

**Explaining Group Influence:  
The Role of Identity and Emotion in Political Conformity and Polarization**

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## ABSTRACT

Evidence has accumulated that people often conform to political norms. However, we know little about the mechanisms underlying political conformity. Whose norms are people likely to follow, and why? This article discusses two phenomena—social identity and “self-conscious” emotions—that are key to understanding when and why people follow the crowd. It argues that adherence to in-group norms is a critical basis of status among in-group peers. Conformity generates peer approval and leads to personal pride. Deviance generates disapproval and causes embarrassment or shame. These emotional reactions color an individual’s political perspectives, typically generating conformity. These same mechanisms can spur between-group polarization. In this case, *differentiation* from the norms of disliked out-groups results in peer approval and pride, and conformity to out-group norms disapproval and embarrassment or shame. This framework is supported by the results of two experiments that examine the influence of group opinion norms over economic and social aspects of citizens’ political ideologies. One exogenously varies the social identity of attitudinal majorities; the other primes the relevant emotions. In addition to contributing to the study of political conformity and polarization, this article adds to our growing understanding of the relevance of social identity and emotion to political life.

Keywords: conformity; polarization; social identity; emotion; norms; political opinion

After a long hiatus, political scientists have returned in force to the study of social influence. Researchers in this area share the perspective that individuals' political decisions are not made in a social vacuum but, rather, are continually influenced by the words and actions of others. Most political scientists who study social influence focus on one of two topics: political discussion within social networks (e.g., Huckfeldt and Sprague 1995; McClurg 2006; Sinclair 2012; Sokhey and Djupe 2011) or conformity to social norms (e.g., Bolsen 2013; Gerber, Green, and Larimer 2008; Mutz 1998; Nadeau, Cloutier, and Guay 1993; Nickerson 2008; Noelle-Neuman 1993; Walsh 2003). The accumulated findings from studies in both areas leave little doubt that people influence one another's political attitudes and behaviors.

While scholars have successfully demonstrated social influence in a variety of settings and with respect to many different political outcomes, considerably less attention has been paid to the *mechanisms* of such influence, i.e., how and why political decisions are affected by a person's social network or group. Drawing from rational choice theories (e.g., Downs 1957), most social network scholars assume that influence between discussants occurs due to information exchange or logical argument (e.g., Huckfeldt and Sprague 1995). While this familiar assumption may be appropriate for the study of political discussion, it does not explain conformity to social norms. In fact, the conformity, or "social pressure," phenomenon is in part defined by the absence (or irrelevance) of substantive information exchange or argument.

What fills this mechanistic void? Research in psychology and sociology suggests that identification with peers (Turner 1987, 1991) and "self-conscious" emotions—especially pride, embarrassment, and shame (Lewis 2000; Scheff 1988)—are worth consideration. While some studies of social influence in political science have discussed these mechanisms and tested them indirectly (e.g., Gerber, Green, and Larimer 2010; Sinclair 2012), surprisingly few studies have

provided persuasive evidence of their causal role in influence by directly manipulating them experimentally and/or measuring them via participant self-report. The result is that speculation as to the role of identity and emotion in politically relevant social influence far outweighs the evidence. In addition, while some political scientists have discussed these mechanisms independently, none have combined them into an integrated theoretical framework.

The framework presented here focuses on the mechanisms underlying conformity to social norms<sup>1</sup> and argues that self-conscious emotions encourage individuals to adopt the norms of groups with which they closely identify.<sup>2</sup> More specifically, pride stemming from perceived approval of in-group peers signals to the individual that a conforming viewpoint or action is valid, whereas embarrassment or shame stemming from perceived disapproval of in-group peers generates doubt. The result is conformity to in-group norms. These same mechanisms contribute to between-group polarization as well. Individuals tend to distance themselves from out-group norms in part because they perceive that in-group peers approve of opinions and actions that are *different* from those of disliked out-groups and disapprove of those that resemble disliked out-groups. This framework is tested with two experiments that examine the role of identity and emotion in the influence of group opinion norms over economic and social aspects of citizens' political ideologies. Overall, the evidence supports the theoretical framework.

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<sup>1</sup> While political scientists often associate norms with behavior, group norms may be behaviors, thoughts, or even feelings that are typical within a group (Hogg and Reid 2006, 8).

<sup>2</sup> Many types of groups are relevant, ranging from face-to-face (e.g., workplace, neighborhood) to broader demographic (e.g., race, sex, religious) groups. A person who identifies with a group perceives it to be an important element of his or her personal self-concept (Tajfel and Turner 1986).

This article contributes to research in political science beyond the study of political conformity and polarization. First, this study broadens our understanding of the political relevance of emotions. While considerable evidence on this score has accumulated, the role of emotions in social influence has remained underexplored, as has the political relevance of the particular emotions examined in this study—pride, embarrassment, and shame. Second, this article unpacks the somewhat mysterious phenomenon of shared group norms. It is common wisdom in political science that political opinions and actions are correlated with social identity; the social-psychological dynamics described in this article provide one explanation for why this is the case.

## **THEORETICAL FRAMEWORK**

### **Social Influence over Political Opinion and Behavior**

Over a half century ago, the Columbia and Michigan schools of voting behavior were quite taken with social influence and, in particular, the idea of social conformity. Berelson, Lazarsfeld, and McPhee argued that “[d]uring a campaign political preferences are ‘contagious’ over the range of personal contacts” (1954, 122). Campbell, Converse, Miller, and Stokes (1960) showed that voting preferences of citizens mirrored those of their racial, religious, and union affiliations, even after controlling for characteristics that citizens were likely to share with fellow group members (e.g., income, education, occupation). The authors attributed these findings to forces less “rational” than ordinary persuasion. Berelson et al. argued that “[f]or many voters political preferences may better be considered analogous to cultural tastes,” with origins in ethnic, sectional, class, and family traditions (1954, 311). Campbell et al. wrote: “[N]orms and values attributed to a generalized ‘group’: these are the expectations concerning appropriate behavior

for [e.g.] the ‘loyal’ Catholic or union member. It is the group standards that are psychologically real and are responsible for influence when it occurs” (1960, 296).

These voting scholars had been influenced by the findings of experimental psychologists studying group dynamics who, in the preceding decades, had been working to understand a particular social influence phenomenon, variously labeled “group pressure,” “conformity,” or “majority influence.” For example, Sherif ([1936] 1966) demonstrated with his “auto-kinetic effect” studies that a group of previously unacquainted individuals would converge on a group norm that would influence the individuals’ judgments even when they were separated from the group. Asch (1951), in his line-length studies, discovered that norms created by the experimenter, via confederates, were sometimes influential over participants’ judgments even when they were obviously “wrong.” Hundreds of similar experimental studies followed, many explicitly addressing the power of social and political norms (see Turner 1991 for a review). Together, the studies suggest that individuals frequently change their beliefs or behaviors to mirror a perceived majority<sup>3</sup> even when no accompanying explanations, information, or arguments are given.

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<sup>3</sup> This article focuses on descriptive norms (an opinion held or behavior engaged in by the majority), not injunctive norms (opinions or behaviors considered socially desirable or even morally correct). Note, however, that the line between descriptive and injunctive norms is unclear. Like injunctive norms, descriptive norms typically suggest to people how they *ought* to behave (Theiss-Morse 2009), signaling opinions and behaviors “appropriate” for group members (Turner 1987). Also similar to injunctive norms, descriptive norms can be enforced via social-psychological rewards and sanctions (Scheff 1988).

However, the reasons for conformity remained murky, even among psychologists. The lack of a clear mechanism of influence cast doubt on the conformity phenomenon. Coupled with an overall decline in interest in social influence, political scientists seemed to quickly lose interest in the topic of conformity. When the study of politically relevant social influence reemerged several decades later, interest had shifted to discussion networks (e.g., Beck 2002; Huckfeldt and Sprague 1987, 1995; McClurg 2006). One benefit of this influence paradigm is that it fits more comfortably within standard rationality assumptions. Scholars in this tradition tend to argue that citizens exchange—and are persuaded by—information and logical arguments.

Until very recently, only a handful of contemporary studies had tackled the subject of political conformity. The most prominent are Mutz's *Impersonal Influence* (1998) and Noelle-Neuman's *Spiral of Silence* (1993). Although each builds on the conformity research tradition in psychology, these works differ from that tradition in important ways. For example, similar to social network scholars, Mutz fits conformity into a rationalistic framework; she argues that some people construct arguments as to why the majority believes as it does, persuading themselves in the process. Mutz's framework represents an alternative, although ultimately complementary, explanation for political conformity to the one offered here. Noelle-Neuman moves in a different direction. She explains her "spiral of silence" findings by arguing that people are motivated to avoid embarrassment; however, she never directly tests this assumption.

