did not engage sufficiently with the images in this particular study or that their stereotypes and attitudes were to "well-rehearsed" for a brief exposure to some images to be able to have any meaningful impact on their subsequent judgments in the given experimental setting.

<sup>&</sup>lt;sup>8</sup> At the same time, it seems almost impossible to decide on an empirical basis whether the original SCM inadvertently eliminates existing individual-level differences in stereotype content (because participants are actually answering the questions that they have been asked) or whether the larger difference that emerges in the high social desirability condition is an experimental artifact. To some extent, this question leads us back to the "will the real attitude please stand up" debate referred to in Chapter 2.

# 3.4 Experiment 3—Norm-conforming and norm-breaking gay men contrasted

Experiment 3 addresses four questions: first, whether Experiment 2 failed to produce visual priming effects due to substantive limitations or problems of design ("visual priming" hypothesis); second, whether explicitly contrasting norm-conforming to norm-breaking subgroups in a within-participant design affects warmth and competence ratings of straight and gay people, i.e., whether conformity matters ("conformity" hypothesis); third, whether liberals and conservatives differ in terms of the relative weight that they attach to sexual orientation and conformity when they think about social groups ("nonconsensuality" and "social conservatism" hypotheses); and fourth, whether participants respond only to verbal labels or also unlabeled visual stimuli in the SCM framework ("visual priming" hypothesis).

#### 3.4.1 Method

#### 3.4.1.1 Participants

The sample included 122 participants, 36.9 percent of whom were female. The mean age was 34.62 years, with a standard deviation of 12.95 and a median age of 31 years. The youngest participant was 19 and the oldest participant was 81 years of age. Again, participants represented a broad cross-section of educational attainment, with 9.8 percent high school graduates, 41.0 percent with some college education but no degree, and 48.8 percent with a college or graduate degree. Annual household incomes ranged from below \$25,000 (31.1 percent) to \$100,000 and above (9.0 percent), with the \$25,000 to \$44,999 category being the most populous (33.6 percent). 76 percent of the participants were White, 10.7 percent Black/African American, 6.6 percent Hispanic/Latino, 4.1 percent Asian, and 2.5 percent American Indian. In terms of sexual orientation, 84.4 percent identified as heterosexual/straight, 10.7 percent as bisexual and 4.1 percent as homosexual, gay, or lesbian. Since most items required participants to make assessments of gay men or of African American, American

those who did not identify as heterosexual and those who identified as African American were excluded from all subsequent analyses of the relevant items. However, their responses concerning other target groups were retained.

In terms of ideological positions (especially social conservatism), the sample exhibited a pronounced liberal bias. Ideological self-positioning on a 7-point Likert scale had a mean of 3.46 with a standard deviation of 1.69 and a median of 3, while social conservatism had a mean of 2.51 with a standard deviation of 1.80 and a median of 2 (i.e., the majority of participants ranked 1 or 2 out of 7 on social conservatism). The correlation between ideological selfpositioning and social conservatism was .574 (almost identical to Experiment 2, where it had been .580).

#### 3.4.1.2 Procedure

The procedure is described in great detail in Section 3.1.2 above. With the aspect of conformity made explicit this time, the experiment included six target groups—"norm-conforming" and "norm-breaking" straight people, "norm-conforming" and "norm-breaking" gay men, as well as "norm-conforming" and "norm-breaking" African Americans.

In this experiment, all participants were exposed to images of the target group before completing the relevant SCM items. This, in turn, enabled a modification to the experimental design, which was the introduction of a further experimental condition, which I will call "labeling." The "labeled" condition was identical to the "image exposure" condition in Experiments 1 and 2 in that the images were used in addition to group labels and participants were merely asked to "take a few seconds to look at some pictures" of the target group before completing the corresponding SCM items. In the "no label" condition, however, target groups were unlabeled. They were introduced as "a certain social group" and participants were asked to identify the target group solely based on the images before answering the relevant questions.

#### 3.4.2 Results—Conservatives rely on sexual orientation; liberals don't

As in Experiments 1 and 2, the warmth (Cronbach's  $\alpha = .87$ ), competence ( $\alpha = .88$ ), competition ( $\alpha = .79$ ), status ( $\alpha = .75$ ) and conformity ( $\alpha = .83$ ) items had acceptable internal reliability and were therefore averaged on the participant level. Again, as in Experiments 1 and 2, scores on the warmth dimension were predicted by both scores on the competition dimension and the conformity dimension. Lack of competition predicted warmth scores most strongly for norm-conforming straight people (Pearson's r = -.558) and least strongly for normconforming African Americans (r = -.314), while conformity predicted warmth most strongly for both subgroups of African Americans (r = .656) and least strongly for norm-breaking gay men (r = .354). Status judgments predicted competence judgments least strongly for normconforming straight people (r = .454) and most strongly for norm-breaking straight people (r= .679).

Table 17 below shows the effects of conformity on warmth and competence ratings for straight people, gay men, and African Americans across different experimental conditions in Experiments 2 and 3. Experimental conditions 0, 1, and 2 are the "no image," "norm-conforming image" and "norm-breaking image" conditions from Experiment 2, respectively, while conditions 3 and 4 represent the "norm-conforming" and "norm-breaking" subgroups from Experiment 3. Thus, the Tukey's tests assess the effects of no exposure to images (0) versus exposure to norm-conforming (1) or norm-breaking images (2) without explicitly contrasting the two versus explicitly contrasting norm-conforming (3) and norm-breaking subgroups (4) on a within-participant level. (The effects of labeling and social desirability are addressed in the detailed separate analysis of Experiment 3 below.)

