# The Role of Self-Conscious Emotions in Polarized Societies

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## 1 Abstract

In the contemporary era, there is an increasing tendency of using "us versus them" rhetoric in a political tribalism sense. Motivated reasoning literature offers one solution as to how group conflict shapes outgroup bias: Individuals grow negative feelings toward out-groups to reduce the cognitive dissonance, hence they feel better about their judgments. If this is the case, do our emotions play the same role across individuals? To understand the puzzle outlined above, I investigate how people's predisposed tendencies may explain the variance in affective polarization across individuals. Based on the conceptual difference between shame (the actor's negative sense of identity) and guilt (the result of a reaction to a specific behavior) in the psychology literature, I hypothesize that information regarding the in-group bias transgression increases the out-group bias more among shame-prone individuals than guilt-prone ones. To test this argument, I plan to field a 3-sample survey experiment in which members of dyadic identity categories (Gender: men/women, Race: white/blacks, Party: democrat/republican) will be randomly assigned video treatments to watch that illustrate respective identity's offence in the past. Later, affective polarization level in each category will be measured. I expect to find evidence that proneness to the SCE moderates the relationship between information about in-group's past wrongdoing and the level of affective polarization.

## 2 Introduction

We have not seen eye-to-eye lately. Having been surrounded by fierce debates on several hot-button issues, people have felt that coexisting peacefully with individuals loyal to the other side can't be possible in many cases such as in Turkey, Poland, the United States, etc. (Carothers and O'Donohue (2019)). In parallel, research on political polarization has boomed. While the majority of the literature focused on policy-based/ideological divisions to understand the phenomenon, Iyengar, Sood and Lelkes (2012) (p:2) proposed an alternative sign of the polarization among masses: "To the extent that party-identification represents a meaningful group affiliation, the more appropriate test of polarization is affective, not ideological, identity".

Affective polarization is the growing trend of favoring the in-group while disliking and distrusting those from out-groups (Iyengar et al. (2019)). In these group-centric evaluations<sup>1</sup>, political tribalism has an instrumental influence on individuals' political evaluations, rather than being simple policy preferences (Fowler et al. (2020)). For example, Druckman et al. (2020) argue that individuals who show greater levels of affective polarization are likely to politicize the matters or actors purportedly apolitical in their nature (i.e., response to Covid-19), and already highly politicized issues are seen through individuals' partisan lens regardless of their affective polarization level. Hence, partisanship-based hostility forms individuals' opinions or attitudes on a political matter through affective polarization (Druckman et al. (2020)). Emotions are the focal point of these identity centered polarized politics that highlight the connection between a social phenomenon and the psychology. The question is then how do our individual-level emotions aggregate to the sharp societal divisions seen in daily life and politics?

Theories of motivated reasoning<sup>2</sup> (e.g., Cognitive dissonance<sup>3</sup>) posit one solution to how group conflict shapes out-group bias<sup>4</sup>: Individuals develop negative feelings toward out-groups to reduce the cognitive dissonance, therefore they feel better about their judgments. Festinger (1962) states that the core theoretical claim of Cognitive Dissonance Theory is "the idea that if a person knows various things that are not psychologically consistent with one another, he will, in a variety of ways, try to make

<sup>&</sup>lt;sup>1</sup>Social Identity Theory, one of the prominent theoretical approaches to in-group favoritism that also lies in the center of Affective Polarization, postulates a psychological stance by putting categorically distinct social identities as the fundamental element of in-group favoritism. (Tajfel et al. (1979))

<sup>&</sup>lt;sup>2</sup>Motivated Reasoning is the tendency to come up with arguments that supports individuals' favorite conclusions over the ones that they do not want to believe in. Kunda acknowledges that "there is considerable evidence that people are more likely to arrive at conclusions that they want to arrive at, but their ability to do so is constrained by their ability to construct seemingly reasonable justifications for these conclusions". (Kunda (1990); p. 480).

<sup>&</sup>lt;sup>3</sup>One of the prominent theories of Motivated Reasoning is the Cognitive dissonance. The theory's fundamental principle is that "if a person knows various things that are not psychologically consistent with one another, he will, in a variety of ways, try to make them more consistent" (Festinger (1962); p.93).

<sup>&</sup>lt;sup>4</sup>"In-group favoritism"/"Out-group bias" is a display of preferring affiliates of one's in-group over out-group ones that can be displayed in evaluating out-group members, distributing resources, approaching conflicted issues etc. (Allport, Clark and Pettigrew (1954); Tajfel et al. (1979); Tajfel (1981))

them more consistent".<sup>5</sup> However, are people always motivated to reduce cognitive dissonance by bringing their cognitions, attitudes, or behaviors in line with their identities? If so, do our emotions play the same role across individuals?

Scholars argue that events that threaten one's group identity or group can be generated through several actions such as group conflict (elections, wars, class inequality, etc.), past wrongdoings (racism, land-stealing, genocides, etc.) or technology (social media). Given the importance of identity in political behavior, researchers investigated the origins, underlying principles, and consequences of affective polarization through the lens of emotions (e.g., Webster and Abramowitz (2017) - fear, anger, and distrust; Lu and Lee (2019) - anger and fear; McLaughlin et al. (2020) - enthusiasm and anxiety; Marcus et al. (2019) – the role of fear and anger in support for the far right, etc.). In the study of partisanship, attention has mostly focused on anger (increases out-group bias and polarization) and anxiety (reduces out-group bias and polarization). Similarly, in the populism studies, less attention has been paid on the role of shame and pride emotions (Salmela and Von Scheve (2017), Salmela and von Scheve (2018), Kazlauskaitė and Salmela (2022)). While the literature frequently revolves around circumstance-caused or other-caused emotions, a vital segment of emotions' role in out-group bias has been understudied – Self-conscious emotions (SCE).

## 3 The Argument

In daily life, people are exposed to any sorts of information that may trigger cognitive dissonance, ultimately leading to increased out-group bias. These occasions can vary from a conversation with friends to reading the news, from watching a video on social media to a partisan discussion with relatives over dinner. For example, Settle (2018) explains that what the Facebook "Newsfeed" – regardless of content being political or apolitical – provide to the users enhances the psychological and affective polarization. Then the question becomes: Are people always motivated to reduce cognitive dissonance by bringing their cognitions, attitudes, or behaviors in line with their identities? If this is the case, do our emotions play the same role across individuals? In this regard, it is important to bring Self Conscious Emotions - the most understudied part of emotions - into studying polarization for two reasons: Its "central features" and "linkage to identity".

SCE have a rich and complex structure. From emergence to its functionality, SCE have a diverse working mechanism resulting in a different impact on individuals' political behavior. In order to highlight these variations, Tracy and Robins (2004) argue 5 central distinctive characteristics: *Self-awareness* (that forms an identity including social, collective,

<sup>&</sup>lt;sup>5</sup>A classic example of the concept is a person holds a contradicting belief and a behavior: I smoke vs. I know that smoking is harmful. In literature, there are four main ways of coping with this cognitive dissonance: Changing the thought – "I smoke" & "smoking is not really a bad idea", changing the behavior – "I don't smoke anymore" & "Smoking is harmful", adding a new thought to rationalize the inconsistency – "I smoke" & "Smoking is harmful" + "But I also have a healthy lifestyle", and trivializing the inconsistency – "We all are going to die anyway".

relational self-representation), development (emerge later in the childhood based on morality), complex social goals (promoting accomplishment of social goals such as status or hierarchy), non-universal expressions<sup>6</sup> (not immediate/automatic like basic emotions), cognitive complexity (evaluation of broader norms through high cognitive functional assessment).