Interest in conformity has noticeably increased more recently in political science, with scholars quickly amassing considerable evidence that peers often influence one another's political opinions and behaviors even when substantive information exchange and arguments are absent (e.g., Bolsen 2013; Gerber, Green, and Larimer 2008; Gerber and Rogers 2009). While this more recent scholarship has focused more on demonstrating the influence of social norms

than on investigating the mechanisms that underlie it, scholars have begun a search for mechanisms of influence in line with those proposed in this article. Reflecting the thinking of early voting scholars, Sinclair (2012) argues that social identity plays an important role in political influence (also see Alwin, Cohen, and Newcomb 1991; Walsh 2003). Supporting this idea, she demonstrates that neighborhood canvassers are more successful at getting people to vote than outsiders. One limitation of this study, however, is that social identity is manipulated only roughly (assuming neighbors identify with one another). Similar to Noelle-Neuman (1993),<sup>4</sup> Gerber, Green, and Larimer (2008, 2010) and Panagopoulos (2010) argue that the desire to feel pride and avoid embarrassment or shame motivates citizens to conform to voting norms in their communities. They demonstrate that people are more likely to vote when reminded voting records are public. While the evidence that this type of experimental treatment increases voter turnout is highly persuasive, the emotions assumed to cause this relationship are not directly manipulated or measured, leaving the precise emotional mechanisms uncertain. In sum, while strong evidence for political conformity has accumulated and scholars have named social identity and particular emotions as mechanisms of conformity, research demonstrating a causal role for these mechanisms via exogenous manipulation and/or careful measurement is all too rare.

### **Explaining Conformity and Polarization with Social Identity and Emotion**

The primary goal of this article is to better understand the mechanisms underlying political conformity, with a secondary goal of relating these same mechanisms to polarization.<sup>5</sup>

Psychologists and sociologists have paid considerable attention to these phenomena,

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<sup>4</sup> See also work by Elster on adherence to social norms (e.g., 1999).

<sup>5</sup> Many definitions of polarization exist. In this article, polarization refers to the phenomenon whereby the norms of two or more groups increasingly differ from one another over time.



incorporating the themes of identity and emotion into a variety of prominent theoretical frameworks relevant to the study of political conformity and polarization.

### The Social Identity Perspective

This article draws important insights into conformity and polarization from “self-categorization theory” (SCT) (Turner 1985, 1987, 1991). SCT builds upon—and expands the scope of—social identity theory, developed by Henri Tajfel in conjunction with Turner (e.g., Tajfel 1978; Tajfel and Turner 1986).<sup>6</sup> While most political scientists are more familiar with social identity theory, this article focuses on self-categorization theory for two reasons. First, unlike social identity theory, SCT develops a well-specified theory of the psychological group, one that allows for investigation of *intragroup*, as well as *intergroup*, dynamics (Haslam et al. 2010). Second, SCT has been used to explain a wider range of group-related phenomena than has social identity theory. Most notably, SCT offers arguably the most prominent explanation for social conformity and polarization in contemporary social psychology (Haslam et al. 2010).

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<sup>6</sup> The borders of social identity theory are ambiguous, in large part because it has spawned an enormous literature. A common error is to attribute theoretical propositions and empirical insights associated with self-categorization theory to social identity theory, particularly in the arena of social influence (see Haslam et al. 2010). Such confusion is understandable given the overlapping themes (social identity) and authorship (Tajfel and Turner). And, in some cases, authors explicitly use the “social identity theory” label to refer to both theories, while clarifying that there exist two separate branches of the theory (e.g., Huddy 2001; Huddy and Khatib 2007). In this article, the term “social identity *perspective*” is used as an umbrella term to refer to both theories together along with newer theories that build on their insights.

Self-categorization theory argues that the key to in-group conformity and between-group polarization is social identity, i.e., a person's incorporation of a group membership into his or her self-concept (Turner 1985, 1987). When a relevant social identity is salient, individuals will seek to be "prototypical" group members (Turner 1985, 1987). Prototypical group members are characterized by a high "meta-contrast ratio," meaning their attitudes and actions not only resemble in-group members' but they also are easily distinguished from those of out-group members. Numerous experimental studies support this notion (Turner 1991). People tend to conform to the attitudinal and behavioral norms of in-groups, not out-groups (Abrams et al. 1990; Clark and Maass 1988; Wood et al. 1996). Further, taking into account the fact that identity *strength* varies (Huddy 2001), group members who identify more strongly with the group than other members are more influenced by its norms on average (Terry and Hogg 1996; Terry, Hogg, and White 1999; also see Theiss-Morse 2009). Finally, when people learn of a norm or value held by an out-group, particularly a derogated one, they tend to shift their attitudes or actions in the opposite direction (Clark and Maass 1998; Nelson, Gwiasda, and Lyons 2011; Wood et al. 1996). These researchers, by employing randomized and controlled experiments, have isolated social identification as one *cause* of conformity (and lack of identification as a cause of polarization). Thus, the effects are not confounded with competing causal influences on within-group similarity, such as homophily (i.e., like tending to affiliate with like, see Lazer 2011).<sup>7</sup>

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<sup>7</sup> These studies do not argue that homophily does not contribute to within-group similarity; rather, they argue that group influence over the individual *and* homophily both are reasons for within-group similarity but also that their effects can be disentangled through experimentation.

What is it about identification that opens a person up to group influence? Psychologists have long argued that peers provide the individual with helpful “social reality tests” when they indicate whether they agree with the individual’s point of view (Festinger 1950; Turner 1987, 1991). The people with whom one identifies provide the best social reality tests: “The perceived, expected or believed agreement of similar others in the same situation implies that our behaviour is a function of the objective world” (Turner 1991, 161). Agreeing with in-group members generates “subjective validity,” the perception of truth; disagreeing with them generates “subjective invalidity,” the perception of falsehood. Note, however, that the logic is reversed for out-groups: agreeing with out-group members should generate subjective *invalidity*.

Self-categorization theory offers an appealing explanation for political conformity and polarization; however, it seems incomplete. Namely, it largely ignores emotion.<sup>8</sup> Empirical accounts of people’s encounters with group norms are thick with emotion, especially when people are disobeying norms (e.g., Asch 1951; Elster 1999; Milgram 1992; Noelle-Neuman 1993). And, while self-categorization theory—at least as originally formulated by Turner—says little about emotion, its forebear *social identity theory* considers emotion to be highly relevant to social identity and inter-group processes. In particular, a key tenant of social identity theory is that “individuals seek to achieve or maintain positive self-esteem by positively differentiating

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<sup>8</sup> Defining emotion is notoriously difficult. Lazarus (1991) says that “emotion is an integrative, organismic concept that...unites motivation, cognition, and adaptation in a complex configuration” (40). Cognitive appraisals of whether and how a situation is relevant to an individual’s goals set in motion (ideally) adaptive action tendencies and coping mechanisms. Much of this psychological and physiological activity occurs automatically and subconsciously, but some may be conscious, including subjectively felt “feelings.”

their ingroup from a comparison outgroup on some value dimension” (Haslam et al. 2010, 343; see, e.g., Tajfel and Turner 1986).<sup>9</sup> Is emotion—specifically, the desire for positive self-esteem—relevant to social influence?

### Self-Conscious Emotions

A group of emotions called “self-conscious emotions”—especially embarrassment, shame, and pride—deserve our attention in seeking to understand political conformity and polarization. Not only are they closely linked to individuals’ levels of self-esteem, but they also have been explicitly named by many researchers as responsible for social conformity.

Although he does not explicitly discuss emotion, Turner argues that those who achieve a high meta-contrast ratio (again, not only resembling the in-group, but also being distinct from the out-group) are evaluated most highly by in-group peers (Turner 1985, 1987; also see Theiss-Morse 2009). According to others, those who exemplify shared community ideals tend to be treated with respect and admired (Lewis 2000), whereas norm breakers are often subject to derogation (or shaming) (Marques, Abrams, and Serôdio 2001). While the former case is likely to lead to positive self-esteem and pride, the latter tends to cause embarrassment and shame<sup>10</sup> (Asch 1951; Lazarus 1991; Lewis 2000; Milgram 1992). The result is often conformity at the

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<sup>9</sup> Self-categorization theory also includes this idea, but Turner casts it in cognitive terms (Turner 1985, 261) and does not incorporate it into his explanation for conformity and polarization. Turner’s de-emphasis of the self-esteem plank of social identity theory may stem from uneven empirical support for this proposition (see Brown 2000). The self-esteem hypothesis discussed in this article is related but clearly distinct from that discussed as a part of social identity theory.

<sup>10</sup> While Lazarus argues that the main difference between these two emotions is intensity level (1991), note that some argue for differences in kind as well as degree (e.g., see Miller 2007).

individual-level to social norms and values (Lewis 1991; Scheff 1988). This phenomenon has been described most fully by sociologist Thomas Scheff: “[P]ride and shame make up a subtle and pervasive system of social sanctions. This system leads to experiencing social influence as compelling” (Scheff 1988, 396). The system functions continuously, even when we are alone, because we can imagine others’ reactions to our behavior in detail (Lazarus 1991, 241; Scheff 1988).

The explanation for conformity offered by the emotions literature is likewise compelling but also underspecified in its lack of attention to identity. Certainly not every majority norm of which a person is aware will influence him or her. Americans are unlikely to feel embarrassed by their tendency to wear shoes indoors, even if made aware that many other cultures disdain the practice. A longtime Democrat is unlikely to gloat when she reads a public opinion poll and discovers that her opposition to gay marriage places her within the Republican mainstream. While the literature on self-conscious emotions does specify that emotion-driven conformity occurs in response to “peers,” “important others,” and the like (suggesting social identity is relevant), this component is undertheorized and generally untested empirically.