In the case of straight people, only the contrasts involving the "norm-breaking" subgroup from Experiment 3 are statistically significant. When explicitly contrasted with normconforming behavior, norm-breaking behavior reduces straight people's warmth ratings by about .5 points and their competence ratings by about .8 points. The fact that the contrasts between the "norm-breaking image" condition from Experiment 2 and the "norm-breaking" subgroup from Experiment 3 are highly significant suggest that—as hypothesized above participants might not have paid sufficient attention to the images before making their judgments and/or the images were not powerful enough to have any noticeable effect on subsequent judgments in Experiment 2. (The exact same images were used for the "norm-breaking image" condition in Experiment 2 and the "norm-breaking" subgroup in Experiment 3 for all three target groups.) Moreover, these contrasts prompt the substantive conclusion that when participants were assessing straight people without any visual priming in Experiment 2, their dominant mental representations of straight people were those of norm-conforming, rather than norm-breaking, behavior.

The patterns are surprisingly similar for gay men. Apart from a quite small difference between the "norm-breaking image" condition from Experiment 2 and the "norm-conforming" subgroup from Experiment 3 (which suggests that the visual priming might have had some effect in Experiment 2 after all), only the contrasts involving the "norm-breaking" subgroup are statistically significant. Most notably, gay men only gained a statistically insignificant amount of .15 points in both warmth and competence when they were represented as normconforming (either with or without an explicit label) in Experiment 3 as compared to the "no image" condition of Experiment 2, where participants had been asked to evaluate gay men in general. This suggests that, just as in the case of straight people, the dominant image of gay men in American society (or at least this overwhelmingly socially liberal sample) is that of

			Straight	t people				Gay	men	African Americans						
		SS	Df	F	p	)	SS	Df	F	P	)	SS	Df	F	p	)
	Conditions	28.910	4	11.921	.000	***	11.950	4	4.302	.002	**	118.580	4	36.013	.000	***
	Contrasts	Estimate	Std. error	t	p	)	Estimate	Std. error	t	P	)	Estimate	Std. error	t	p	,
	1 vs. 0	023	.107	212	.832		.062	.122	.513	.608		103	.129	796	.427	
	2 vs. 0	034	.109	311	.756		060	.125	481	.631		.122	.135	.910	.363	
_	3 vs. 0	.138	.103	1.345	.179		.155	.119	1.294	.196		.567	.124	4.560	.000	***
mtł	4 vs. 0	504	.103	-4.912	.000	***	301	.119	-2.521	.012	*	876	.124	-7.040	.000	***
War	2 vs. 1	011	.111	103	.918		122	.124	984	.326		.225	.138	1.636	.102	
	3 vs. 1	.161	.104	1.545	.123		.092	.119	.777	.438		.670	.128	5.245	.000	***
	4 vs. 1	481	.104	-4.633	.000	***	364	.119	-3.059	.002	**	773	.128	-6.052	.000	***
	3 vs. 2	.172	.107	1.614	.107		.215	.122	1.754	.080		.445	.133	3.342	.001	***
	4 vs. 2	470	.107	-4.412	.000	***	241	.122	-1.970	.049	*	998	.133	-7.497	.000	***
	4 vs. 3	642	.100	-6.440	.000	***	456	.117	-3.906	.000	***	-1.443	.123	-11.739	.000	***
		SS	Df	F	р	)	SS	Df	F	P	)	SS	Df	F	p	,
	Conditions	68.410	4	28.568	.000	***	16.950	4	5.743	.000	***	103.830	4	36.560	.000	***
	Contrasts	Estimate	Std. error	t	р	)	Estimate	Std. error	t	P	)	Estimate	Std. error	t	p	)
	1 vs. 0	082	.106	774	.440		.034	.125	.270	.787		.043	.120	.361	.718	
	2 vs. 0	.013	.109	.124	.901		095	.129	741	.459		.110	.124	.884	.377	
JCe	3 vs. 0	.135	.102	1.321	.187		.154	.123	1.256	.210		.627	.116	5.428	.000	***
eter	4 vs. 0	810	.102	-7.942	.000	***	388	.123	-3.162	.002	**	741	.116	-6.414	.000	***
duu	2 vs. 1	.096	.110	.870	.385		129	.128	-1.006	.315		.067	.127	.524	.600	
ŭ	3 vs. 1	.217	.103	2.099	.036	*	.120	.122	.984	.326		.584	.119	4.922	.000	***
	4 vs. 1	728	.103	-7.049	.000	***	422	.122	-3.445	.001	***	784	.119	-6.611	.000	***
	3 vs. 2	.12 <u></u>	.106	1.145	.253		.250	.126	1.978	.049	*	.517	.123	4.197	.000	***
	4 vs. 2	82	.106	-7.778	.000	***	293	.126	-2.322	.021	*	851	.123	-6.907	.000	***
	4 vs. 3	945	.099	-9.536	.000	***	542	.120	-4.510	.000	***	-1.368	.114	-11.983	.000	***

 Table 17: Tukey's tests contrasting the effects of different experimental conditions on warmth and competence ratings across Experiments 2 and 3

Experimental conditions: 0 = "no image" (Experiment 2), 1 = "norm-conforming image" (Experiment 2), 2 = "norm-breaking image" (Experiment 2), 3 = "norm-conforming" subgroup (Experiment 3), 4 = "norm-breaking" subgroup (Experiment 3)

norm-conforming gay men. Moreover, interestingly, norm-breaking behavior results in smaller losses of both warmth and competence ratings for gay men than for straight people.

The target group of African Americans represents an interesting, and rather disheartening, contrast. Not only are the explicit contrasts between the norm-conforming and the norm-breaking subgroups the largest for them in Experiment 3 (a staggering 1.4 points on both the warmth and competence dimensions, as opposed to .5 for gay men and .6 for straight people), African Americans are also the only target group of the three target groups compared here that recorded a considerable gain in both warmth and competence ratings of about .6 points when they were represented as a norm-conforming subgroup (as opposed to simply "African Americans" in general in Experiment 2). This suggests that—in contrast to both straight people and gay men—the dominant image of African Americans is mixed, and includes elements of both norm-breaking and norm-conforming behavior.

Three-way mixed between–within ANOVAs were conducted to assess the effects of "social desirability" and "labeling" as between-participant factors and "conformity" as a withinparticipant factor (the latter comparing warmth and competence ratings of norm-conforming and norm-breaking subgroups of the same target group).