Additionally, SCE's role in the behavioral outcome is peculiar. The journey from norms to identity is worth mentioning. One aspect of SCE's framework is the "morality" aspect that sometimes scholars use or the "moral emotions" to describe them (Tangney and Fischer (1995)). As Haidt (2003)(p.276) defines, moral emotions "are linked to the interests or welfare either of society as a whole or at least of persons other than the judge or agent". As being part of a key tool in individuals' moral gadget, they have an impact in the relationship between "moral standards" and "moral behavior". When the individual reflects upon the self, SCE stipulate an immediate sentence and feedback regarding both anticipated and actual behavior (either a penalty or encouragement) by functioning as a moral barometer (Tangney and Fischer (1995)). They provide the motivational force to understand when to do right and avoid doing wrong (Kroll and Egan (2004)). However, what is good and bad can be a relative phenomenon across several dimensions such as culture, position in society, age, etc. rather than universal. Unlike other basic emotions' functioning in the outcome, different moralities result in different "identities" and different behavior.<sup>7</sup>

SCE are critically instrumental in both driving and regulating people's beliefs, behaviors, and thoughts (Tangney and Fischer (1995); Tracy, Robins and Tangney (2007)), and their linkage to "identity" aspect is cardinal (for instance, shame is ascribed to the individual's negative sense of identity). Therefore, SCE<sup>8</sup> could help us understand why some people do and some people don't reduce cognitive dissonance by harmonizing the behavior with their identities (for example, why some people resolve cognitive dissonance by accepting blame through guilt). Rather than conventional wisdom suggesting that anger, fear, or anxiety is the explanation for sharp cleavages in the opinions, I argue that peoples' proneness to self-conscious emotions plays a crucial role in their political behavior (see the model in the figure below and more detailed in hypotheses section). In doing so, I build my argument on the Intuitionist Model of Political Reasoning (see Arceneaux and Vander Wielen (2017) for details) by acknowledging the individual differences in motivated reasoning among other political attitude formation models.<sup>9</sup> In

 $<sup>^{6}</sup>$ However, Beall and Tracy (2020) acknowledges that "pride and shame expressions are both likely to be universal and innate behavioral responses to success or failure".

 $<sup>^{7}</sup>$ Clearly, other elements – phenotype, experiences, relationships etc. – play a part in the identity formation, but the point here is a direct causal mechanism SCE take part in.

<sup>&</sup>lt;sup>8</sup>To clarify, I use "social dimension" of the SCE rather than policy-based beliefs, since they are ultimately caused by social expectations that people internalize. Since stronger arguments can sway peoples' opinion (Chong and Druckman (2007)) and most people have fairly weak policy attitudes (Arceneaux (2012)), policy-based beliefs are unlikely to be the key factor to trigger SCE and the main driver of affective polarization.

<sup>&</sup>lt;sup>9</sup>While the research seeks to answer what explains the variance in outgroup bias, a crucial issue must be considered. It should be noted that outgroup bias is what researchers measure at the individual level, whereas the aggregate of outgroup bias observed in individuals' behavior gives us a society-level

particular, I look at how people's predisposed tendencies (traits) as a moderator, as opposed to the emotion (states) itself, because it allows us to make inferences about emotional states without having to measure them directly.

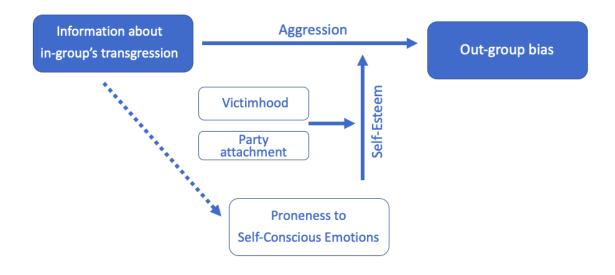


Figure 1 - The process model of the argument

#### 3.1 Hypotheses

Individuals are in constant interactions either with each other or with the tools of communication such as newspapers, social media, etc. As motivated reasoning literature indicates, it is important to understand whether the received information creates a cognitive dissonance that eventually steers out-group bias in peoples' minds. I argue that when people hear about transgressions that are caused by their in-groups, their bias towards the out-group elevates. <sup>10</sup> What one can initially expect is that the direct effect of the treatment (information) should be positive on average. I hypothesize that;

-[H1] In-group transgression treatment will increase affective polarization

And, the following equation shows the empirical model for Hypothesis 1:

concept – the affective polarization. Hence, while affective polarization is the inspiring part of the research question, the outgroup bias ultimately lies in the heart of the inquiry.

<sup>&</sup>lt;sup>10</sup>Some would argue that acquiring knowledge of an in-group transgression would reduce affective polarization, either by reducing positive feelings for the in-group or by increasing positive feelings for the outgroup. While this argument is valid, I investigate the impact of SCE on motivated reasoning and dissonance avoidance in this project that is based on individuals' counterargument to the information in polarized matters. Regardless of whether the effect goes one way or another, I believe it is interesting to investigate whether it is moderated by predispositional tendencies.

$$y = b_0 + b_1 x + \varepsilon_i \tag{1}$$

#### $Affective \ Polarization = b_0 + b_1 * Treatment$ (2)

## $Hypothesis \ 1 \ predicts \ that \ b_1 > 0 \tag{3}$

The question then becomes whether every individual responds the same way by bringing their cognitions, attitudes, or behaviors in line with their identities. The "guilt vs. shame" debate in psychology literature offers an insight to investigate the varience in out-group bias.

Guilt and shame are mostly used interchangeably in daily life conversations. Both of these emotions have a negative connotation about one's actions resulting in cognitive dissonance, but the outcomes of these behaviors are complicated. In contemporary literature, the most dominant rationale to distinguish shame and guilt is "the focus on self vs. behavior" approach. Having put forward by Lewis (1971) and detailed by Tracy and Robins (2004) appraisal-based model of SCE, the approach operationalized the difference between guilt and shame as; while guilt is the result of a reaction to a specific **behavior**(*I have done something bad*), shame is ascribed to the actor's negative sense of **identity**(*I am someone bad*). In both situations, the emotions are inter-correlated and not mutually exclusive (Tangney (1994)); and the psychological discomfort occurs due to conflicting beliefs, thoughts, values, etc.

Furthermore, in times of experiencing a cognitive dissonance, individuals look for the source of the problem. Research has presented that individuals who criticize poor performance on the **ability** (an internal, stable, uncontrollable aspect) are likely to feel ashamed, while people who blame poor performance on **effort** (an internal, unstable, controllable aspect) are likely to feel guilty (Brown and Weiner (1984); Tracy and Robins (2006)). Hence, guilt can function as a cue for activating the control mechanism by sending a signal for behavioral need to change. Individual approaches to the emotionally problematic situation in a more optimistic way include ascribing the source of the problem to "behavior" or "belief". Eventually, the behavioral change can lead to positive outcomes such as reducing prejudice or increasing the prosocial behavior.

Conversely, the mechanism for shame does not allow a stress-free checkout in moments of emotional distress. While changing your behavior is a relatively more possible option, changing who you are is something unlikely in the short-term. Once shame is induced, it signals a personality trait as "feeling like a bad person" which makes the behavioral change improbable. At that moment, shame is considered a risky outcome that might lead to self-hatred, aggression, violence, addiction, depression, or bullying by ascribing the source of the problem to the "person" or "identity".