### An Integrated Perspective

It seems clear that an integration of self-categorization theory and the literature on self-conscious emotions would benefit the study of social influence generally, and political influence more specifically. While two existing theories have made moves in this direction—intergroup emotions theory (Mackie, Maitner, and Smith 2009) and collective self-esteem (Luhtanen and Crocker 1992)—both offer more insight into *intergroup* dynamics (e.g., prejudice) than the

*intragroup* dynamics that are responsible for conformity.<sup>11</sup> This should not be surprising. As Theiss-Morse (2009, 66) argues, the extent to which group boundaries affect *internal* group dynamics has generally been understudied.

Thus, this article draws directly from the self-categorization and self-conscious emotions literatures. Focusing on their applicability to political variables, a model of conformity and polarization is introduced. In group contexts, interpersonal comparisons are common among in-group members (Turner 1985, 255). The basis of much of this comparison is the extent to which individuals conform to in-group norms and differ from out-group norms, particularly norms held by derogated out-groups. In other words, the extent to which individuals resemble in-group prototypes is a key basis of status within a group. Prototypicality (in general or in a specific

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<sup>11</sup> Intergroup emotions theory, a broadly applicable theory developed by Smith and Mackie (see, e.g., Mackie et al. 2009), argues that, when social identity is salient, people will appraise situations and experience relevant emotions in accord *not* with their personal identities but, rather, with their social identities. For example, when a social identity is highly salient, an out-group attack on the in-group is experienced as an attack on the self, and fear or anger directed at the out-group is generated as a result. Luhtanen and Crocker (1992) provide an updated take on social identity theory's "need for positive distinctiveness" with their construct "collective self-esteem," i.e., that part of an individual's self-esteem that is derived from the status of one's in-group(s) within society at large. This concept is distinct from what they call "membership esteem," that part of self-esteem stemming from one's status as an *individual within* the group. While collective self-esteem may be the cause of many important intergroup phenomena (including prejudice and people's desire to "exit" low status groups), emotions scholars have made clear that within-group conformity hinges on membership esteem.

domain) tends to generate pride in individuals because they perceive respect and approval from in-group members; non-prototypicality tends to generate embarrassment or shame because individuals perceive a lack of respect and disapproval. Note that peer approval and disapproval may be communicated explicitly or may be assumed or imagined on the part of the individual.

These self-conscious emotional reactions color an individual's perspective. When people perceive in-group approval in response to their adherence to in-group norms (or their differentiation from out-group norms), the resulting pride strengthens their internal commitment to in-group norms. When people perceive in-group *disapproval* in response to their deviance from in-group norms (or adherence to out-group norms), the resulting embarrassment or shame weakens their commitment to those deviant attitudes or behaviors. In this way, norms shared by a majority of in-group peers often become internalized over time by group identifiers.<sup>12</sup> Finally, note that these conforming and polarizing influences are limited to the in-group. Evaluative feedback from individuals outside the boundaries of the in-group is largely orthogonal to a person's self-worth and, thus, his or her self-conscious emotional experiences.

Given the greater relevance of in-group status to self-worth among high identifiers, these mechanisms should be more pronounced among high identifiers, leading to greater conformity and polarization among them. Although for the most part outside the empirical scope of this article, note that the likelihood and extremity of conformity and polarization will also vary

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<sup>12</sup> Many distinguish between "informational influence" ("true" influence based on information) and "normative influence" (surface compliance due to an effort to ingratiate oneself with peers) (Deutsch and Gerard [1955] 1965) but others have challenged this dichotomy (e.g., Turner 1987; Hogg and Reid 2006). This article suggests that what many would call "normative influence" can in fact cause the "true" influence often associated with informational influence.

according to additional factors, including personality traits, group cultures, and social contexts that either exaggerate or dampen interpersonal comparisons within groups, the reliance of social judgments on group prototypes, and the emotional reactions of individuals to those judgments.

In sum, the theory—which I refer to as “social-emotional influence theory”—provides one explanation for why political conformity occurs. It also argues that these same mechanisms that underlie conformity to in-group norms underlie between-group polarization. In other words, it is argued that polarization—while admittedly dependent on the existence of two groups—is at least in part motivated at the individual level by *intragroup* social-psychological processes.

While the theory is broadly relevant to political conformity and polarization, this article narrows the subject of empirical inquiry in two respects. First, it investigates “impersonal” conformity, as opposed to conformity to individuals with whom one is interacting in person. Impersonal conformity represents a more difficult test of the theoretical framework, as in-group peers are distant from study participants. Second, it focuses on conformity to opinion, not behavioral norms. This allows for the elimination of certain confounding factors, such as a concern for one’s reputation due to deviance that is easily observed by peers. In addition, a focus on group influence over private opinion rather than public behavior (or opinion expressed in public) may carry more normative weight as it implies peer influence has been internalized.



## HYPOTHESES

This theory results in six key hypotheses regarding political influence that are tested below:

**In-group conformity (H1):** When encountering a new or unexpected in-group norm, individuals will shift their political views in the direction of conformity with the majority.

**Out-group polarization (H2):** When encountering an out-group norm, individuals will *not* change their views in the direction of conformity with the (out-group) majority; and, if the out-group is disliked by their in-group peers, individuals will shift their views *away* from those of out-group members.

**Identity strength and conformity (H3):** Due to the accumulation of identity-based influence over time, in-group identity strength will be positively correlated with adherence to in-group opinion norms.

**Identity strength moderation (H4):** The influence patterns described in H1 and H2 will be moderated by the strength of individuals' in-group identification.

**Emotional reactions to group norms (H5):** Agreement with the in-group majority generates pride among individuals, and disagreement embarrassment/shame; agreement with a derogated out-group majority generates embarrassment/shame among individuals, and disagreement pride.

**Emotion moderation (H6):** When encountering group norms, individuals who experience elevated levels of pride or embarrassment/shame are more likely to change their political views (in the direction of the in-group or away from the out-group, as relevant).<sup>13</sup>

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<sup>13</sup> It is common for causal variables to be both mediators and moderators in a theoretical framework. This is the case with respect to self-conscious emotions in the model proposed herewith (see the “An Integrated Perspective” section). Because the critical test of emotions' causal influence in Study 2 below involves exogenous arousal, a moderation test is performed.

## EXPERIMENTAL EVIDENCE

Given that experiments are the gold standard for assessing causation (Morton and Williams 2010), two experiments were designed to test these mainly causal hypotheses. The first experiment focuses on religious group influence over citizens' stands on social issues and emphasizes the role of social identity. Citizens' opinions on issues such as abortion and gay marriage depend to a significant extent on their religious faith (Leege, Wald, Krueger, and Mueller 2002). To the extent that religious affiliation represents a social identity (Djupe and Gilbert 2008; Wald, Owen, and Hill 1988), individuals' opinions on these issues are likely to be influenced by the opinions held by religious groups—both in-groups and disliked out-groups.<sup>14</sup> The second experiment focuses on in-group conformity with respect to social welfare attitudes and investigates the moderating role of self-conscious emotions. In this study, the social welfare attitudes examined evoke the value economic individualism, which occupies a central place in American political culture (Feldman 1999). The relevant group in the experiment is college peers, a highly relevant social identity for many undergraduate students (Alwin, Cohen, and Newcomb 1991; Moskaleiko, McCauley, and Rozin 2006).

Taken together, these two experiments offer several advantages. First, each key causal agent suggested by the theoretical framework (identity and emotion) is exogenously varied in one experiment, distinguishing causation from correlation. Second, group influence is examined

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However, one could argue that—taken together—the two studies test mediation: Group norms arouse self-conscious emotions in Study 1, and their causal effects are demonstrated in Study 2 (see Bullock, Green, and Ha 2010; Imai, Tingley, and Yamamoto 2012).

<sup>14</sup> While a religious person's opinions on social issues are also influenced by religious doctrine, religious leaders, etc., the focus here will be specifically on religious *peer* influence.

over two factors—preferences with respect to economic and social policy—thought to explain most of the variance in political ideology (Feldman and Johnston *forthcoming*). Third, these groups are not formal political groups. As is likely true of a great many social groups, despite the likelihood that these groups influence their members’ political views, probably few people choose to affiliate with them initially for political reasons (see Huckfeldt and Sprague 1995). This represents a normative problem worth investigating further.

### **Study 1: Religious Identity and Social Conservatism Experiment**

#### Study Sample

The study was conducted with 220 church-going Catholics from five churches in a large Archdiocese in the Midwest. Via a combination of flyers placed in church bulletins and announcements from the pulpit, participants were asked to take part in a short, anonymous, on-line study of Catholic opinion being conducted by University of Michigan researchers in return for a \$5 donation to their church and a \$5 donation to a Catholic charity of their choice.

Most participants had a high level of commitment to Catholicism. In response to the pre-test question, “How important is being Catholic to you?” 34% said “very” and 44% said “extremely.” Most participants also indicated that they held socially conservative values, with 71% indicating in the pre-test that they agreed with traditional church teachings on abortion, divorce, and homosexuality. These and other sample characteristics, such as an older mean age (54) and more females (69%), likely reflect the church-going nature of the sample.<sup>15</sup>

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<sup>15</sup> Reflecting the demographic attributes of the participating Archdiocese, the sample is more racially homogeneous (98% white) and upper-income (50% middle-class; 40% upper-middle class) than U.S. Catholics as a whole. (National statistics from Pew Research Center 2008.)