As expected, social desirability had a sizeable main effect in all target groups (see Table 18 below). The effect size of social desirability was similar across the three target groups, with a difference of .36 on both dimensions for straight people, .40 in warmth ratings and .52 in competence ratings for gay men, and .43 and .36 for African Americans (higher ratings were given in the "high social desirability" condition in each case). Somewhat surprisingly, how-ever, labeling did not have a main effect in any of the target groups under consideration, except for a modest difference of .25 points in favor of the "no label" condition for the warmth ratings of straight people. Thus, it seems that participants were not merely responding to the

			Straight people					Gay men					African Americans				
			Df	SS	F	P	)	Df	SS	F	р	)	Df	SS	F	р	)
	t	Social desirability	1	7.871	11.592	.001	***	1	7.624	7.107	.009	**	1	9.919	11.608	.001	***
	en- pan	Label	1	3.743	5.512	.021	*	1	.417	.388	.535		1	.942	1.102	.296	
	Betwe	Social desirability x Label	1	1.611	2.373	.126		1	.082	.076	.783		1	6.172	7.222	.008	**
	q	Residuals	118	8.13				98	105.14				105	89.73			
Warmth	nt	Conformity	1	25.148	37.898	.000	***	1	15.990	32.508	.000	***	1	113.430	199.587	.000	***
	ticipa	Social desirability x Conformity	1	16.897	25.464	.000	***	1	.644	1.977	.163		1	2.000	3.514	.064	
	par	Label x conformity	1	2.496	3.762	.055		1	1.344	4.121	.045	*	1	1.140	2.014	.159	
	ithin-	Social desirability x Conformity x Label	1	.858	1.293	.258		1	.230	.707	.403		1	4.030	7.091	.009	**
	W	Residuals	118	78.30				98	31.95				105	59.67			
	t	Social desirability	1	7.913	11.240	.001	**	1	13.389	13.007	.000	***	1	6.773	9.177	.003	**
	en- pan	Label	1	1.084	1.540	.217		1	.832	.809	.371		1	.143	.194	.661	
	Betwe	Social desirability x Label	1	.408	.579	.448		1	2.164	2.102	.150		1	4.950	6.707	.011	*
	d	Residuals	118	83.07				98	1.88				105	77.490			
Competence	nt	Conformity	1	54.440	77.652	.000	***	1	15.009	49.050	.000	***	1	101.950	194.070	.000	***
Competence	ticipa	Social desirability x Conformity	1	7.900	11.269	.001	**	1	.474	1.292	.259		1	.770	1.474	.227	
	par	Label x conformity	1	.570	.814	.369		1	.613	1.670	.199		1	.260	.492	.485	
	ithin-	Social desirability x Conformity x Label	1	1.860	2.653	.106		1	.113	.308	.580		1	6.310	12.007	.001	***
	W	Residuals	118	82.72				98	35.96				105	55.16			

 Table 18: Three-way mixed ANOVAs with "social desirability" and "labeling" as between-participant factors and "conformity" as a within-participant factor

labels but also to the images in the "labeled" condition and participants in the "no label" condition would mostly have agreed with the labels that had been attached to the pictures in the "labeled" condition.

However, one must make an important qualification to the conclusion above, since in the context of African Americans, the "labeling" factor entered into a two-way interaction with the "social desirability" factor. In the "high social desirability" condition (i.e., when participants were asked to provide their own evaluations rather than society's evaluations in general), labeling tended to increase both warmth and competence ratings by about .25 points, while in the "low social desirability" condition, labeling decreased ratings on both dimensions by about .4 points. The most plausible explanation for this is that in the "no label" condition, participants were not confronted with explicit racial labeling and might thus have (more or less intentionally) disregarded the fact that all five pictures depicted African Americans.

This explanation becomes even more credible when one takes into account the three-way interaction between labeling, social desirability, and conformity (that did not arise for any other target group). When participants were rating norm-breaking African Americans, labels decreased ratings in the "high social desirability" condition and increased them in the "low social desirability" condition. The effect went into the opposite direction for norm-conforming African Americans. Thus, participants were ready to give higher ratings to norm-conforming African Americans under a racial label when they were asked for their own opinions but they were only ready to give lower ratings to norm-breaking African Americans under a racial label when they could defer to society.

Effects of the "conformity" dimension were already discussed when I was comparing the results of Experiment 2 to Experiment 3. In sum, conformity as a within-participant factor had

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a very strong effect on both warmth and competence ratings in all target groups. As already mentioned, the strongest effect occurred for African Americans (+1.44 points on the warmth dimension and +1.37 points on the competence dimension for the norm-conforming sub-group), followed by straight people (+.64 and +.94 points, respectively), and gay men (+.46 and +.52 points).

In order to be able to more fully assess the relative effects of conformity and sexual orientation (of the target groups) as well as of social desirability (as an experimental condition) and of social conservatism (as a self-reported measure), these variables were entered into a fourway mixed ANOVA, with the two former variables as within-participant factors and the two latter variables as between-participant factors (see Table 19). For this analysis, social conservatism had been recoded into a binary variable using a median split. (The same analysis was also performed with ideology as a binary variable, but it did not produce any significant effect.<sup>9</sup>)

		War	nth		Competence				
	SS	F	р	р		F	р		
Social desirability	15.34 13.00 .0005 ***		***	19.75	14.96	.0002	***		
Social conservatism	6.66	5.65	.0194	*	9.62	7.29	.0082	**	
Sexual orientation	1.26	2.43	.1220		.77	2.50	.1170		
Conformity	32.7	57.16	.0000	***	56.07	7.14	.0000	***	
Social desirability x Social conservatism	1.65	1.40	.2405		.01	.01	.9457		
Social desirability x Conformity	7.80	13.63	.0004	***	4.22	5.29	.0236	*	
Social conservatism x Conformity	.81	1.42	.2365		.36	.45	.5030		
Social desirability x Sexual orientation	.00	.00	.9874		.53	1.74	.1910		
Social conservatism x Sexual orientation	2.29	4.54	.0356	*	.33	1.07	.3030		
Conformity x Sexual orientation	1.24	2.91	.0914		4.04	13.28	.0004	***	

#### Table 19: Four-way mixed between-within ANOVA with "social desirability" (as an experimental condition) and social conservatism (as a self-reported measure) as between-participant variables and sexual orientation and conformity (of the target groups assessed) as within-participant factors

(Higher-order interactions were not included in the analysis due to insufficient statistical power.)