The literature across several fields also focused on the dispositional tendencies that peoples' proneness (either guilt or shame) is an elicitor that makes them experience these emotions. Shame or guilt prone individuals tend to anticipate respective emotions in response to both the potential behavioral outcomes and actual failures or transgressions (Tangney and Fischer (1995)), yet the variance in the outcome is significant. Lutwak, Ferrarib and Cheek (1998) argues that as these difference in cognitive styles result in dissimilar forms of affective responding (proneness); "shame may motivate a range of defensive strategies that are maladaptive and destructive", whereas "guilt feelings may foster other oriented empathy that points the way toward redemption and strengthening interpersonal relationships" (Lutwak, Ferrarib and Cheek (1998); p. 1028). Additionally, guilt is related to an information-oriented style (people who intentionally search, reflect and utilise self-relevant information in their decision-making) whereas shame is attributed to diffuse-avoidant style (people who are often defensive, avoid confronting their difficulties, and depend on external cues controling personal endeavors) in terms of the identity related cognitive processes (Berzonsky (1994); Lutwak, Ferrarib and Cheek (1998)). Therefore, I expect that the treatment interacts with out-group bias in different levels based on individuals' dispositional tendencies. I hypothesize that;

-[H2] The in-group bias transgression treatment will increase affective polarization more among shame-prone individuals than guilt-prone individuals

And, the following equation shows the empirical model for Hypothesis 2:

$$y = b_0 + b_1 * X + b_2 * S + b_3 * X * S + b_4 * G + b_5 * X * G + b_6 * S * G + b_7 * X * S * G + \varepsilon_i$$
(4)

 $\label{eq:approx} Affective\ Polarization = b_0 + b_1 * Treatment + b_2 * Shame\ Proneness + b_3 * Treatment * Shame\ Proneness + b_4 * Guilt\ Proneness + b_5 * Treatment * Guilt\ Proneness + b_6 * Shame\ Proneness * Guilt\ Proneness + b_7 * Treatment * Shame\ proneness * Guilt\ proneness + b_7 * Treatment * Shame\ proneness * Guilt\ proneness + Dre-treatment\ Controls$ 

(5)

In light of this knowledge, to demonstrate my theoretical approach, I argue that proneness to SCE moderates the relationship between the level of out-group bias and information about in-group's past wrongdoing (Three identity variables are chosen with their dichotomous sub-categories: *Gender ID* (i.e., Women & Men), *Racial ID* ( i.e., Whites & Blacks), and *Partisan ID* (i.e., Democrats & Republicans). Up until this point, I've utilized the term "in-group" to identify the respective identity group. It should be clarified what "identity" also refers to in terms of its "degree of attachment" and "victimhood".

First, in this research I acknowledge the identity in a social psychological approach by following the "Michigan School" of political behavior and more recent scholars following a similar line of research. A social identity denotes an individual's sense of attachement to a specific group where he/she takes part in the same identity category that has an impact on "what people feel, think and do". (Klandermans (2014); Mason and Wronski (2018)). Here, the interaction between these social identities such as race, gender, religion etc. and the partisan identity is important because it paints an overall picture of the cumulative relationship of these categories rather than classification of each social identity as its own. The question remains as to what extent the bond differs across individuals.

Campbell et al. (1960) described group identification phenomenon as a "psychological reality" in which "there is room for a great deal of variation in the degree of psychological membership that characterizes the relationship" (p. 306; Mason and Wronski (2018): p.258). *The American Voter* sheds lights into to the modern identity politics by explaining the degree of attachment a person can hold for a social group where the individuals differ in their political thinking and behavior. Their model suggests that three different interactions determine the variation in group political "strength": (1) the extent individual relates to the group, (2) the extent the group relates to the political world, (3) the extent the individual relates to the political world. They anticipated that "in most (social) groups formed along occupational, ethnic, or religious lines membership" as a major factor in varying levels of identification (p. 323).

Second, along with the degree of attachment, I focus on differences between how "victim" and "offender" identities approach a transgression that is done by their own in-group. Fohring (2018) states that the discussion of victimhood is "a deeply personal yet also cultural phenomenon" (p.147). Identification of a victimhood paves ways for people to deliver both positive (towards the victim group) and negative (towards the offender group) judgements, hence it creates consequences for both groups in the public eye. So, how do people who belong to one of these groups react to their in-groups transgressions toward the other one?

I utilize three identity categories with their dichotomous sub-categories in this research. In each of these identity categories, the common knowledge indicates the following;

- Gender ID: Men are in the offender, women are in the victim group
- *Racial ID*: Whites are in the offender, Blacks are in the victim group
- Party ID: There isn't an evident offender/victim relationship. (Yet, both sides tend to see themselves the victim of other party's policies/agenda)

The literature overall indicates that there may be gender differences in SCE where women tend to have higher scores on both shame and guilt measurements (Tangney (1994); Tracy, Robins and Tangney (2007); Brody and Hall (2008)). Else-Quest et al. (2012) shows that the stereotyping of women being more emotional than men is partially true that the gender differences in SCE are accurate for shame and guilt, but not for both authentic and hubristic pride. On the race/ethnicity side of the debate, the literature provides several different answers. Differences between shame and guilt emotions were greater among white people's samples than non-white ones in gender stereotypes (Else-Quest et al. (2012)) and purely racial stereotypes (Peacock et al., 2006); Asian Americans scored greater levels of shame-proneness, compared to guilt-proneness than White Americans (Szeto-Wong (1997)), and black people experience higher recurrent shame due to the negative stereotyping of African Americans in both institutional and interpersonal levels (Harris-Perry (2011)).

To evaluate individuals' proneness to the Self-Conscious emotions I use a TOSCA-3S questionnaire (see research design and appendix). The measure doesn't make any

reference to politics per se, it only explains how individuals feel about a mistake or transgression they made as a person. However, as individuals' self-esteem is connected to in-group (intergroup discrimination) either as an independent or dependent variable (Tajfel et al. (1979); Abrams and Hogg (1990)), the treatment takes effect on the "group to individual" or "group to group" level. Even though most of the research indicates that women show higher degrees of shame and guilt proneness than men, the results for ethnicity are rather conflicting; what I expect here is that when the issue is a sensitive topic (i.e., domestic abuse in gender identity category and discrimination in racial identity compared to a corruption scandal in the political party they feel close to), shame/guilt proneness would less likely trigger these emotions for those in the victim identities. The result will be that responsibility attribution will occur and the members of these groups will likely reject the blame overall and perceive it as if attributed by their out-group.

As Women and African Americans<sup>11</sup> are in the most often victimized groups who fight for the recognition of their collective victimization (Fohring (2018)), I expect asymmetrical results in these categories relative to those in the Party identity ones. Additionally, as Michigan School scholars argue, people who hold strong partisan attachments to their in-groups also tend to categorize themselves as a "victim" so much so that I expect a tendency of rejecting the blame of the transgression in both Party identity categories. Therefore, I hypothesize that;

-[H3] Those in "offender" groups will give stronger reactions to the treatment than those in the "victim" groups

- Shame-prone Men in the treatment group will likely have higher scores of outgroup bias than Shame-prone women
- Shame-prone White people in the treatment group will likely have higher scores of outgroup bias than Shame-prone Black people
- Both Shame-prone Democrats and Republicans in the treatment group (those who hold weak party attachments) will likely have similar scores of outgroup bias

## 4 Research Design

The research<sup>12</sup> will investigate the variance in out-group bias that individuals exhibit in their political behavior by considering the role of predisposed tendencies (moderator) in people's political decisions (Dependent variable) through daily life interactions (Independent variable). More specifically, the research seeks to show how people's predisposed tendencies (traits), as opposed to the emotion (states) itself may explain the variance in affective polarization across individuals.