## Study Design

The experiment had a 1x4 between-subjects design. Participants began the on-line study by filling out a pre-test that addressed Catholic identity, basic political views, and demographics. Participants were then randomly assigned to one of three treatments or the control group. The identity of the influencing group was exogenously varied by exposing some participants to the views of the Catholic in-group and others to the views of a disliked out-group, Evangelicals.<sup>16</sup>

More specifically, those in the “Catholics are conservative” condition learned that a majority of American Catholics shun divorce, oppose abortion, and oppose gay marriage. Those in the “Catholics are progressive” condition learned that, to the contrary, most Catholics believe one can be a good Catholic without following conservative Church teachings on divorce, abortion, and gay marriage. Finally, those in the “Evangelicals are conservative” condition learned that most Evangelicals have socially conservative views on divorce, abortion, and gay marriage. The control group received no such information. Information presented to participants originated in reputable public opinion surveys (D’Antonio 2007; General Social Survey 2008; Pew Research Center 2008). The Catholics are conservative vs. progressive contrast was achieved by presenting responses to different survey questions. See Appendix A for the stimuli. No “Evangelicals are progressive” stimulus was included because survey information that could be interpreted in this fashion could not be found.

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<sup>16</sup> American Evangelicals and Catholics tend to be mutually exclusive groups (Putnam and Campbell 2010). Only one participant, removed from the sample, identified as Evangelical. In the post-test, participants rated Evangelicals 25 points lower than Catholics on average on a 100-point scale. (Ratings were not influenced by experimental treatments.)

Following the stimulus, participants filled out a post-test questionnaire that included questions on social and political attitudes as well as their emotions. They then were debriefed.

### Measures

The dependent measure is a socially conservative attitude scale made up of nine questions touching on five (equally weighted) salient themes—divorce, pre-marital sex, homosexuality, sexuality and teens, and abortion ( $\alpha = .83$ ). Variation in participants' strength of identification with other Catholics was measured in the pre-test with an additive scale made up of two questions adapted from Huddy and Khatib (2007) ( $r = .71$ ).<sup>17</sup> Emotional responses to the stimuli were assessed at the end of the study with two questions that asked treated participants whether they felt pride or shame in response to the opinion information (i.e., the stimulus). All variables range from 0 to 1, with 1 representing the most conservative, identified, or emotional response. See Appendix A for exact wording and response options.

### Data Analyses

Expectations with respect to the main treatment effects are as follows. The general conformity hypothesis (**H1**) is tested with the “Catholics are progressive” treatment; participants in this condition are expected to express more progressive values in the post-test than the control group. The polarization hypothesis (**H2**) is tested by comparing reactions to the “Catholics are

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<sup>17</sup> The questions that make up the identity measure reflect the social identity perspective's definition of “identification”: “the extent to which the category is valued and contributes to an enduring sense of self” (Haslam et al. 2010, 349). By design, the measure is somewhat out of sync with self-categorization theory's exclusively cognitive focus (the “importance” question has an affective component). However, the measure admittedly does not emphasize affiliative, emotional attachments to the same extent as those of some authors, such as Theiss-Morse (2009).

conservative” and “Evangelicals are conservative” treatments. In the former, participants’ values should be at least as conservative as the control group.<sup>18</sup> However, in the latter, values should be more *progressive* than the control group, given Evangelicals’ low status among participants.

Figure 1 displays the means and 90% confidence intervals<sup>19</sup> for the four experimental groups with respect to social conservatism. The patterns are as predicted. Relative to the control group, participants who learned that most Catholics were unsupportive of conservative Church stands were more progressive in the post-test. And, while participants who learned that other Catholics were socially conservative were equivalent to the control group, those who learned that *Evangelicals* were socially conservative were more progressive than the control group.

[Figure 1 here]

We can assess significance levels using OLS regression. The *Social Conservatism Scale* was regressed onto dummy variables representing the three treatment groups; the control group was excluded as the comparison group. The model is as follows:  $\text{Social Conservatism} = \beta_0 + \beta_1 \text{Catholics Conservative} + \beta_2 \text{Catholics Progressive} + \beta_3 \text{Evangelicals Conservative} + \varepsilon$ .<sup>20</sup> The

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<sup>18</sup> Because the information does not challenge *de facto* assumptions, it is unlikely to influence participants.

<sup>19</sup> Note that confidence intervals surrounding two estimates that are significantly different from one another may still overlap somewhat. (Confidence intervals are wider than standard errors.)

<sup>20</sup> Statistical tests assessing experimental group balance on demographic and political variables showed that randomization was successful and, therefore, no control variables were used.

coefficients for the “Catholics are progressive” ( $b_2 = -.077$ ) and “Evangelicals are conservative” ( $b_3 = -.070$ ) conditions are both statistically significant ( $p \leq .05$  one-tailed).<sup>21</sup> See Table 1.

[Table 1 here]

We turn next to evaluating the hypotheses related to identity strength. With respect to **H3**, we would expect there to be a positive relationship between *Identity Strength* and *Social Conservatism* given the longstanding association between the American Catholic community and opposition to abortion, gay marriage, and the like. To avoid contamination by the experimental treatments, this hypothesis is evaluated by analyzing the control group only. With respect to **H4**, we expect strong identifiers to be more influenced by the “Catholics are progressive” and “Evangelicals are conservative” stimuli than weak identifiers. To test these hypotheses, *Identity Strength* is added to the above equation along with interaction terms between *Identity Strength* and each of the three treatment groups. The results are in the last column of Table 1.

The coefficient on *Identity Strength*, which represents the relationship between this variable and the dependent variable in the excluded control group, is very large and highly significant ( $b = .611$ ,  $p \leq .001$ ). On average, the strongest Catholic identifiers were 61 percentage points higher on the *Social Conservatism Scale* than the lowest identifiers, supporting **H3**. With respect to the identity moderation hypothesis, the coefficient on *Catholics Progressive\*Identity Strength* is essentially zero, against expectations. The coefficient on the *Evangelicals Conservative\*Identity Strength* interaction is substantial and in the expected direction ( $b = -.148$ ) but misses statistical significance ( $p = .16$ , one-tailed). In Figure 2, this interactive effect is

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<sup>21</sup> One-tailed tests are employed throughout this section given the directional nature of the hypotheses. Note p-values for the following additional contrasts: Catholics conservative vs. Catholics progressive ( $p = .07$ ); Catholics conservative vs. Evangelicals conservative ( $p = .08$ ).

graphed along with its confidence intervals at each level of the Catholic identity variable. While the treatment effect is clearly not significant at the first three levels of identity, it is significant at the top two levels. Thus, there is some limited support for **H4**.<sup>22</sup>

[Figure 2 here]

Finally, we can turn to the emotion measures to test **H5**. We would expect typical sample members—who began the study indicating they were socially conservative—to feel the most pride in the “Catholics are conservative” condition, as they reflect on the fact that their values are in line with a majority of American Catholics, and less pride in the other two conditions, perceiving their values to be out-of-step with a progressive majority or in sync with a disliked out-group. The mirror opposite pattern is expected for shame, with the least shame expected in the “Catholics are conservative” condition and more shame in the other two conditions. Note that, all else equal, people tend to express much more pride than shame; therefore, contrasts among treatment groups are examined for each emotion separately.

The expected patterns emerge in Figure 3. Difference-in-means tests were conducted and most of the relevant comparisons reach statistical significance. With respect to pride, the difference is greatest between those in the Catholics vs. Evangelicals conservative conditions ( $p \leq .01$ ); a near-significant difference emerges for the Catholics are conservative vs. progressive contrast ( $p = .13$ ). With respect to shame, those in the Catholics are conservative condition said

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<sup>22</sup> Similar results are obtained if this treatment effect is estimated separately for those with Catholic identities above vs. at/below the scale midpoint. Those with strong Catholic identities appeared to shift their views in the progressive direction in response to the “Evangelicals are conservative” stimulus ( $b = -.126, p \leq .01$ ) but weak identifiers did not.



they experienced none whatsoever; this is in contrast to the greater shame in the Catholics are progressive ( $p \leq .05$ ) and Evangelicals are conservative ( $p = .10$ ) conditions.<sup>23</sup>

[Figure 3 here]

### Study 1 Discussion

Overall, these findings support the relevant hypotheses. Catholics who learned that other Catholics held progressive family values expressed more progressive views in the post-test than the control group, and Catholics who learned that Evangelicals were socially *conservative* also expressed more progressive views in the post-test. These findings are especially compelling when one considers that most practicing Catholics are respectful of a conservative Church hierarchy and likely less open to progressive change than others, and that the conformity and polarization described occurred in a sample with a median age of 54, an age when values and attitudes are at their most stable (Sears and Levy 2003). Also, as expected, the strongest Catholic identifiers in the sample were overwhelmingly more likely to be socially conservative. It is all

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<sup>23</sup> The total N available is too small for a test of H6 (emotion moderation). The reason for the small N is as follows: (1) For methodological reasons, the analysis cannot include the control group (because the emotion questions asked for reactions to the treatments) or participants who said in the pre-test that they *disagreed* with socially conservative Church teachings (a different emotional pattern is expected from such individuals, and there are too few to analyze separately). (2) There was significant attrition prior to the emotion questions because they followed a difficult screening question at the end of the study. *This attrition is statistically unrelated to treatment group* and, thus, does not threaten the causal inferences. The final N is 31.

the more intriguing, then, that high identifiers appeared to be more likely than low identifiers to shift in a progressive direction when they were exposed to conservative out-group norms.<sup>24</sup>

In addition, the data support the idea that self-conscious emotions are automatically evoked when group identifiers encounter group norms. On average, study participants who expressed support for traditional values at the outset of the study felt the most proud and the least ashamed when they learned that most Catholics supported those values (as they did); by contrast, they felt less proud and more ashamed when they learned that most Catholics opposed those values or that most Evangelicals supported them. This said, these findings do not demonstrate a *causal* role for these emotions in the observed influence. To test this expectation, we turn to a second experiment that exogenously varies the emotions pride and embarrassment.