<sup>&</sup>lt;sup>9</sup> Moreover, I conducted a two-way mixed within-between ANCOVA for the warmth and competence ratings of gay men as a target group, with social desirability as a between-participant factor, conformity as a within-participant factor, and ideology and social conservatism as covariates. Again, ideology failed to produce any significant effect.

Conformity had the most pronounced effect among the variables assessed, with normconforming subgroups receiving higher warmth (+.56 points) and competence (+.64) ratings than norm-breaking ones. Social desirability as an experimental condition had a considerable effect as well—ratings given by those in the "high social desirability" condition averaged +.40 points higher on both dimensions. Interestingly, a main effect emerged for social conservatism as well, with (relative) social conservatives giving the lower ratings (by .25 on the warmth dimension and .31 on the competence dimension).

Most strikingly, however, sexual orientation (of the target group assessed) did not have a main effect. On average, gay men were rated as just as warm and just as competent as straight people, with the caveat that social conservatives tended to rate gay men somewhat (by about .3 points) less warmly than liberals.<sup>10</sup> Moreover, gay men's competence ratings suffered less severely under norm-breaking behavior than those of straight people. Lastly, conformity and social desirability produced an interaction effect. Norm-breaking individuals were rated both less warmly and less competently in the low social desirability condition.

#### 3.4.3 Discussion

Experiment 3 addressed four questions—the reasons for the failure to produce visual priming effects in Experiment 2, the effects of explicitly contrasting norm-conforming to norm-breaking subgroups in a within-participant design on warmth and competence ratings of straight and gay people, differences between liberals and conservatives in terms of the relative weight that they attach to sexual orientation and conformity, and the role of labeling and visual stimuli.

<sup>&</sup>lt;sup>10</sup> As in Experiment 2, social conservatism also had an indirect effect on the warmth and competence ratings of gay men through the intervening variable of internal motivation to control prejudice. This time, a one-point increase on the social conservatism scale corresponded to a .355-point decrease on the IMCP scale (comparable to the .414 points in Experiment 2).

A cross-experimental analysis of data from Experiments 2 and 3 has shown that visual priming effects failed to occur in Experiment 2 due to problems with the design rather than substantial problems with the hypothesis, since both substantively and statistically significant differences were observed between experimental conditions using the same visual stimuli but different procedures. Moreover, the cross-experimental comparison produced the interesting insight that the "default" stereotype of both straight people and gay men is that of the norm-conforming subgroups, whereas the "default" stereotype of African Americans seems to be mixed. This conclusion is based on the fact that the ratings of African Americans improved significantly when they were presented as norm-conforming and decreased significantly when they were presented as norm-breaking. By contrast, only the second effect occurred for straight people and gay men. Thus, conformity matters—although more strongly for evaluations of African Americans than for evaluations of straight people and more strongly for evaluations of straight people than for evaluations of gay people.

Interestingly, sexual orientation as a within-participant factor did not have a significant main effect nor an interaction effect with social desirability, i.e., sexual orientation did not determine participants' attitudes in either the "high social desirability" or the "low social desirability" condition. Its interaction effect with social conservatism reveals, however, that while gay men received a penalty from social conservatives based on their sexual orientation, no such effect occurred for social liberals. Moreover, explicit labeling of the subgroups of "normconforming" or "norm-breaking" did not have a significant effect either.

#### 3.5 General discussion

In this chapter I presented and analyzed the results of three experiments that had addressed six of the seven hypotheses set out in Chapter 2 above, relying on the Stereotype Content Model. Below I summarize and synthetize those results and relate them back to my hypotheses.

First, I had hypothesized that perceived conformity with social norms would predict warmth judgments in the context of gay men as a target group ("conformity–warmth" hypothesis). In fact, all three experiments indicate that the conformity dimension—not included in the original SCM—emerges as a possible contender to the competition dimension as a predictor of warmth (including for gay men). However, further experimental testing will be necessary to determine whether beyond mere correlation a causal relationship can be established between the conformity and warmth dimensions for at least some social groups. Such a causal link has already been established for the competition–warmth link in the context of immigrant groups, where economic concerns are especially salient (Cuddy et al., 2008). Moreover, the question of what factors determine whether competition or conformity has a larger influence on warmth ratings would merit further investigation.

Second, I had hypothesized that when attitudes are measured using an explicit method such as the SCM, social desirability concerns would be present; however, they would be more salient for some target groups than for others and they would show considerable individuallevel variation ("social desirability" hypothesis). As demonstrated above, social desirability does indeed affect responses, but social desirability effects operate differently in the context of different target groups. Overall, social desirability tends to reduce cross-group differences, with mild effects on high warmth-high competence and low warmth-high competence target groups and large effects in the low warmth-low competence and high warmth-low competence clusters. In the context of gay men as a target group, social desirability concerns affected responses less than for the homeless or the elderly, but more than for professionals or the middle class. Moreover, Experiments 2 and 3 have demonstrated that social desirability does not affect everyone equally. Women, educated individuals, and social liberals—who received higher ratings on internal motivation to control prejudice—tended to be more susceptible to social desirability than men, less educated individuals, and social conservatives when evaluating gay men. However, it remains open to question whether asking participants to provide their meta-level assessments of social stereotypes rather than their own evaluations is an efficient way of overcoming this bias. According to one interpretation, this method reduces existing social desirability bias; according to an alternative interpretation, it introduces bias by suppressing existing individual differences in judgment.