<sup>&</sup>lt;sup>11</sup>along with LQBTQ people, Refugees and Immigrants

 $<sup>^{12}</sup>$  The original IRB approval (protocol no: 27265) was obtained on August 18th, 2020. The amendments were approved on December 1st, 2022 under submission no: 27265-0006

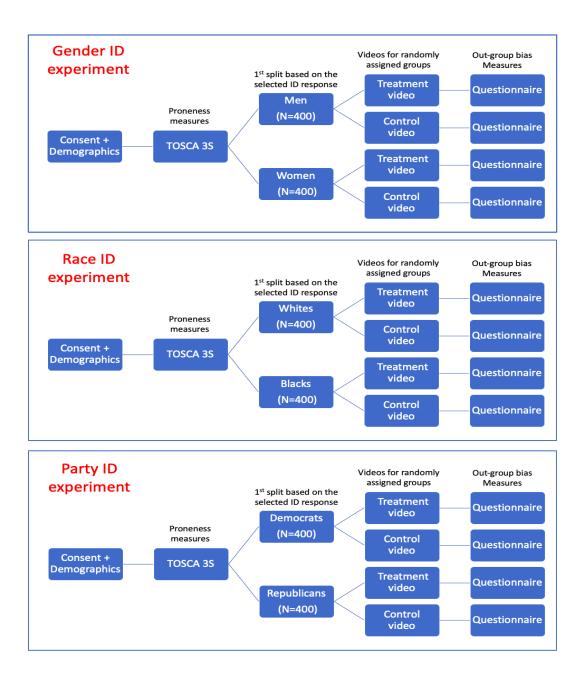


Figure - 2 The overview for each experiment

To answer how proneness to shame/guilt shape the relationship between group conflict and outgroup bias, I propose a 3-sample survey experiment. The studies will take place online using MTurk (through Cloud Research) and will be conducted on a sample of U.S. adults. Goodman and Paolacci (2017) point out several advantages of using MTurk data, including the inexpensiveness, diversity of the sample that allows targeting subgroup studies, high level of flexibility that provides room for cross-cultural research, and the high quality data through the built-in incentive structure.

### 4.1 Concerns and possible solutions

It should be noted that Buhrmester, Talaifar and Gosling (2018) and several other researchers touch on a couple factors that could impact the data quality. Below, I address these issues by responding through answers from the literature. Concern types:

- Inattentive participants: Chmielewski and Kucker (2020) advise that using response validity indicators and screening the data reduce the failing response validity indicators of the participants. Additionally, Thomas and Clifford (2017) show that insufficient attention is no more a problem among MTurk samples than among other commonly used convenience or high-quality commercial samples. To prevent this issue, I embedded a basic attention check question (for example, which colors appear in the American flag?) into the "proneness" battery. If the participants fail twice to provide the correct answer, they will be excluded from the rest of the survey. Some questions in each sections are composed of reverse wording in which the answers offer different polarities (e.g., differently ordered answers of shame-proneness, guilt-proneness, and externalization).
- Dishonesty in affirming qualifications: Since the study targets ordinary citizens, they are not required to prove any specific qualificiation or accomplishment to participate.
- The non-naivete and familiarity: Thomas and Clifford (2017) find that employing rigorous exclusion methods consistently boosts statistical power without introducing problematic side effects (e.g., substantially biasing the post-exclusion sample), and can thus provide a general solution for dealing with problematic respondents across samples. Same as in dishonesty problem, ordinary citizens are targeted. Additionally, each of the identity batteries compose different exclusion criteria
- Non-credible inferences: Berinsky, Huber and Lenz (2012) and Krupnikov and Levine (2014) indicate that researchers can make credible, generalizable experimental inferences with some confidence via using MTurk. Levay, Freese and Druckman (2016) states that MTurk data can be used to advance research programs, particularly if researchers measure and account for a range of political and demographic variables as needed. Demographics section that includes party identity, race, education, gender, income, and religiosity measures that provide the needed variables.

### 4.2 Survey measures

To test my hypotheses, I will conduct 3-experiments in which I will recruit an equal number of participants in the dyadic sub-identity categories (Gender: men/women, Race: whites/blacks, Party: democrats/republicans). The procedure will be the same in each of these experiments. Participants will complete the same consent form (must be over 18 years of age & wish to participate in the study), demographics section (party identity, race, gender, closeness to these mentioned identities, ideology, education, income, and religiosity), and SCE proneness test.

Based on their selection in the demographics section respective to their identities, participants will be assigned to watch a video. Here, I will use block randomization (for more information, please see Suresh (2011)) in order to balance the sample sizes across treatment and control groups of the same sub-identity (e.g. women in treatment group vs control group). Finally, the participants will answer the out-group bias questions respective to their identity categories and the survey will end.

**Proneness:** All participants will answer the questions that measure shame/guilt proneness in group identity level as in social psychology approach. The Test of Self-Conscious Affect-3 Short Version (TOSCA-3S; Tangney et al. (2000); see Appendix) is composed of 11 scenarios with 3 questions each to measure Shame-proneness, Guilt-proneness, and Externalization. The reason behind choosing this measurement is to evaluate these proneness levels through daily-life scenarios in a self-report manner. <sup>13</sup> Rüsch et al. (2007) and Tangney et al. (2000) indicate that a scenario-based examination provids a significant distinction between shame-proneness and guilt-proneness.

The questionnarie incorporates scenarios one can encounter in daily life followed by several common reactions to those situations. As the participants read each scenario, they will try to imagine themselves in that situation and then indicate how likely they would be to react in each of the ways described. These reactions will be measured in a 5-point likert scale from "not likely" to "very likely" manner.

*Example*: You make plans to meet a friend for lunch. At 5 o'clock you realize you stood him up. You would think:

	Not likely				Very Likely
	(1)				(5)
I'm inconsiderate (shame)	О	0	0	0	0
I should make it up to him as soon as possible $(guilt)$	О	0	0	0	О
My boss distracted me just before lunch ( <i>externalization</i> )	О	0	0	0	О

#### Table 1: An example of the questions from TOSCA-3S survey

<sup>&</sup>lt;sup>13</sup>Externalization is not going to compose the main part of the analysis, however, the data will be collected for an additional analysis.

**Treatment**: The treatment will be conducted by priming individuals via acknowledging their respective identities' transgressions through videos. In order to keep the parsimony in the research, three different identity categories are chosen: *Gender ID* (i.e., Women & Men), *Racial ID* (i.e., Whites & Blacks), and *Partisan ID* (i.e., Democrats & Republicans). For each identity, the overarching theme regarding the wrongdoing is as follows: Domestic violence for gender identity, discrimination for racial identity, and corruption scandal for party identity.

In each experiment, I will use block randomization. First, the participants will be split into two groups by the sub-categories (e.g. Gender ID: 400 Men and 400 Women) assigned through Cloud Research quotas. Then, each of these sub-groups (participant numbers are equal here too) will be randomly assigned to treatment or control groups to watch the short clips. While Treatment groups' videos differ in the content based on the sub-categories (see Table 1 below), Control group participants across all categories will watch the same video that explains the Frigate (Pirate) Birds of Costa Rica.

The videos were acquired from the internet and edited (cut unnecessary informations, shortened to achieve a minute and a half length, etc.) by the author using "Imovie" application. All videos are between 1 minute 20 seconds and 1 minute 30 seconds in length.

Group	Category	Sub-category	Video
Treatment	Gender ID	Women	https://www.youtube.com/watch?v=-4oiBdtPwmQ
		Men	https://www.youtube.com/watch?v=mvecqzEXwYM
	Racial ID	Whites	https://www.youtube.com/watch?v=dVwYLPUXGyc
		Blacks	https://www.youtube.com/watch?v=LGu3H7sPmko
	Party ID	Democrat	https://www.youtube.com/watch?v=VARP_oy1B2M
		Republican	https://www.youtube.com/watch?v=hfAdu6t1THE
Control	Gender ID		
	Racial ID	-	https://www.youtube.com/watch?v=6rc4mFUyMYE
	Party ID		

Table 2: Treatment videos based on each group

After the treatment, each individual will respond a question indicating how much the information provided in the video contradict with their belief or behavior, ranging on scale of not at all (1) to very much (5). I will use this data to compare across and within identity groups in regard to the variance in participants' out-group bias. **Out-group Bias**: The affective polarization levels will be measured by looking at several different factors.