## **Study 2: Self-Conscious Emotions and Economic Individualism Experiment**

### Study Sample and Design

Approximately 100 participants were recruited from the University of Michigan Introductory Psychology subject pool.<sup>25</sup> Students participated in person, in groups. Each student received a

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<sup>24</sup> The identity moderation hypothesis (H4) was only partially supported, however; strong identifiers were not more likely than low identifiers to shift in a progressive direction when exposed to progressive *in*-group norms. One explanation for this null result is that some of the most devoted Catholics, who also tended to be the most conservative, may have dismissed the progressive Catholics depicted in the study as not “true Catholics.” Borrowing again from Turner (1991), if an in-group norm is too different from a person’s personal beliefs, he or she may choose to redraw group boundaries—separating him or herself from the former in-group—rather than conform. Exploring when such identity redefinition occurs is an important topic for further study.

paper-and-pencil questionnaire containing a pre-test, stimulus, and post-test. Students were debriefed regarding the study aims and methodology after completing the study.

The experiment had a 2x2 between-subjects design with random assignment of treatments. Two factors were varied: information regarding whether most fellow University of Michigan undergraduates supported or opposed economic individualism, and whether or not participants' self-conscious emotions were primed. The stimuli included the following. With respect to the opinion information, half of participants read poll results that most University of Michigan undergraduates supported economic individualism; the other half read poll results that most University of Michigan undergraduates opposed economic individualism. All poll results were fabricated for the purposes of experimental control.<sup>26</sup> With respect to emotion priming, approximately half of the participants read emotional scenarios intended to prime either pride or embarrassment. (Embarrassment was chosen over shame for ethical reasons.) In accord with standard practice in psychology, the emotion primes preceded the opinion stimulus (e.g., see Small and Lerner 2005; Zajonc 1980). Primes were presented in the form of a question to decrease awareness of the manipulation and were unrelated to economic individualism (as well as to politics in general) to decrease the likelihood of confounding effects.<sup>27</sup> See Table 2 for the basic design. The stimuli are available in Appendix B.

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<sup>25</sup> Demographics are as follows: 47% Democratic, 23% Republican, and 31% Independent or "other." 78% white, 8% African American, 7% Asian, 5% Hispanic, and 2% Native American. Men made up 52% of the sample. The mean age was 19.

<sup>26</sup> A post-test probe did not turn up any skepticism with regard to the veracity of these stimuli.

<sup>27</sup> In other words, "incidental affect" (orthogonal to study content) rather than "integral affect" (arising in response to related content) is examined (see Blanchette and Richards 2010). The

[Table 2 here]

The logic of how the opinion and emotion stimuli were expected to work together requires some explanation. First, it was expected that nearly all participants would support economic individualism in the abstract (as it is a very popular value in the U.S.). Thus, the experimental design assumes participant commitment to this general value. Two Likert-type statements at the start of the questionnaire—“individuals should strive to be financially self-reliant” and “one ought to work hard in life” (the same statements used in the opinion stimulus)—effectively screened out the small percentage of participants (15%) who did not support economic individualism.<sup>28</sup> Thus, all analyzed participants who received the pro-individualism poll results learned they were in the majority; those who received the anti-individualism poll results learned they were in the minority. Second, the emotion primes were tailored to these specific circumstances: those in the pro-individualism condition also assigned an emotion prime read *pride*-evoking scenarios, intended to increase the likelihood that they would feel pride after finding themselves in step with peers; those in the anti-individualism condition also assigned an emotion prime read *embarrassment*-evoking scenarios, intended to increase the likelihood that they would feel embarrassment after finding that their opinions were deviant.

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former allows one to more cleanly isolate the causal influence of emotion on the dependent variable; the latter is usually intertwined with cognitive content related to the study.

<sup>28</sup> In most cases, these individuals expressed mild opposition to just one of the statements. While there are too few cases for separate analysis here, note that adding these individuals to the analyses that follow does not considerably alter the results.

## Measures

The dependent measure is the average of responses to two questions on government social welfare policy which heavily implicate the value economic individualism. The first question asked participants whether the federal government ought to give college scholarships to *all* low-income high school graduates or only to those who have taken rigorous courses in high school. The second asked participants whether the federal government should provide welfare benefits to *all* low-income single mothers or only to those who are willing to work for those benefits. (See Appendix B for exact question wording.) Answers to these questions are correlated at .35.<sup>29</sup> The additive scale *Social Welfare Policy* was re-coded to range from 0 to 1 ( $m = .54$ ) so that relatively individualistic answers were represented by higher numbers. The format of both questions was modeled on a format frequently used by the American National Election Studies.

The post-test questionnaire also included measures of participants' feelings. A battery of emotion items was asked following the opinion stimulus to provide a secondary test of emotional moderation. The instructions read: "Describe **how you feel right now** by indicating the extent to which you feel each emotion." Answer choices, arrayed on a five-point scale, ranged from "not at all" to "extremely."<sup>30</sup> The emotions were listed in alphabetical order. These questions were used to create a *Self-Conscious Emotion Intensity* scale, also placed on the 0 to 1 interval, as well as another emotion measure described in the Discussion and Conclusion. The *Self-Conscious Emotion Intensity* scale is scored to reflect responses in the "pride" family ("proud" and "self-confident") for participants in the pro-individualism/majority treatment groups and responses in

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<sup>29</sup> Patterns of results presented below are similar when the variables are assessed separately.

<sup>30</sup> This battery of questions was based on a widely-used emotion measure called the "Profile of Mood States" (POMS) created by McNair and Droppleman (1971).

the “embarrassment” family (“embarrassed” and “insecure”) for participants in the anti-individualism/minority treatment groups. This variable construction reflects the previous logic of the emotion primes, where the specific emotion prime depended on whether the participant is in-step with the majority (pride primed) or out-of-step with the majority (embarrassment primed).<sup>31</sup>

### Data Analyses

2x2 experiments are most easily analyzed and interpreted with ANOVAs, which allow for straight-forward interpretation of the two “main effects” as well as the interaction effect. Two separate ANOVAs were conducted—one with the emotion treatment variable and one with the

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<sup>31</sup> Note that it is inappropriate to test the moderating effect of emotion in this study by comparing the opinion treatment effect across levels of embarrassment and pride separately and for all participants, regardless of treatment. To illustrate, take the case of embarrassment. The meaning and effects of a high level of embarrassment differ depending on whether it occurs in participants who received the pro-individualism or the anti-individualism treatment. In response to the anti-individualism treatment, where the participant is in the minority, embarrassment signals a participant is likely to conform, as expected; however, in response to the pro-individualism treatment, the unusual circumstance of embarrassment in response to being in the *majority* suggests a participant may instead deviate from the perceived norm because he or she is, evidently, uncomfortable being in the mainstream. (A parallel, opposite, result would occur if one concentrated on pride.) Thus, despite a focus on one emotion, the changing context means such an analysis is *not* comparing like to like. Interacting the opinion treatment variable with the above-described *Self-Conscious Emotion Intensity* scale better tests the emotion moderation hypothesis.

measured emotion variable.<sup>32</sup> The experimental set-up allows for tests of **H1** (conformity) as well as **H6** (emotion moderation).<sup>33</sup> For **H1** to be fully supported, participants' post-test views in the pro-individualism treatment groups should be more “conservative” than participants' post-test views in the anti-individualism groups. For **H6** to be supported, this difference—evidence of majority influence—should be greater when the relevant emotions are greater. In other words, there should be a positive interaction between the opinion treatment and self-conscious emotions. Finally, note that no main effect for emotion is expected. There is no theoretical reason to expect that pride or embarrassment in and of itself causes individualism to increase or decrease.

The first ANOVA includes the opinion treatment variable (coded 0 / 1), the exogenous emotion treatment variable (0 / 1), and their interaction. The results are displayed in the first column of Table 3. With respect to the first factor, majority opinion did not appear to influence participants' views on average  $F(1, 82) = .90, p = .35$ . However, the interaction term is statistically significant:  $F(1, 82) = 4.46, p \leq .05$ , two-tailed.<sup>34</sup> In other words, the effect of the opinion stimuli changed when emotions were primed.

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<sup>32</sup> Randomization successfully balanced the treatment groups with respect to age and political ideology but not sex or race. These two variables are therefore added to the analyses as controls; however, their addition does not substantially alter the results of the analyses.

<sup>33</sup> Note that this study tests H6 in the context of conformity to in-group norms. Future research will be needed to address the emotion moderation hypothesis with respect to polarization in response to out-group norms.

<sup>34</sup> While hypotheses with clear directional claims continue to be tested, ANOVAs require the use of two-tailed tests (because the F distribution is asymmetric). With this in mind, a more relaxed standard is appropriate, although most tests discussed do meet a  $p \leq .05$  (two-tailed) threshold.