Third, the experiments produced mixed results with regard to the "visual priming" hypothesis. Based on Experiment 1, it seemed that images of norm-conforming and norm-breaking individuals could be used to influence warmth and competence ratings irrespectively of the way in which participants engaged with the pictures. However, mere exposure to images of different subgroups did not produce any detectable effect in Experiment 2. When normconforming and norm-breaking subgroups were contrasted on a within-participant level in Experiment 3, large effects occurred independently from social desirability and explicit labeling. At the same time, the results of Experiment 3 seemed to confirm the "conformity" hypothesis as well. The "default" stereotype for both straight people and gay men seems to be that of conformity and both are penalized for norm-breaking behavior, although straight people somewhat more strongly than gay men.

Fourth, the experimental data also provided ample evidence for the "nonconsensuality" and "social conservatism" hypotheses. Although Experiment 1 did not reveal a main effect for ideology, it has shown that in the context of the homeless and the elderly, liberals are more vulnerable to social desirability than conservatives. In Experiment 2, ideology affected

warmth and competence ratings through its effect on internal motivation to control prejudice against gay men—an effect that the original SCM, not addressing social desirability concerns explicitly, had failed to detect by design.

However, the most important conclusion stems from Experiment 3. Foreshadowing the results of the IAT study, Experiment 3 has shown that whereas both liberals and conservatives penalize norm-breaking behavior, conservatives also penalize gay men for their sexual orientation, but liberals do not. Possibly, these effects could have been detected even more unequivocally if the samples had been more ideologically balanced. Moreover, at least in this context, the Wilson–Patterson type measurement of ideology emerged as clearly superior to the traditional Likert-scale ideology item. In Experiment 2, simple unidimensional selfplacement was a weaker predictor of internal motivation to control prejudice than the Wilson–Patterson type items and in Experiment 3, the differences between social conservatives and social liberals could not have been detected at all if only the "traditional" ideology item from the ANES had been used.

# Chapter 4 LIBERALS' AND CONSERVATIVES' IMPLICIT ATTITUDES TOWARDS NORM-CONFORMING AND NORM-BREAKING GAY MEN

Because a large body of previous literature has shown that ideology has a strong impact on implicit attitudes towards homosexuals, with increasing implicit preferences for straight people over gay people as a function of conservative leanings (see Section 2.2), I did not revisit this issue here. Instead, I asked the questions of whether implicit preferences of norm-conforming gay men over norm-breaking gay men and of norm-conforming straight people over norm-breaking straight people are consensual or subject to the influence of ideology (Experiment 4). Moreover, I wanted to know whether transgressions on the sexual orientation dimension or transgressions on the conformity dimension would be more salient for liberals and conservatives, i.e., whether ideological preferences would predict implicit attitudes in an IAT pitting norm-conforming gay men against norm-breaking straight people (Experiment 5).

# 4.1 Methods shared across experiments

# 4.1.1 Participants

Participants were recruited on the Amazon MTurk platform for a "short and fun psychological test." Visitors from outside the United States and those who had participated in the Stereotype Content Model study had been excluded. Respondents received \$.50 for their participation.

## 4.1.2 Procedure

The IAT sessions were administered using the Inquisit Online interface (Millisecond Software LLC., 2012). Participants were greeted and asked to provide informed consent. Then they were instructed to fill out a short questionnaire with standard demographic items, a Likert-scale measure of ideology, as well as the Wilson–Patterson type items used in the SCM studies (see Section 3.1.2 above).
Participants were then administered two IAT sessions (Experiment 4) in randomized order, with one of them pitting norm-conforming gay men (labeled simply as "gay men" in the study) against norm-breaking gay men (labeled as "queer men") and the other one pitting norm-conforming straight people ("traditional people") against norm-breaking straight people ("non-traditional people"). The labels used in the study had been chosen based on their brevity and the fact that they are more easily comprehensible than the labels "norm-conforming" and "norm-breaking." In Experiment 5, participants completed a single IAT session, this time pitting norm-conforming ("conformist") gay men against norm-breaking ("non-conformist") straight people.

All three sessions followed the standard IAT procedure (Greenwald et al., 1998), i.e., each session consisted of five phases—initial target concept discrimination, associated attribute discrimination, initial combined task, reversed target concept discrimination, and reversed combined task (see Table 20). Sample stimuli are presented in Appendix B.

At the beginning of the IAT session, participants were informed that they would be taking part in a "timed sorting task." They were instructed to go as fast as they could without making any mistakes.

In the first phase ("initial target concept discrimination"), participants were asked to press the "E" key if the concept belonged to the first category (e.g., "GAY MEN" in one of the sessions of Experiment 4) and the "T" key for the second category ("QUEER MEN"). In the second phase ("associated attribute discrimination"), they were asked to press "E" for positive-ly valenced adjectives and "T" for negatively valenced adjectives. The first two phases served the purpose of practicing key assignments only.

Sequence	1			2		3		4			5				
Task	Initial target concept discrimination			Associated attribute discrimination		Initial combined task		Reversed target concept discrimination		Reversed combined task					
T	"Е"	GAY MEN		"Е"	good		"Е"	GAY MEN good	_		GAY MEN	"I"		GAY MEN bad	"I"
instructions		QUEER MEN	"I"		bad	"I"		QUEER MEN bad	- "I"	"Е"	QUEER MEN		"Е"	QUEER MEN good	
	<b></b>			"Е"	superb		<b>((T))</b>	6 8				т.,		6 8	т.,
	E	<b>D</b>			tragic	"I"	E	E				1			T
		"I	·····	"Е"	pleasant				"I"	"E"			" <b>F</b> "		
Somple stimuli			.1.		horrible	"I"							E.,		
Sample Stinun	<b>((–</b> ))	60		"Е"	beautiful		"Е"	superb			60.		"Е"	superb	
	E.,				sad	"I"		tragic	"I"			•¶"	"Е"	tragic	"I"
				"Е"	lucky		"Е"	pleasant			R			pleasant	
		- Bar				painful	"I"		horrible	"I"	E.,				horrible

Table 20: Visual representation of the IAT procedure for the "norm-conforming vs. norm-breaking gay men" IAT session from Experiment 4

All sessions used identical procedures. The table is based on the table presented in Greenwald, McGhee, and Schwartz (1998, p. 1465).