For the Gender and Racial identities, the experiment contains 2 identical matrix type questions with four (empathy related) and five (threat perception) sets of subquestions. First, I utilized Stephan et al. (2002)'s Racial Attitudes Questionnaire / Realistic Threats section. I modified the questions for both identity categories as they would fit to the respective category and end up with 5 questions total from the questionnaire (5-point likert scale from strongly disagree to strongly agree where higher values represent greater animosity towards the "other side").

Additionally, since the lack of empathy is correlated to shame-proneness, I modified Sirin, Valentino and Villalobos (2021)) 4-item Group Empathy Index (GEI) as an alternative measure of the out-group bias by looking at the perspective of individuals and empathic concern scores (5-point likert scale from almost never to almost always where higher values represent greater empathy towards the "other side"). Both categories are composed of 9 questions per each identity group.

For the party identity, I utilized the feeling thermometer, social-distance measures (e.g., gauging how comfortable people are having close friends or neighbors, the use of the word "we" when thinking of the related to the assigned identity etc.) and trust rating as in Druckman and Levendusky (2019) study that are composed of 9 questions total. The survey includes same 5-item scales to measure affective polarization respective to the participants' party identities by varying in the content (e.g., extremely uncomfortable to extremely comfortable, extremely upset to extremely pleased, etc.). The responses indicate that higher values represent greater animosity towards the "other side" with respect to the assigned identities.

**Control Variables**: The demographics section will be used as the control variables of the research. While participants' age (interval/ratio ) is a covariate; their party choice, race, and gender (nominal ), ideology, education, income, and religiosity (ordinal, likert scale) will be independent control variables. Here, two issues has to be clarified.

First, the importance of the control variables in this research hinges upon the moderators. As it was indicated in Hypothesis 3, the literature touches upon the impact of gender and race on Self-Conscious Emotions. Additionally, it is likely that people's experiences through life choices, the culture and they grow up, the families they were born into may have an impact on the variance in their shame-proneness and guilt-proneness. Therefore, I will investigate whether the moderator (SCE) co-vary with the demographics.

Second, the interaction between the treatments and the control variables are tied to each other. As all of the treatment categories (Gender ID, Racial ID, and Party ID) are also a control variable per se, I will take into account the rest of the control variables in each categories (e.g. when the treatment is information on the racial identity, race variable will be excluded from the control variables).

The descriptions, coding, and the information for analysis preparation can be found below:

	Research Design						
Category	Variable	Description	Coding	Preparing for Analysis			
Proneness	Moderator	- The respondents will answer short TOSCA-3S questionnaire - It composes 11 scenarios with 3 questions for each to measure proneness levels of Guilt, Shame, and Externalization (will be analyzed in future studies).	<ul> <li>11 answers will be measured ordinally in a 5-item scale from "not likely(1)" to "very likely(5)"</li> <li>The answers indicate that higher values represent higher shame or guilt proneness.</li> </ul>	<ul> <li>Descriptive statistics will summarize the data.</li> <li>Next, I will use the summated rating scale to find the scores for Shame Self-Talk and Guilt Self-Talk (Alternatively, I plan to conduct a robustness check based on TOSCA-3S scoring guideline as seldom/low, average/medium, and often/high - See appendix).</li> </ul>			
Treatment	IV	<ul> <li>All groups in treatment group will watch a video respective to their identity categories</li> <li>Control group will watch a separate video that is not related to priming their respective identities' transgressions</li> </ul>	<ul> <li>The coding will be measured dichotomously depending on whether they received the treatment.</li> <li>The respondents in Control group will be coded 0, the respondents in treatment group will be coded 1.</li> </ul>	No further preparation is necessary here. - The difference in means (MD) will be conducted later to compare treatment and control groups.			
Out-group Bias	DV	The respondents will answer questions with respect to their identity categories Gender ID, Racial ID, Partisan ID - 9 questions for each	- The measurement is in 5-item scale. The answers indicate that higher values represent greater animosity towards the "other side" (except for empathy values) with respect to the assigned identities.	<ul> <li>Descriptive statistics will summarize the data.</li> <li>Next, I am going to compute a summated rating scale to find out out-group bias scores for each identity categories (and each dependent variables among these categories)</li> </ul>			

## 5 Analysis

To estimate the direct treatment effect and the interaction between the outgroup bias and the treatment, I need to have a satisfactory powered design. To do so, I set the power at 0.80, the p-value at 0.05, and the effect size d at 0.2; hence I need a sample size of 394 per each sub-identity category for being able to detect a small effect. I will recruit 400 people per each category in case of a decrease in the sample size due to any incompletion or any other reasons. Totally, I will have a total sample of 2400 participants (1200 in the treatment groups, 1200 in the control group).

Group	Category	Sub-category	Ν
Treatment	Gender ID	Women	200
		Men	200
	Racial ID	Whites	200
		Blacks	200
	Party ID	Democrat	200
		Republican	200
Control	Gender ID	Women	200
		Men	200
	Racial ID	Whites	200
		Blacks	200
	Party ID	Democrat	200
		Republican	200

Table 3: Sample sizes for each identity category

#### Hypothesis 1

The first model will test the hypothesis that exposure to the information about in-group's part transgression treatment will increase the out-group bias, where "OGB" (Out-group bias) is the summated scale measuring the out-group bias. I will use 3 difference in means (MD) tests to see the effects of treatment videos on individuals' out-group bias compared to the control group one. So, since I have independent samples, I will use two-sample t test in which assume that both samples' variances are equal. The regression model below indicates the general form of the analysis:

$$DV = b_0 + b_1 * Treatment + covariates + \varepsilon_i \tag{6}$$

While the intercept of the equation gives control group's mean, the coefficient shows the difference in means between the treatment group and the control group.

#### Hypothesis 2

The second model will test the hypothesis that exposure to information about in-group's part transgression treatment will increase out-group bias more among shame-prone individuals than guilt-prone individuals. I will use Moderation analysis of the SCE to test the effects of treatment videos (include a different video of in-group transgression for each category: Gender ID, Racial ID, and Party ID) on individuals' out-group bias. To examine whether the treatment effects are moderated by the Self-Conscious Emotions, I will look at the interaction of the moderator (shame - S and guilt - G) with the treatment indicator (X), along with a matrix of demographics covariates. The regression model below indicates the general form of the analysis:

$$DV = b_0 + b_1 * X + b_2 * S + b_3 * X * S + b_4 * G + b_5 * X * G + b_6 * S * G + b_7 * X * S * G + covariates + \varepsilon_i$$
(7)

And, the specific moderator hypotheses for each identity groups are listed below:

In the Gender and Racial identity categories, I created summated rating scales of "empathy" and "threat" variables as dependent variables.