[Table 3 here]

To clarify these relationships, experimental group means are graphed below in Figure 4. Without emotions primed, those in the anti-individualism treatment group reported slightly more individualistic attitudes than those in the pro-individualism treatment group, contrary to expectations; however, when pride or embarrassment was primed, this relationship reversed. Participants appeared to conform to the perceived majority, as expected.

[Figure 4 here]

One drawback of the above analysis, however, is that it only takes into account whether or not participants received an emotion prime. It does not include any measure of participants' subjective emotional experiences, including naturally evoked pride or embarrassment in response to the opinion stimuli when the emotion primes were *not* present. A second analysis was conducted, replacing assignment to an emotion group with the *Self-Conscious Emotion Intensity* scale.<sup>35</sup> See again Table 3 (second column). Here, again, there is no main effect for the opinion treatment, but the interaction between opinion and emotion is significant:  $F(1, 82) = 6.06, p \leq .05$ . The pattern of results is similar to that of the previous analysis. See Figure 5. No social influence appeared to occur among participants who reported very low levels of self-conscious emotions. However, this quickly changes as we advance up the emotion scale, with the gap between the two lines becoming statistically significant at and above the emotion mid-point (.375).

[Figure 5 here]

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<sup>35</sup> Self-reported emotion is entered into the ANOVA as a continuous variable, i.e., the analysis is technically an ANCOVA (with interaction). While this variable theoretically ranges from 0 to 1, the actual range is 0 to .75 because few participants reported experiencing extreme emotion.



## Study 2 Discussion

In this experiment, the self-conscious emotions pride and embarrassment appeared to increase individuals' susceptibility to social influence by peers. No evidence emerged for political conformity when student participants simply read opinion information and among those reporting lower-than-average self-conscious emotional reactions. However, when pride or embarrassment was primed, and among those experiencing higher-than-average self-conscious emotions, views appeared to shift in the direction of majority opinion.

This said, one could suggest an important counterargument to the conclusion that self-conscious emotions increased the likelihood of conformity in this experiment. Perhaps emotions mattered, but not specifically self-conscious emotions. For example, maybe the emotional stimuli were effective because they contributed to emotional arousal (Lazarus 1991, 17), increasing participants' attentiveness to the opinion stimuli, and, therefore, opinion conformity. We can test this alternative hypothesis by adding a measure of basic emotional arousal<sup>36</sup> and its interaction with the opinion treatment to the original ANOVA containing the measured self-conscious emotion variables. See the third column of Table 3. The counterhypothesis is not supported by the analysis. The *Opinion x Emotional Arousal* interaction term has an F statistic of nearly 0. The F statistic on the *Opinion x Self-Conscious Emotion Intensity* interaction declines slightly but easily remains statistically significant:  $F(1, 81) = 4.51, p \leq .05$ . Note that if each of the three basic emotions in the *Emotional Arousal* measure is examined separately, a similar pattern is produced.

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<sup>36</sup> An average of three basic emotions: anxiety, anger, and enthusiasm (see, e.g., Panksepp 1994).

## DISCUSSION AND CONCLUSION

Overall, the pattern of results observed reflects the expectations set out in the six hypotheses.

The findings from the first experiment demonstrate the power of in-group norms to influence and out-group norms to polarize as well as the relevance of gradations of subjective identity to these processes. The first experiment's findings also suggest, but do not demonstrate, a causal role for self-conscious emotions. Results from the second experiment directly support emotional causation. While these experimental effects will likely decay over time (e.g., see Chong and Druckman 2013), they also stem from a single (impersonal) interaction with a group norm. Repeated interactions would likely reinforce attitudes and lead to stabilization over time.

Alternative explanations for the pattern of findings are worth considering, however. Could the pattern of results in the two experiments be due to the more common argument that social influence, generally speaking, is due to information exchange and/or argument? This is unlikely given that the stimuli deliberately did not include any substantive information or arguments. What about other more “rational” explanations, such as the possibility that study participants were conforming for self-interested reasons (Chong 2000) or because they constructed arguments to explain the majority's view, persuading themselves in the process (Mutz 1998)? These theories are also unlikely to explain the experimental results. Theories such as Chong's that emphasize self-interested motivations tend to focus on public behavior, not private opinions, as were the focus of both experimental studies. With respect to Mutz's theory, those mechanisms could explain the in-group influence observed in the first experiment but not the empirical patterns related to out-group norms or self-conscious emotion.

In sum, the empirical results support the “social-emotional influence” framework proposed herewith. That framework provides an explanation for a phenomenon—political

conformity—that has long been underexplored and not well understood as a result. Likewise, it provides a window into between-group polarization, a topic highly relevant to contemporary U.S. politics. Social identity allows us to understand which groups will influence a person, and in what way. Emotion helps us to understand why people fall into line with in-group expectations so readily despite exposure to diverse perspectives on politics.

In addition, the social-emotional perspective on conformity and polarization helps to make sense of certain puzzling aspects of public opinion. For example, it offers an explanation as to why norms, values, and attitudes are affectively charged (Banaji and Heiphetz 2010; Rokeach 1973) and closely correlated with group boundaries. The framework also provides insight into why people tend to feel proud of shared group norms and to feel shame when they disregard them. Finally, the theoretical framework contributes to the growing literature on emotions and politics. Heretofore, most empirical emotions and politics scholars have focused on the basic emotions of fear/anxiety, enthusiasm, and anger (e.g., Brader 2006; Gadarian 2010; Huddy, Feldman, and Cassese 2007; Marcus, Neuman, and MacKuen 2000; Valentino et al. 2011), leaving self-conscious and other more complex emotions to the side. Given the many ways in which group identity, social relationships, and social status intersect with politics, further examination of the political relevance of self-conscious emotions would be fruitful.

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## TABLES

**Table 1** Effects of treatments on participants' opinions on social issues (Study 1)

	<b>Social Conservatism</b>	<b>Social Conservatism (w/ identity terms)</b>
<b>Constant</b>	.619*** (.032)	.192** (.073)
<b>Catholics Conservative</b>	-.013 (.046)	.035 (.123)
<b>Catholics Progressive</b>	-.077* (.043)	-.094 (.107)
<b>Evangelicals Conservative</b>	-.070* (.043)	.026 (.110)
<b>Identity Strength</b>	--	.611*** (.098)
<b>Catholics Conservative x Identity</b>	--	-.100 (.162)
<b>Catholics Progressive x Identity</b>	--	.007 (.142)
<b>Evangelicals Conservative x Identity</b>	--	-.148 (.148)
<b>N</b>	209	206

*Note* Table entries are unstandardized OLS regression coefficients with standard errors in parentheses. \*\*\* $p \leq .001$  \*\* $p \leq .01$  \* $p \leq .05$  (one-tailed tests)

**Table 2** Experimental design of economic individualism experiment (Study 2)

	<b>No Emotion</b>	<b>Emotion Primed (pride or embarrassment)</b>
<b>Majority Supports Economic Individualism</b>	23	20
<b>Majority Opposes Economic Individualism</b>	22	20

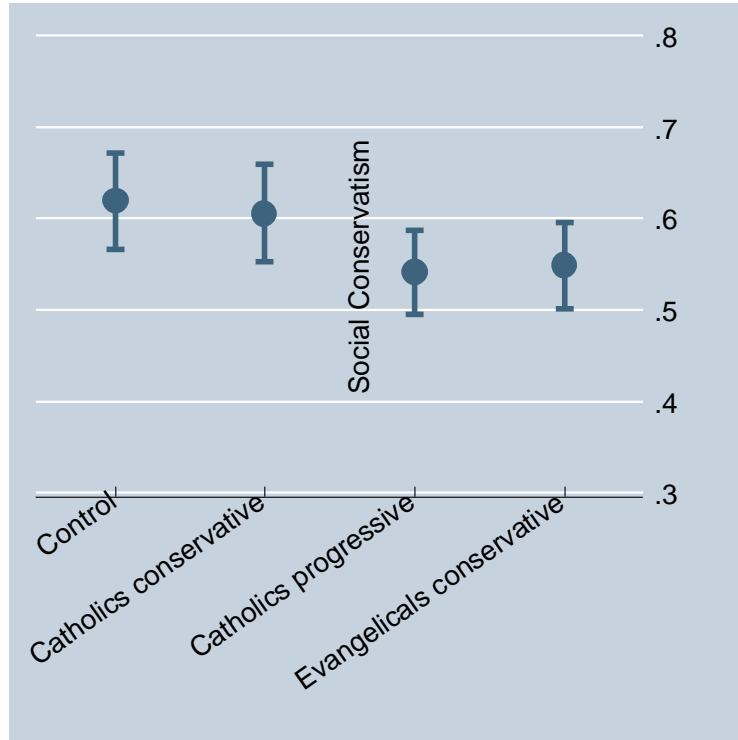
**Table 3** ANOVA results for three models (Study 2)

	<b>Model 1: Basic Model</b>	<b>Model 2: Measured Emotion</b>	<b>Model 3: Arousal Added</b>
<b>Opinion Treatment</b>	0.90	0.72	0.75
<b>Emotion Treatment</b>	0.02	--	--
<b>Opinion Treatment x Emotion Treatment</b>	4.46*	--	--
<b>Self-Conscious Emotion Intensity</b>	--	1.83	0.36
<b>Opinion Treatment x Self-Conscious Emotion Intensity</b>	--	6.06*	4.51*
<b>Emotional Arousal</b>	--	--	2.64
<b>Opinion Treatment x Emotional Arousal</b>	--	--	0.01
<b>Sex Control</b>	0.18	0.22	0.13
<b>Race Control</b>	5.12*	5.65*	5.76*
<b>N</b>	82	82	81