	Norm-con norm-hereaking	nforming vs. g straight people"		"Norm-conforming gay men vs. norm-breaking straight people"					
TRADITIONAL PEOPLE		NON- TRADITIONAL PEOPLE	R	CONFORMIST GAY		NON-CONFORMIST STRAIGHT	R		

Table 21: Sample stimuli for the "norm-conforming vs. norm-breaking straight people" and "norm-conforming gay men vs. norm-breaking straight people" IAT sessions

In the third, and first relevant, phase ("initial combined task"), participants were asked to press "E" for images representing the category "GAY MEN" or for positively valenced adjectives and "I" for images of "QUEER MEN" or negatively valenced adjectives. In the fourth phase ("reversed target concept discrimination"), they practiced the reversed key assignment for positive and negative adjectives, i.e., "E" for negative adjectives and "I" for positive adjectives. In the fifth and final phase ("reversed combined task") the pairing from the third phase was reversed. Participants were asked to press "E" for images representing the category "GAY MEN" or for negatively valenced adjectives and "I" for images of "QUEER MEN" or positively valenced adjectives. The IAT scores or d ("difference") scores discussed in Sections 4.2.2 and 4.3.2 represent the differential between log-transformed response latencies in the third and fifth phases of the IAT session (Greenwald, Nosek, & Banaji, 2003).

At the end of each IAT session, participants received a summary with their IAT (*d*) scores and the explanation that the score suggests "little or no/a slight/a moderate/a strong automatic preference for [group A] over [group B]." In Experiment 4, participants completed a second IAT session, were thanked for their participation, and then logged off the website. In Experiment 5, participants completed only one IAT session before being thanked for their participation and then logged off.

## 4.2 Experiment 4—Conformity matters

4.2.1 Method

#### 4.2.1.1 Participants

208 people participated in the study. 64.9 percent of participants were female. The mean age of participants was 36.50 years, with a standard deviation of 12.78 years and a median age of 34 years. The youngest participant was 19 years old and the oldest participant was 72. In terms of educational attainment, 2.9 percent did not finish high school, 16.3 percent were

high school graduates, 32.7 percent had some college education, and 48.1 percent at least a college degree. Annual household income ranged from below \$25,000 a year (24 percent) to \$100,000 and above (7.7 percent), with \$25,000 to \$44,999 the most populous category (35.1 percent). 81.6 percent of the participants identified as White, 8.7 percent as Black/African American, 6.3 percent as Asian, and 2.4 percent as Hispanic/Latino. 92.3 percent identified as heterosexual/straight. The sample was ideologically balanced with a slight liberal bias (the mean ideological self-placement was 3.58, with a standard deviation of 1.72 and a median of 3).<sup>11</sup>

#### 4.2.1.2 Procedure

The procedure has been described in Section 4.1.2 above. Participants completed two IAT sessions, one pitting norm-conforming gay men against norm-breaking gay men and the other one pitting norm-conforming straight people against norm-breaking straight people. Participants were randomly assigned to one of the two different orderings. One can safely assume that no ordering effects occurred, t (175.55) = .292, p = .770 and t (199.97) = .187, p = .851.

#### 4.2.2 Results

The results of the "norm-conforming vs. norm-breaking gay men" and the "norm-conforming vs. norm-breaking straight people" IATs are quite straightforward. Participants overwhelmingly displayed a moderate to strong implicit preference for the norm-conforming subgroup in both sessions.

In the "norm-conforming vs. norm-breaking gay men" session, d scores ranged from -1.237 to 1.533 (with positive numbers denoting automatic preference for the norm-conforming subgroup). The mean automatic preference was .464, with a standard deviation of .461 and a

<sup>&</sup>lt;sup>11</sup> The analyses reported below were carried out using the Wilson–Patterson type social conservatism scale as well and no differences emerged as compared to models using the Likert-scale self-placement. Therefore, those results are not reported.

strong negative skew (-.546). In the "norm-conforming vs. norm-breaking straight people" session, *d* scores ranged from -1.254 to 1.439, with a mean of .541 and a standard deviation of .40. Again, the distribution was negatively skewed (-.647). (For better visibility, *d* scores are presented as implicit preference groups in Figure 3.) In fact, the dimension of sexual orientation only made a substantively very small difference on a within-participant level, as shown by a repeated measures *t* test comparing *d* scores from both sessions, *t* (207) = 2.306, *p* = .022, with a mean of differences of .077.



## Figure 3: Distribution of implicit preference groups ("norm-conforming vs. norm-breaking gay men" above and "norm-conforming vs. norm-breaking straight people" below)

Group 1 (d < -.65): strong preference for norm-breaking, group 2 (-.65 < d < -.35): moderate preference for norm-breaking, group 3 (-.35 < d < -.15): slight preference for norm-breaking, group 4: (-.15 < d < .15): no preference, group 5 (.15 < d < .35): slight preference for norm-conforming, group 6 (.35 < d < .65): moderate preference for norm-conforming, group 7 (.65 < d): strong preference for norm-conforming.

Moreover, no demographic or attitudinal variables recorded could be used to reliably predict d scores in either of the sessions (see Table 22). Only age has a statistically significant effect in both regressions and its effect is substantively negligible. Thus, one can conclude that im-

plicit preferences for norm-conforming over norm-breaking people apply independently of the sexual orientation of the target group and across the board.