#### Gender ID

- DV= empathy; Moderator = SCE; IV= information (The treatment will decrease empathy towards men/women more among shame-prone individuals than guilt-prone individuals)
- DV= threat perception; Moderator = SCE; IV= information (The treatment will increase threat perception towards men/women more among shame-prone individuals than guilt-prone individuals)

#### Racial ID

- DV= empathy; Moderator = SCE; IV= information (The treatment will decrease empathy towards whites/blacks more among shame-prone individuals than guilt-prone individuals)
- DV= threat perception; Moderator = SCE; IV= information (The treatment will increase threat perception towards whites/blacks more among shame-prone individuals than guilt-prone individuals)

For party identity, I grouped 8 questions under 5 dependent variables: "thermo" as displaying the feeling thermometer questions, "tribalism" for measuring whether they

are truly for their own party or against the other party, "distance" as indicating the related to the social distance measures, "social" as showing their patience level to the people from other party on social media, and "trust" variable for how much they trust to other side:

Party ID

• DV= Thermo; Moderator = SCE; IV= information (The treatment will increase their animosity feeling towards other side more among shame-prone individuals than guilt-prone individuals)

Party = The treatment will increase their animosity feeling towards Democratic Party/Republican Party more among shame-prone individuals than guilt-prone individuals

**Elected officials** = The treatment will increase their animosity feeling towards Democratic Party's elected officials/Republican Party's elected officials more among shame-prone individuals than guilt-prone individuals

**Voters** = The treatment will increase their animosity feeling towards voters of Democratic Party/Republican Party more among shame-prone individuals than guilt-prone individuals

- DV= Tribalism; Moderator = SCE; IV= information (The treatment will increase partisanship and tribal attitudes towards Democrats/Republicans more among shame-prone individuals than guilt-prone individuals)
- DV= Distance; Moderator = SCE; IV= information (The treatment will increase discomfort towards Democrats/Republicans more among shame-prone individuals than guilt-prone individuals)
- DV= Social; Moderator = SCE; IV= information (The treatment will decrease patience on social media towards Democrats/Republicans more among shame-prone individuals than guilt-prone individuals)
- DV= Trust; Moderator = SCE; IV= information (The treatment will decrease trust towards Democrats/Republicans more among shame-prone individuals than guilt-prone individuals)

Lastly, it should be noted that each dependent variable for every identity category will also be examined separately as a robustness check.

#### Hypothesis 3

For H3, I will use the previous Moderation analysis. In Hypothesis 2, I argued that exposure to information about in-group's part transgression treatment will increase out-group bias more among shame-prone individuals than guilt-prone individuals. However, whether this varies across individuals may depend on two important factors: peoples' attachment to their identities and peoples' collective victimhood sensation in those identities. Then, the results beg for a further analysis to investigate whether these two factors also accompanies the relationship between information and the out-group bias across sub-categories. Thus, I expect that those in "offender" groups will give stronger reactions to the treatment than those in the "victim" groups of the same main category. Overall. this hypothesis can also be considered as the "robustness check" of the previous hypothesis where there is any variance across sub-categories. The regression model below indicates the general form of the analysis like in H2:

$$DV = b_0 + b_1 * X + b_2 * S + b_3 * X * S + b_4 * G + b_5 * X * G + b_6 * S * G + b_7 * X * S * G + covariates + \varepsilon_a$$
(8)

The specific moderator hypotheses for each identity are the same as in Hypothesis 2 by comparing across the sub-categories in terms of shame-proneness.

#### Gender ID

• DVs= empathy and threat perception; Moderator = SCE; IV= information (Shame-prone Men in the treatment group will likely have higher scores of outgroup bias than Shame-prone women)

#### Racial ID

• DVs= empathy and threat perception; Moderator = SCE; IV= information (Shame-prone White people in the treatment group will likely have higher scores of outgroup bias than Shame-prone Black people )

#### Party ID

• DVs= all 5 of them; Moderator = SCE; IV= information (Both Shame-prone Democrats and Republicans in the treatment group (those who hold weak party attachments) will likely have similar scores of outgroup bias )

Details of the analysis per each hypothesis is presented below in the table:

	Analysis					
Question	Hyp.	Sampling Plan	Analysis Plan	Related Tests		
Are people always motivated	H1	The study is a 3-sample		Two-sample t test		
to reduce cognitive dissonance		experiment. I will basically	means (MD) to test the			
by bringing their cognitions,		compare the treatment	effects of treatment videos on			
attitudes, or behaviors in line		groups (N= $400^*3$ ) to control	individuals' out-group bias			
with their identities?		groups (N= $400^*3$ )	compared to the control			
(Motivated reasoning)			group one.			
Do our emotions play the same role across individuals	H2	I will compare each identity categories across the	, e	Regression analysis		
in reducing the Cognitive		Treatment and Control				
Dissonance?		groups. (e.g. Gender ID:				
(Motivated Reasoning		400 participants in the				
across different emotions)		Treatment Group and 400	individuals out group blas			
across different emotions)		participats in the Control				
		Group, etc.)				
Do those in "offender" groups	H3	Here, I will compare the	I will use the previous	Regression analysis		
differ in their cognitive		sub-categories. Each	Moderation analysis to			
responses than those in the		subcategory identities in	investigate whether the			
"victim" groups?		the treatment group (e.g.,	party attachment and			
(Victimhood and		200  Men + 200  Women in	victimhood feeling have			
${\bf Attachment\ hypothesis})$		Gender ID) will be compared	an impact on the degree			
		to the control group (e.g.,				
		200  Men + 200  Women in	influence the relationship			
		Gender ID)	between the treatment and			
			the outgroup bias.			

### 5.1 Pilot Study

In the meantime, to see the effectiveness of different treatment videos in the theoretical part, a pilot study was conducted prior to performance of the survey experiment<sup>14</sup>. In the pilot study, 516 individuals have taken the survey and 418 of them successfully completed the study through Qualtrics platform<sup>15</sup> Since the treatment is the IV in the hypothesis, the pilot study answers a crucial question: "Can different videos induce various levels of self-conscious emotions (especially shame to link it to their identities) in respondents as the way it is planned?"

First, consent form and age were asked to ensure respondents who are above 18 years of age willed to participate. Then, participants answered the demographics questions including nationality, favored political party, racial/ethnic group, education level, gender, income level, and the importance of religion in their lives. Based on the answers they provided in their national/party/racial identities, respondents were randomly assigned to one of the sections rather than answering all three identity group questions. After the randomization, they answered questions about their respective identities in each section. Next, they were shown videos about their in-group's transgressions that are explained by experts, scholars or the politicians themselves to stimulate a set of negative emotions regarding to their identity.

Later, I used a similar procedure to PANAS-M developed by Rhodes-Purdy, Navarre and Utych (2021) to capture a respondent's emotional reaction to the treatment. PANAS-M examines a variety of emotions at once by allowing survey-takers to choose which emotions they feel at the moment, then rate the degree of intensity. My altered version of PANAS-M functions in the same way, yet only looks at two types of emotions: the basic negative emotions (anger, disgust, fear, anxiety) and the core self-conscious emotions (embarrassment, pride, shame, guilt). The reason behind this logic is to catch whether the videos trigger respondents to feel the self-conscious emotions over the others.

According to the results, there is no significant distinction across videos in the answers of the participants. Therefore, videos are chosen by the investigator to use in the main experiment.

 $<sup>^{14}\</sup>mathrm{IRB}$  approval (protocol #27265) was obtained on August 18th, 2020.

<sup>&</sup>lt;sup>15</sup>The link to the pilot study can be found here: https://clatemple.az1.qualtrics.com/jfe/ form/SV\_3mbGvmNPNlL1qa9

## 6 Appendix

## 6.1 Full Questionnaire

#### Consent Form

Q1 How old are you? (Dropdown menu)

- Under 18
- 18
- 19
- •••

- 85

- Over 85

Q2 Self-Conscious Emotions Study Informed Consent

Researcher: Adam Ziegfeld, Political Science Department, Temple University

This study involves research. The purpose of this study is to examine the role of Self-Conscious Emotions in how people form their political opinions. What you should know about a research study:

- $\cdot$  You volunteer to be in a research study.
- $\cdot$  Whether you take part is up to you.
- $\cdot$  You can choose not to take part in the study.
- $\cdot$  You can agree to take part now and later change your mind.
- $\cdot$  Whatever you decide, it will not be held against you.
- $\cdot$  Feel free to ask all the questions you want before and after you decide.

 $\cdot$  By agreeing to participate, you are not waiving any of the legal rights that you otherwise would have as a participant in a research study.

 $\cdot$  The estimated duration of your study participation is around 10-12 minutes.