*Note* Cells contain F-statistics and are marked \*\* $p \leq .01$  \* $p \leq .05$  ^ $p \leq .10$  (two-tailed)

## FIGURES

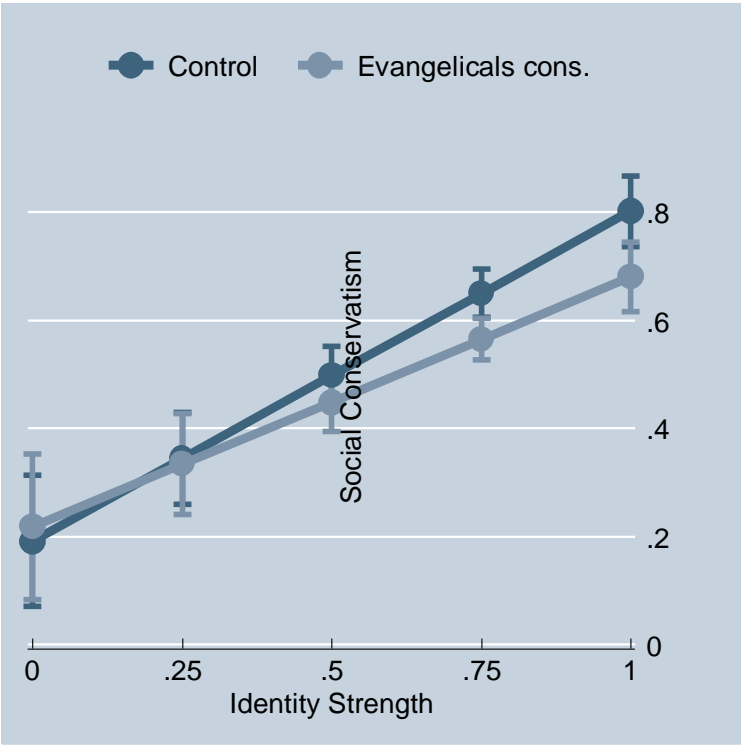
**Fig. 1** Social Conservatism scale means by experimental group (Study 1)



*Note* Figure displays experimental group means and 90% confidence intervals.

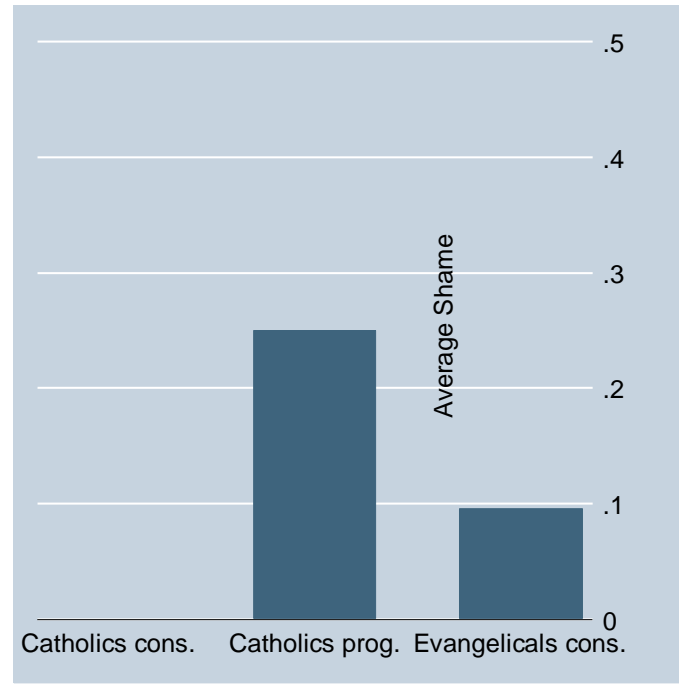
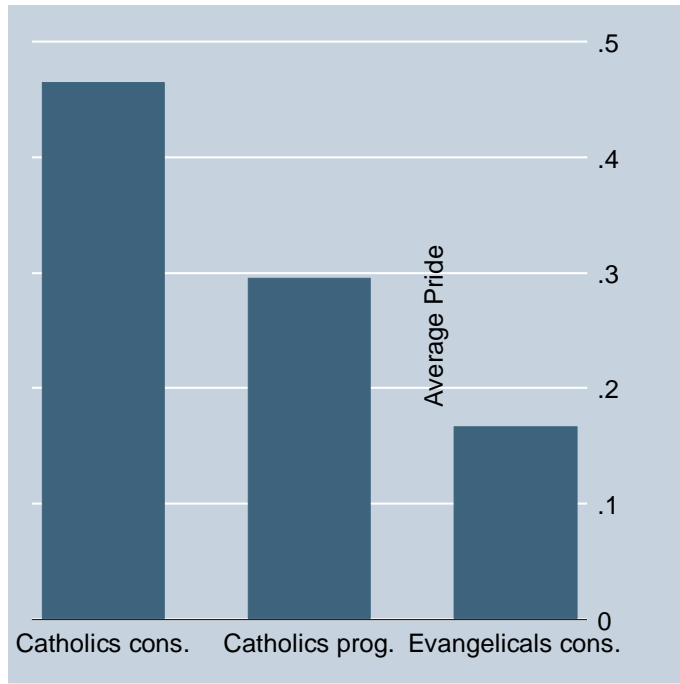


**Fig. 2** “Evangelicals conservative” treatment interacted with identity (Study 1)

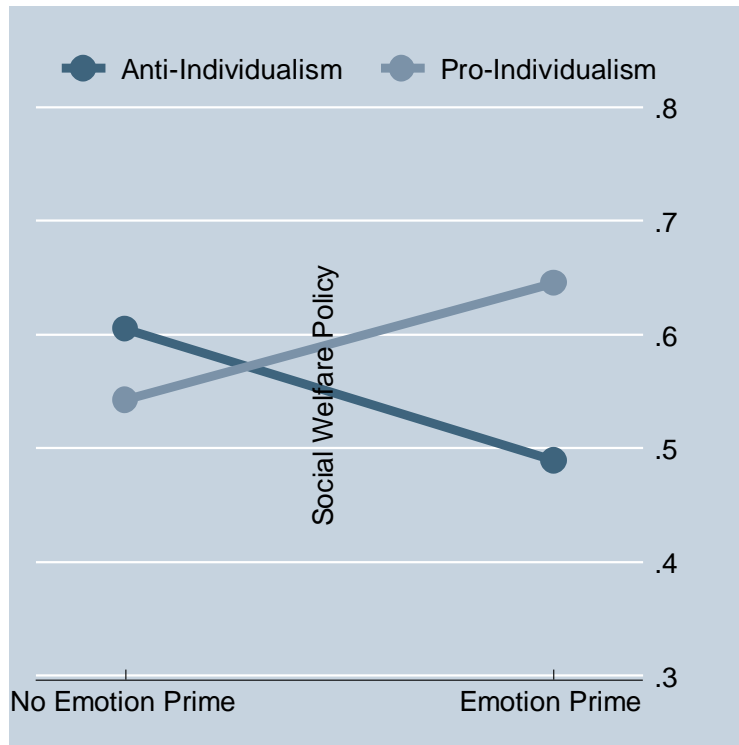


*Note* Figure displays predicted values for experimental groups at five levels of identity with 90% confidence intervals at each level. Values calculated and graphed using the *margins* set of commands in Stata 12.

**Fig. 3** Average levels of pride and shame in response to treatments (Study 1)

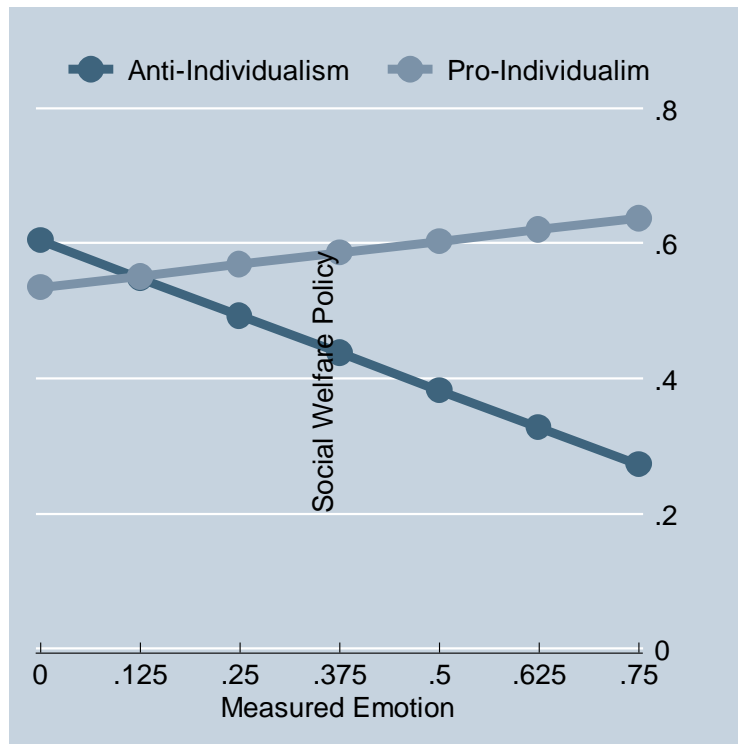


**Fig. 4** Predicted values for opinion and emotion treatment groups (Study 2)



*Note* Predicted values for interaction between opinion and emotion treatments with controls. In figure, *Sex* is held to 1 (female) and *Race* to 0 (white).