						_					
	"norm-col	<i>d</i> score nforming vs. gay men	es . norm-br n''	eaking		<i>d</i> scores "norm-conforming vs. norm-breaking straight people"					
	Estimate	Std. error	t	р		Estimate	Std. error	t	р		
(Inter- cept)	.084	.224	.374	.709	(Inter- cept)	.362	.194	1.869	.063		
Age	.006	.003	2.312	.022*	Age	.006	.002	2.734	.007**		
Ideology	026	.019	-1.374	.171	Ideology	002	.016	097	.923		
Gender	.034	.067	.505	.614	Gender	.057	.058	.985	.326		
Educa- tion 2	.128	.202	.632	.528	Educa- tion 2	067	.174	384	.702		
Educa- tion 3	.180	.195	.925	.356	Educa- tion 3	198	.168	-1.180	.239		
Educa- tion 4	.218	.192	1.134	.258	Educa- tion 4	179	.166	-1.079	.282		
Income 2	006	.085	071	.944	Income 2	.088	.073	1.204	.230		
Income 3	.200	.093	2.152	.033*	Income 3	.117	.080	1.451	.148		
Income 4	048	.120	399	.690	Income 4	.179	.103	1.728	.086		
Income 5	.173	.132	1.307	.193	Income 5	.203	.114	1.779	.077		
Multiple R	2 <sup>2</sup> : .088, adju	usted $R^2$ : .042	2		Multiple $R^2$ : .097, adjusted $R^2$ : .051						

 

 Table 22: Linear regressions predicting d scores in the "norm-conforming vs. norm-breaking gay men"

 and "norm-conforming vs. norm-breaking straight people" IATs on the basis of demographic and attitudinal variables

# 4.3 Experiment 5—Conformity trumps sexual orientation for liberals, but not for conservatives

#### 4.3.1 Method

#### 4.3.1.1 Participants

96 individuals participated in the study. 43.8 percent of participants were female. The mean age of participants was 32.82 years, with a standard deviation of 10.85 years and a median age of 31.5 years. The youngest participant was 18 and the oldest participant was 68 years of age. 16.7 percent were high school graduates, 35.4 percent had some college education, and 47.9 percent at least a college degree. Annual household income ranged from below \$25,000 (24 percent) to \$100,000 and above (10.4 percent), with \$25,000 to \$44,999 the most popu-

lous category (28.1 percent). 81.2 percent of the participants identified as White, 8.3 percent as Asian, 6.2 percent as Black/African American, and 3.1 percent as Hispanic/Latino. 91.7 percent identified as heterosexual/straight. The sample was ideologically balanced with a slight liberal bias. (The mean ideological self-placement score was 3.38 with a standard deviation of 1.649 and a median of 3.) However, participants were mainly social liberals (with a mean of 2.5, a standard deviation of 1.85 and a median of 2).

#### 4.3.1.2 Procedure

The procedure was identical to the one described in Sections 4.1.2 and 4.2.1.2 above, except for the fact that participants now completed only one IAT session ("norm-conforming gay men vs. norm-breaking straight people") rather than two, as in Experiment 4 ("norm-conforming vs. norm-breaking gay men" and "norm-conforming vs. norm-breaking straight people").

#### 4.3.2 Results

The distribution of implicit preferences was far more balanced in Experiment 5 than in Experiment 4, with both the mean and median d score close to zero (-.022 and -.032). The distribution had a standard deviation of .472 and a slight negative skew of -.084. Again, for better visibility, the results are presented in terms of preference groups (Figure 4).

Moreover, a linear regression of d scores on the standard demographic and attitudinal variables produces quite interesting results this time (see Table 23). For the sake of better interpretability and since preference groups are admittedly somewhat arbitrary, d scores were standardized before fitting the model.



#### Figure 4: Distribution of implicit preference groups ("norm-conforming gay men vs. norm-breaking straight people")

Group 1 (d < -.65): strong preference for norm-breaking straight people, group 2 (-.65 < d < -.35): moderate preference for norm-breaking straight people, group 3 (-.35 < d < -.15): slight preference for norm-breaking straight people, group 4: (-.15 < d < .15): no preference, group 5 (.15 < d < .35): slight preference for norm-conforming gay men, group 6 (.35 < d < .65): moderate preference for norm-conforming gay men, group 7 (.65 < d): strong preference for norm-conforming gay men.

	Estimate	Std. error	t	р				
(Intercept)	.464	.418	1.109	.271				
Social conservatism	197	.065	-3.031	.003	**			
Ideology	085	.071	-1.192	.237				
Age	009	.009	-1.043	.300				
Gender	.256	.186	1.375	.173				
Education (group 2)	366	.272	-1.345	.182				
Education (group 3)	.096	.267	.362	.718				
Income (group 2)	1.002	.263	3.808	.000	***			
Income (group 3)	.775	.277	2.793	.006	**			
Income (group 4)	.231	.339	.681	.498				
Income (group 5)	.710	.355	2.001	.049	*			
Multiple $R^2$ : .341, adjusted $R^2$ : .217								

 Table 23: Linear regression predicting d scores in the "norm-conforming gay men vs. norm-breaking straight people" IAT on the basis of demographic and attitudinal variables

Income seems to have the strongest effect among the attitudinal and demographic predictors under consideration. However, Tukey's post-hoc tests reveal that only the contrasts between the lowest income group (below \$25,000) and the other income groups are significant, with differences ranging from .80 to .97 standard deviations. Beyond those contrasts, only the contrast between the second (\$25,000–\$49,000) and fourth (\$75,000–\$99,999) income groups is statistically significant.

However, social conservatism produces a considerable effect as well. A 1-point change in the liberal direction on the 7-point social conservatism scale corresponds to .20 standard deviations of change towards an implicit preference of norm-conforming gay men over norm-breaking straight people. Ideology, as measured on a Likert scale, fails to reach statistical significance.

## 4.4 Discussion

In Experiments 4 and 5, whose results are reported above, I reproduced the substantive conclusions from Experiment 3 with a completely different methodology, thus confirming my original hypothesis that the SCM and the IAT would yield the same results, with the IAT producing more unambiguous conclusions ("explicit–implicit correspondence" hypothesis).

The results of Experiment 4 were unequivocal. When faced with the implicit choice between norm-conforming and norm-breaking subgroups, hardly anyone exhibited a preference for the latter. This essentially reinforces the correctness of the conclusion from Experiments 2 and 3 that conformity matters and it matters in ways going over and beyond "traditional" social categories like sexual orientation and race.