The study procedures consist of watching a video and answering questions on a survey. The reasonably foreseeable risks or discomforts are encountering information that one might encounter in a newspaper. The benefit you will obtain from the research is knowing that you have contributed to the understanding of Self-Conscious Emotions, along with a 1.25 dollars payment. The alternative to participating is not to participate. Please contact the research team with questions, concerns, or complaints about the research and any research-related injuries by e-mailing awz@temple.edu.

This research has been reviewed and approved by the Temple University Institutional Review Board. Please contact them at (215) 707-3390 or e-mail them at: irb@temple.edu for any of the following: questions, concerns, or complaints about the research; questions about your rights; to obtain information; or to offer input.

Confidentiality: Efforts will be made to limit the disclosure of your personal information, including research study records, to people who have a need to review this information. However, the study team cannot promise complete secrecy. For example, although the study team has put in safeguards to protect your information, there is always a potential risk of loss of confidentiality. In particular, the study team will not connect any personal identifying information with the data collected and published results will not include identifying information. There are several organizations that may inspect and copy your information to make sure that the study team is following the rules and regulations regarding research and the protection of human subjects. These organizations include the IRB, Temple University, its affiliates and agents, and Temple University Health System, Inc., its affiliates and agents.

Do you consent to take part in this study?

- Yes, I wish to participate in this study
- No, I do not want to participate in this study

#### **Demographics**

Q1 Generally speaking, do you think of yourself as a ... (People who choose Independent or Other will take the follow up question in the Party ID experiment)

- Democrat
- Republican
- Independent
- Other: (text entry)

Q1.b If you had to choose, do you think of yourself as closer to a ... (People who choose neither will be excluded from the rest of the Party ID experiment)

- Democrat
- Republican
- Neither

Q2 Which of the following do you consider to be your primary racial or ethnic identity? (People who choose Asian, Native Hawaiian or Pacific Islander, American Indian or Alaska Native, Latino, and Other will be excluded from the rest of the Race ID experiment)

- White
- Asian
- Black
- Native Hawaiian or Pacific Islander
- American Indian or Alaska Native
- Latino
- Other

Q3 Which of the following best describes your gender? (People who choose None of the categories offered will be excluded from the rest of the Gender ID experiment)

- Man
- Woman
- None of the categories offered

Q4 How close do you feel to the following groups? By "close" we mean people who are most like you in their ideas, interests, and feelings? [items presented in random order]

- American......Not at all close / Not close / Somewhat close / Very close
- Democrats......Not at all close / Not close / Somewhat close / Very close
- Republicans......Not at all close / Not close / Somewhat close / Very close
- Independents......Not at all close / Not close / Somewhat close / Very close
- Whites......Not at all close / Not close / Somewhat close / Very close
- Blacks......Not at all close / Not close / Somewhat close / Very close
- Men.....Not at all close / Not close / Somewhat close / Very close
- Women......Not at all close / Not close / Somewhat close / Very close
- Non-binary......Not at all close / Not close / Somewhat close / Very close

Q5 Where would you place yourself on this scale?

- Extremely liberal
- Liberal
- Slightly liberal
- Moderate / middle of the road
- Slightly conservative
- Conservative
- Extremely Conservative

Q6 What is the highest level of school you have completed or the highest degree you have received?

- Less than high school
- High school graduate
- Some college
- 2 year degree
- 4 year degree
- Professional degree
- Masters or Doctorate

Q7 Information about income is very important to understand. Would you please give your best guess? Please indicate the answer that includes your entire household income in (previous year) before taxes.

- Less than 10,000
- 10,000 19,999
- 20,000 39,999

- 40,000 59,999
- 60,000 79,999
- 80,000 99,999
- 100,000 149,999
- More than 150,000

Q8 How important is religion in your life? (whichever religion you practice)

- Not at all
- Slightly
- Moderately
- Mostly
- Extremely

### Test of Self-Conscious Affect, Version 3 (TOSCA-3S)<sup>16</sup><sup>17</sup>

Below are situations that people are likely to encounter in day-to-day life, followed by several common reactions to those situations. As you read each scenario, try to imagine yourself in that situation. Then indicate how likely you would be to react in each of the ways described. We ask you to rate all responses because people may feel or react more than one way to the same situation, or they may react different ways at different times.

not likely

1.2...3...4...5

1...2...3...4...5

1...2...3...4...5

very likely

For example:

A. You wake up early one Saturday morning. It is cold and rainy outside.

- a. You would telephone a friend to catch up on news.
- **b.** You would take the extra time to read the paper.
- c. You would feel disappointed that it's raining.
- d. You would wonder why you woke up so early.

In the above example, I've rated ALL of the answers by circling a number. I circled a "1" for answer (a) because I wouldn't want to wake up a friend very early on a Saturday morning – so it's not at all likely that I would do that. I circled a "5" for answer (b) because I almost always read the paper if I have time in the morning (very likely). I circled a "3" for answer (c) because for me it's about half and half. Sometimes I would be disappointed about the rain and sometimes I wouldn't – it would depend on what I had planned. And I circled a "4" for answer (d) because I would probably wonder why I had awakened so early.

Please do not skip any items – rate all responses.

<sup>&</sup>lt;sup>16</sup>Developed by Tangney et al. (1989).

<sup>&</sup>lt;sup>17</sup>The letters in parantheses indicate the following: E = Externalization, D = Detachment, G = Guilt, S = Shame. In the experiment, these letters will not be shown to the participants

1. You make plans to meet a friend for lunch. At 5 o'clock, you realize you stood him up. You would think:

- a) I'm inconsiderate (S)
- b) I should make it up to him as soon as possible. (G)
- c) My boss distracted me just before lunch (E)

2. You break something at work and then hide it. You would think:

a) This is making me anxious. I need to either fix it or get someone else to (G)

b) I should quit. (S)

c) A lot of things aren't made very well these days. (E)

3. At work, you wait until the last minute to plan a project, and it turns out badly. You would think:

a) I feel incompetent. (S)

b) There are never enough hours in the day. (E)

c) I deserve to be reprimanded for mismanaging the project. (G)

4. You make a mistake at work and find out a co-worker is blamed for the error. You would think:

a) The company did not like the co-worker. (E)

- b) I should be quiet and avoid the co-worker. (S)
- c) I am unhappy and eager to correct the situation. (G)

5. While playing around, you throw a ball and it hits your friend in the face. You would think:

a) I feel inadequate that I can't even throw a ball. (S)

- b) My friend needs more practice at catching. (E)
- c) I should apologize and make sure my friend feels better. (G)

#### Attention Check: Which colors appear in the American flag?

- a) Red Yellow Green
- b) Red White Blue
- c) Red White Black
  - 1st time wrong answer: BE CAREFUL! You read the previous question too quickly. Please re-read the question: Which colors appear in the American flag? This is another reminder that you need to re-read the question carefully.
  - 2nd time wrong answer: End of survey.
  - Correct answer: Continue to the next question.