**Fig. 5** Predicted values by opinion treatment and subjective emotion intensity (Study 2)



*Note* Predicted values for interaction between opinion treatment and *Self-Conscious Emotion Intensity* measure with controls. In figure, *Sex* is held to 1 (female) and *Race* to 0 (white). Differences in treatment group estimates are statistically significant ( $p \leq .05$ ) at and above .375.

**APPENDIX A: Religious Identity and Social Conservatism Experiment (Study 1)**

**Stimuli**

PLEASE READ THE TEXT BELOW CAREFULLY. WHEN YOU ARE DONE, ADVANCE TO THE NEXT PAGE TO ANSWER SOME RELATED QUESTIONS

[Headline Insert]

As you may know, the issue of “family values” continues to be discussed in the media. From time-to-time, public opinions polls are carried out to find out what different types of Americans believe regarding family values. [Body Insert A] According to the survey:

[Body Insert B]

What about you? We would like to know your opinion on family values.

	<b>Catholics Conservative Condition</b>	<b>Catholics Progressive Condition</b>	<b>Evangelicals Conservative Condition</b>
<b>Headline Insert</b>	<i>Recent Polls Indicate Catholics Are Strong Supporters of Family Values</i>	<i>Recent Polls Indicate Catholics Are Less Supportive of Family Values</i>	<i>Recent Polls Indicate Evangelicals Are Strong Supporters of Family Values</i>
<b>Body Insert A</b>	For example, one recent survey indicates that American Catholics today continue to strongly support traditional family values.	For example, one recent survey indicates that American Catholics today seem to question the importance of traditional family values.	For example, one recent survey indicates that American Evangelical (or “born again”) Christians today are strong supporters of traditional family values.
<b>Body Insert B</b>	<ul style="list-style-type: none"> <li>• The majority of Catholics who marry stay married and never divorce.</li> <li>• A majority of Catholics oppose abortion.</li> <li>• A majority of Catholics oppose gay marriage.</li> </ul>	<ul style="list-style-type: none"> <li>• A majority of Catholics say one can be a good Catholic without obeying the Church’s teaching on divorce.</li> <li>• A majority of Catholics say one can be a good Catholic without obeying the Church’s teaching on abortion.</li> <li>• A majority of Catholics say the Church’s opposition to gay marriage is not very important to them.</li> </ul>	<ul style="list-style-type: none"> <li>• A majority of Evangelicals say that divorce should be avoided, even in the event of an unhappy marriage.</li> <li>• A majority of Evangelicals oppose abortion.</li> <li>• A majority of Evangelicals oppose gay marriage.</li> </ul>

## Measures<sup>37</sup>

### Social Conservatism Scale

#### *Divorce Subscale*

Divorce in this country should be more difficult to obtain than it is now.

Divorce is usually the best solution when a couple can't seem to work out their marriage problems.

#### *Premarital Sex Subscale*

It is wrong for a man and a woman to have sexual relations before marriage.

It's a good idea for a couple who intend to get married to live together first.

#### *Gay Rights Subscale*

Sexual relations between two adults of the same sex is wrong.

Homosexual couples should have the right to marry one another.

#### *Sex and Young People Subscale*

Sex education has no place in the nation's public schools.

Methods of birth control should be available to teenagers who need them.

#### *Abortion Question*

There has been discussion about abortion during recent years. Which one of the opinions below best represents your view? By law, abortion should **never** be permitted. / The law should permit abortion **only** in the case of rape, incest, or when the woman's life is in danger. / The law should permit abortion for reasons other than rape, incest, or danger to the woman's life, but **only** after the need for the abortion has been clearly established. / By law, a woman should **always** be able to obtain an abortion as a matter of personal choice. / Other

### Catholic Identity Scale

How important is being Catholic to you?

How well does the term "Catholic" describe you?

### Emotional Reactions to Stimuli

Did the information make you feel [proud / ashamed]?

---

<sup>37</sup> Seven answer categories for Likert items ranged from "strongly agree" to "strongly disagree." Identity items included five possible responses, from, e.g., "not very important" to "extremely important." Emotion questions had five possible responses, from "not at all" to "extremely."

## APPENDIX B: Self-Conscious Emotions and Economic Individualism Experiment (Study 2)

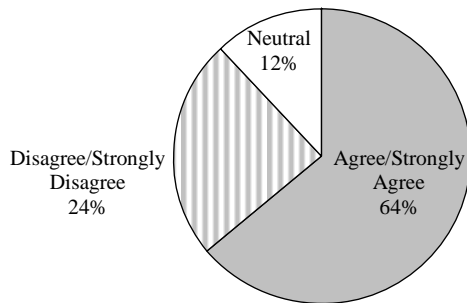
### Pro-Individualism Stimulus

#### HOW DO YOU COMPARE?

In the spring of 2005, researchers at UCLA (University of California, Los Angeles) carried out opinion polls of college students at ten major universities throughout the United States, including The University of Michigan. UCLA researchers asked random samples of undergraduate students at each university about what majors they chose and why, about study habits and extracurricular activities, about Internet use, about their consumer habits, and, finally, about various social attitudes and political opinions.

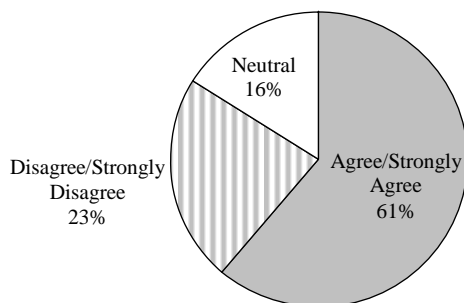
Two of the survey questions focused on attitudes regarding “economic individualism.” According to results published last year in *Public Opinion Quarterly*, most University of Michigan students **agree** with this principle.

64% of University of Michigan undergraduates either agreed or strongly agreed with the statement “Individuals should strive to be financially self-reliant.”



N = 325

61% of University of Michigan undergraduates either agreed or strongly agreed with the statement “One ought to work hard in life.”



N=318

19. You were asked to respond to the same two statements on page 2. Compare your answers to the published data and then check the appropriate response below.

I am in agreement with the majority of University of Michigan undergraduate students....

\_\_\_ on **both** survey items.

\_\_\_ on **one** of the survey items.

\_\_\_ on **neither** of the survey items.

### **Pride Stimulus**

Take a moment to imagine each of the following scenarios, focusing on how each situation would make you **feel**. Then circle the situation that you believe would make you feel the **best**.

- a. You leave school in April to spend the summer at home. One of your goals is to improve the way you look—get in shape, buy some new clothes, maybe get a new haircut, etc. When you return to school in the fall, everyone tells you how great you look. You go to a party the first weekend back, and two cute guys (or girls) approach you during the evening and ask you out.
- b. You attend a family gathering over winter break with various family members. One of your relatives asks you how school is going. As it happens, you got straight As in the fall semester and have secured a really prestigious summer internship, all of which you tell your relatives. The group gushes about your accomplishments, and your mom looks especially pleased.
- c. You are standing on the curb of a busy street, waiting for the light to turn green so that you can cross, when you see a little girl wander away from her mother and dart into the street. You run after her into the traffic, pick her up, and return her to her mother. A small crowd that has gathered on the sidewalk to watch breaks into applause.

### **Embarrassment Stimulus**

Take a moment to imagine each of the following scenarios, focusing on how each situation would make you **feel**. Then circle the situation that you believe would make you feel the **worst**.

- a. You are on a first date with someone you really like. You go to dinner, then to a party. As the evening is coming to an end, both of you are sitting together on a couch. Your date leans in close to you, and you're thinking it is finally time for a kiss. But, instead, your date whispers to you, "Sorry to tell you this, but, uh, the zipper on your pants has been down since we left the restaurant."
- b. It's a warm spring day, and you are walking through the Diag, which is filled with students socializing, studying, playing Frisbee, etc. All of a sudden you trip and, with a loud grunt, fall down. Several books and the bag you had been carrying scatter all around you. Everyone on the Diag seems to stop what they are doing to stare at you sprawled out on the pavement.
- c. You are attending the wedding ceremony of a family member. The room is quiet, except for the bride and groom exchanging their vows. All of a sudden you get a case of the hiccups. Hiccup! Hiccup! A number of people sitting around you turn to you and say "shhhhh....." You put your hand over your mouth, but you can't stop hiccupping.



## Dependent Measures

The federal government currently gives money for college to many low-income high school graduates. Some people believe that these college grants should go *only* to those low-income graduates who have taken rigorous courses in high school. Suppose these people are at one end of a scale, at point 1. Other people feel that such college grants should go to *all* low-income high school graduates, regardless of what courses they have taken. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, and 6. Where would you place yourself on this scale?

Currently, the government in Washington provides aid to low-income, single mothers who have dependent children; this program is typically referred to as “welfare.” Some people feel that the government should require these women to work in order to receive welfare benefits. Suppose these people are at one end of the scale, at point 1. Others feel that the government should provide welfare regardless of work status. Suppose these people are at the other end, at point 7. And, of course, some other people have opinions somewhere in between, at points 2, 3, 4, 5, and 6. Where would you place yourself on this scale?