Experiment 5, in turn, reconfirmed another key finding from Experiment 3, namely that, in line with my "nonconsensuality" hypothesis, sexual orientation and conformity have different relative effects on the attitudes of social liberals and social conservatives. While social liberals als seem to be mostly "blind to sexual orientation," they rely heavily on the dimension of conformity and prefer norm-conforming subgroups to norm-breaking ones. For social conservatives, by contrast, sexual orientation matters more than conformity. Their automatic

preferences go to heterosexuals over gay men, even if the former are norm-breaking and the latter norm-conforming.

## Chapter 5 CONCLUSION—THE TROUBLE WITH DICHOTOMOUS

In Chapter 1, I raised the research question of how the aspect of conformity with social norms influences attitudes towards the gay community in the United States and whether liberals and conservatives differ in their attitudes towards norm-conforming and norm-breaking gay men.

Experiments relying on completely different explicit and implicit measures of social cognition converged in their empirical results. Whereas both social liberals and social conservatives overwhelmingly prefer conformity to nonconformity (whether it comes to straight people, gay men, or African Americans), their explicit and implicit attitudes differ when sexual orientation and norm-conforming behavior are in conflict. For social liberals, sexual orientation does not seem to matter at all—they display positive attitudes towards gay and straight alike, as long as their lifestyles are in line with social expectations. Social conservatives, by contrast, are anything but blind to sexual orientation. In fact, their disapproval of nonconformity is overridden by their disapproval of homosexuality.

Moreover, the results imply that the dominant stereotype of gay people in contemporary American society is that of the monogamous committed couple living in a suburban home and not that of cross-dressers, leather daddies, or sex addicts. Thus, it seems that the "virtually normal" argument and its institutional consequences have been extremely successful in transforming how Americans think about gay men and in the case of social liberals, also how they relate to gay men as a social group. This is all the more surprising because although "separate but equal" facilities for African Americans were declared unconstitutional almost six decades ago, stereotypes of African Americans are still far from unambiguously positive.

In a rather unfriendly but all the more passionate message, one of the participants scolded me for thinking that social psychology experiments "matter in any way or have any meaning or importance," arguing that "[w]hat [people] do, how [they] vote, [and] how [they] treat others is what matters." To some extent, I agree. It would be naïve to assume that experiments on social cognition have perfect external validity in predicting political choices and interpersonal behavior.

Chaiken and Trope (1999) suggest that motivation and opportunity have a profound impact on whether attitudes exert influence on behavior through spontaneous or more deliberative processes. However, even when participants had the opportunity to deliberate over their responses to items in the Stereotype Content Model—unlike in the Implicit Association Test, which prompted spontaneous reactions—, they did not seem to be overly motivated to conceal or mitigate their overwhelmingly negative gut reactions to social groups that they perceived as norm violators.

This result is perfectly in line with previous findings that indicate that even liberals are reluctant to apply the principles of equality and noninterference—otherwise so fundamental to them—to groups that they do not perceive as distinct social entities entitled to that protection (Haidt & Hersh, 2001). Queer people in the widest sense of the term, i.e., including both homosexuals and heterosexuals who refuse to comply with the dominant sexual and societal norms, seem to fall into that category.

I do not agree with Michael Warner's claim that extending the social institution of marriage must necessarily have disastrous consequences for the gay community as a whole and especially for diversity within the gay community (Warner, 2000). However, the results presented here make one wonder whether framing the arguments in favor of same-sex marriage in terms of "normality" might have contributed to redrawing, rather than erasing, boundaries of social exclusion.

## **APPENDIX A—IDEOLOGY AND PARTY AFFILIATION ITEMS**

1. Wilson–Patterson type ideology items (presented in randomized order in the study)

Please evaluate whether you approve or disapprove of some items, or you are not



Patriotism	A	?	5
Nationalism	A	?	5
Lower taxes	A	?	5
Church authority	A	?	5
Small government	A	?	<p< td=""></p<>
Obedience	A	?	3
Legalized abortion	A	?	3
Socialism	A	?	3
Labor unions		?	5
Labor strikes	S.	?	5
Sexual freedom	A	?	5
Corporate tax		?	3

## 2. "Traditional" ideology item (ANES)

When it comes to politics, do you usually think of yourself as extremely liberal, liberal, slightly liberal, moderate or middle of the road, slightly conservative, extremely conservative, or haven't you thought much about this?

*Response options*: Extremely liberal • Liberal • Slightly liberal • Moderate, middle of the road
Slightly conservative • Conservative • Extremely conservative • I don't know

## 3. Party affiliation items (ANES)

Generally speaking, do you usually think of yourself as a Republican, a Democrat, or an Independent?

Response options: Republican • Democrat • Independent

*Follow-up item for Republicans*: Would you call yourself a strong Republican or a not very strong Republican?

Response options: Strong Republican • Not a very strong Republican

*Follow-up item for Democrats*: Would you call yourself a strong Democrat or a not very strong Republican?

Response options: Strong Democrat • Not a very strong Democrat

*Follow-up item for Independents:* Do you think of yourself as closer to the Republican or Democratic Party?

*Response options*: No preference • Closer to the Republican Party • Closer to the Democratic Party

## APPENDIX B—SAMPLE STIMULI



Social groups (left to right, to bottom): (1) Norm-conforming African Americans (Experiments 1, 2, and 3); (2) Norm-breaking African Americans (Experiments 1, 2, and 3); (3) Elderly (Experiments 1 and 2); (4) Norm-breaking gay men (all experiments); (5) Norm-conforming gay men (all experiments); (6) Homeless (Experiments 1 and 2); (7) Professionals (Experiments 1 and 2); (8) Middle class (Experiment 1), norm-conforming straight people (Experiments 2, 3, 4, and 5); (9) Norm-breaking straight people (Experiments 2, 3, 4, and 5); (9)

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