6. You are driving down the road, and you hit a small animal. You would think:

- a) The animal shouldn't have been on the road. (E)
- b) I'm terrible. (S)

c) I feel bad and I hadn't been more alert driving down the road. (G)

7. You walk out of an exam thinking you did extremely well. Then you find out you did poorly. You would think:

a) The instructor doesn't like me. (E)

b) I should have studied harder. (G)

c) I feel stupid. (S)

8. While out with a group of friends, you make fun of a friend who's not there. You would think:

- a) I feel small...like a rat. (S)
- b) Perhaps that friend should have been here to defend himself/herself. (E)
- c) I should apologize and talk about that person's good points. (G)

9. You make a big mistake on an important project at work. People were depending on you, and your boss criticizes you. You would think:

a) My boss should have been clearer about what was expected of me. (E)

b) I feel like I want to hide. (S)

c) I should have recognized the problem and done a better job. (G)

10. You are taking care of your friend's dog while they are on vacation and the dog runs away. You would think:

a) I am irresponsible and incompetent. (S)

b) My friend mustn't take very good care of their dog or it wouldn't have run away. (E)

c) I promise to be more careful next time. (G)

11. You attend your co-worker's housewarming party and you spill red wine on their new cream-colored carpet, but you think no one notices. You would think:

a) I should stay late to help clean up the stain after the party. (G)

b) I wish I were anywhere but at the party. (S)

c) I wonder why my co-worker chose to serve red wine with the new light carpet. (E)

#### Scoring

Category	Score	Recode
Shame-proneness Guilt-proneness Externalization of the blame	0–55	Summated rating scale

Alternative scoring table for the TOSCA-3S, adapted and modified from Tangney et al. (2000)

Group	Category	Score	Result	Recode
Men	Shame-talk	0-24	Seldom/Low	1
	Guilt-talk	0-38		
	Blaming Others	0-21		
	Shame-talk	25-32	Average/Medium	2
	Guilt-talk	39-45		
	Blaming Others	22-28		
	Shame-talk	33-55	Often/High	3
	Guilt-talk	46-55		
	Blaming Others	29-55		
Women Shame-talk		0-26	Seldom/Low	1
	Guilt-talk			
	Blaming Others			
Shame-talk		27-35	Average/Medium	2
	Guilt-talk	43-48		
	Blaming Others	21-28		
	Shame-talk		Often/High	3
	Guilt-talk	49-55		
	Blaming Others	29-55		

Table 5: Alternative scoring table for the TOSCA-3S

### **Treatment Videos**

Please watch the video below and think about your  $\dots ~({\rm Gender} \ / \ {\rm Racial} \ / \ {\rm Party})$  identity.

Then hit the next button.

Group	Category	Sub-category	Video
Treatment	Gender ID	Women	https://www.youtube.com/watch?v=-4oiBdtPwmQ
		Men	https://www.youtube.com/watch?v=mvecqzEXwYM
	Racial ID	Whites	https://www.youtube.com/watch?v=dVwYLPUXGyc
		Blacks	https://www.youtube.com/watch?v=LGu3H7sPmko
	Party ID	Democrats	https://www.youtube.com/watch?v=VARP_oy1B2M
		Republicans	https://www.youtube.com/watch?v=hfAdu6t1THE
Control	Gender ID	-	
	Racial ID	-	https://www.youtube.com/watch?v=6rc4mFUyMYE
	Party ID	-	

Table 6: Treatment videos based on each group

### Cognitive Dissonance

Q1. How much does the information provided in the video contradict with your belief or behavior?

- Not at all
- Only a little
- To some extent
- Rather much
- Very much

#### Affective Polarization Battery

Gender ID

**Note:** "..(g)..." represents the gender choice selected in the demographics section; "...(og)..." represents the other gender that wasn't selected.

Q1a "...(og)..." hold too many positions of power and responsibility, hence dominate American politics more than they should

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1b When "...(og)..." are in positions of authority, they discriminate against "...(g)..." in hiring decisions

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1c Too much money is spent on healthcare, childcare, and educational programs that benefit specifically "...(og)...".

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1d Public service agencies (tax, court, electricity, etc.) is more lenient on "...(og)..." than on "...(g)..".

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1e "...(og)..." have more economic and political power than they deserve in this country.

- Strongly disagree
- Disagree
- Neither agree nor disagree

- Agree

- Strongly agree

Q2a How often would you say you try to better understand "...(og)..." by imagining how things look from their perspective?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Q2b Before criticizing "...(og)...", how often do you try to imagine how you would feel if you were in their place?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Q2c How often would you say that you have tender, concerned feelings for "...(og)..." who are less fortunate than you?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Q2d When you see "...(og)..." being taken advantage of due to their gender, how often do you feel protective toward them?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

 $Racial \ ID$ 

**Note:** "..(r)..." represents the gender choice selected in the demographics section; "...(or)..." represents the other gender that wasn't selected.

Q1a "...(or)..." hold too many positions of power and responsibility, hence dominate American politics more than they should

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1b When "...(or)..." are in positions of authority, they discriminate against "...(r)..." in hiring decisions

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1c Too much money is spent on healthcare, childcare, and educational programs that benefit specifically "...(or)...".

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1d Public service agencies (tax, court, electricity, etc.) is more lenient on "...(or)..." than on "...(r)..".

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q1e "...(or)..." have more economic and political power than they deserve in this country.

- Strongly disagree
- Disagree
- Neither agree nor disagree
- Agree
- Strongly agree

Q2a How often would you say you try to better understand "...(or)..." by imagining how things look from their perspective?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Q2b Before criticizing "...(or)...", how often do you try to imagine how you would feel if you were in their place?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Q2c How often would you say that you have tender, concerned feelings for "...(or)..." who are less fortunate than you?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Q2d When you see "...(or)..." being taken advantage of due to their gender, how often do you feel protective toward them?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

Party ID

**Note:** "..(p)..." represents the party choice selected in the demographics section; "...(op)..." represents the other party that wasn't selected.

Q1 We'd like you to rate how you feel towards towards some groups on a scale of 0 to 100, which we call a "feeling thermometer". On this feeling thermometer scale;

- Ratings **between 0 and 49 degrees** mean that you feel unfavorable and cold (with 0 being the most unfavorable/coldest),

- Ratings **between 51 and 100 degrees** mean that you feel favorable and warm (with 100 being the most favorable/warmest),

- A rating of 50 degrees means you have no feelings one way or the other.

How would you rate your feeling toward; (Please move the sliders to your desired rating)

- Democratic Party......0 / 10 / 20 ..... 80 / 90 / 100
- Republican Party......0 / 10 / 20 ...... 80 / 90 / 100

- Elected Democratic Party Officials......0 / 10 / 20 ..... 80 / 90 / 100

- Elected Republican Party Officials......0 / 10 / 20 ..... 80 / 90 / 100
- Voters of Democratic Party......0 / 10 / 20 ..... 80 / 90 / 100
- Voters of Republican Party......0 / 10 / 20 ...... 80 / 90 / 100

Q2a When talking about "..(p).."s, how often do you use "we" instead of "they"? - Never

- Rarely
- Sometimes
- Mostly
- Always

Q2b Would you say that you are a "..(p).." because you are for what your party represents, or are you more against what "..(op).."s represent?

- Definitely for what "..(p).."s represent
- Somewhat for what "..(p).."s represent
- Neither for nor against these parties
- Somewhat against what "..(op).."s represent
- Definitely against what "..(op)..."s represent

Q3a How comfortable are you having close personal friends who are "..(op).."?

- Extremely comfortable
- Somewhat comfortable
- Neither comfortable nor uncomfortable

- Somewhat uncomfortable
- Extremely uncomfortable

Q3b How comfortable are you having neighbors on your street who are "..(op).."?

- Extremely comfortable
- Somewhat comfortable
- Neither comfortable nor uncomfortable
- Somewhat uncomfortable
- Extremely uncomfortable

Q3c Suppose a son or daughter of yours was getting married. How would you feel if he or she married someone who is a "..(op).."?

- Extremely happy
- Somewhat happy
- Neither happy nor unhappy
- Somewhat unhappy
- Extremely unhappy

Q4 Would you say that you would unfollow/unfriend a "..(op).." friend on social media because of his/her politics related posts?

- Definitely will not
- Probably will not
- Might or might not
- Probably will
- Definitely will

Q5 How much of the time do you think you can trust a "..(op).." to do what is right for the country?

- Almost never
- Once in a while
- Sometimes
- Most of the time
- Almost always

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