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Making Us Look Bad vs. Making Us Uncertain:

Examining the Motivations Underlying Derogation of Ingroup Deviants

by

Mark J. Rinella

Claremont Graduate University

2020

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APPROVAL OF THE REVIEW COMMITTEE

This dissertation has been duly read, reviewed, and critiqued by the Committee listed below, which hereby approves the manuscript of Mark J. Rinella as fulfilling the scope and quality requirements for meriting the degree of Doctor of Philosophy in Psychology.

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Abstract

Making Us Look Bad vs. Making Us Uncertain: Examining the Motivations Underlying

Derogation of Ingroup Deviants

by

Mark J. Rinella

Claremont Graduate University: 2020

Subjective group dynamics theory posits that groups favorably evaluate normative members and derogate deviant members to restore or maintain the subjective validity of their group's norms. Research supports this explanation; however, the pattern of evaluations differs depending on how deviants are defined. Some research has defined deviants as group members who violate generic, socially valued prescriptions (generic norm deviants), while other research has defined deviants as members who diverge from specific group defining norms (oppositional norm deviants). This dissertation proposes that two different social identity motives—self-esteem and uncertainty reduction—underlie the derogation of these different types of group deviants. Specifically, it was predicted that self-esteem is the primary motivation for the derogation of generic norm deviants, whereas, uncertainty reduction is the primary motive behind the derogation of oppositional norm deviants. Study 1 (N = 212) primed workers from Amazon's Mechanical Turk (MTurk) to focus on either self-esteem or uncertainty reduction before having them evaluate two targets, one socially desirable and one socially undesirable, from either the ingroup or an outgroup. Study 2 (N = 234) replicated the design of Study 1 but had MTurk workers evaluate three ingroup or outgroup targets who held varying positions (normative, antinorm, pronorm) on a group defining norm. Study 3 (N = 385) crossed the different types of norms from the first two studies. Again, MTurk workers were primed to focus on either self-esteem or uncertainty reduction before they

evaluated a single ingroup target who was portrayed as either desirable or undesirable, and as holding either a normative, antinorm, or pronorm position on a group relevant norm. The results were mixed across the three studies. Study 1 found some support for the prediction that participants would evaluate desirable ingroup members more positively, and undesirable ingroup members more negatively, when they were focused on self-esteem compared to uncertainty reduction. Study 2 showed that ingroup antinorm targets were evaluated more negatively than other ingroup targets, whereas outgroup antinorm targets were evaluated more positively than other outgroup targets. However, this effect did not differ as a result of the identity motive participants were primed with. Study 3 found that desirable antinorm targets were tolerated more by participants focused on the self-esteem motive than those focused on uncertainty reduction. Yet, no support was found for the prediction that undesirable normative members would be tolerated more by participants primed with uncertainty reduction than by those primed with selfesteem. These findings suggest that the derogation of generic norm deviants is primarily motivated by self-esteem concerns, and they provide further insight into the motivations underlying the derogation of ingroup deviants.

Dedication

This dissertation is dedicated to my family, especially my parents. Thank you for your unfailing belief and support. This would not have been possible without you.

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I would first like to thank my committee members. Dr. Michael A. Hogg has been an exemplary advisor, mentor, and collaborator. He has shaped me into the scholar and researcher that I am today, and I am grateful for all that he has taught me. Dr. William D. Crano and Dr. Jason T. Siegel have provided me with invaluable feedback on numerous projects and have helped me to improve as a researcher.

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CHAPTER 1

Literature Review

It is difficult to imagine a world in which people do not conform to others or follow group norms and cultural practices. Such a world would be characterized by constant disagreement and conflict, making it difficult for anything to be accomplished. Conversely, it is difficult to envision a world in which conformity to the group and wider social norms is absolute. The nature of this world would be static, deprived of any social innovation or change.

Understanding this tension between conformity and deviance has been a key academic focus of the behavioral, social, and political sciences.

Social psychology is no exception (Hogg, 2010; Jetten & Hornsey, 2011; Turner, 1991). Social psychological research has long been interested in the pressure groups place on their members to conform (e.g., Asch, 1951; Festinger, 1950). However, more recently, research has begun examining deviance—a violation of group norms—by group members (e.g., Hogg, Fielding & Darley 2005; for review, see Jetten & Hornsey, 2014). Deviance can serve important functions in a group including introducing alternative ways of thinking or behaving, and leading the group in new directions (Abrams, Randsley de Moura, Marques, & Hutchison, 2008; Abrams, Randsley de Moura, & Travaglino, 2013). Additionally, group members' reactions to deviant members (e.g., acceptance vs. punishment, inclusion vs. exclusion) are important for determining the boundaries of acceptable thought and behavior within groups (Coser, 1962; Dentler & Erikson, 1959).

Therefore, two issues that have received a great deal of attention are 1) how people who deviate from their group's norms are perceived and treated by members of their group and 2) why they are treated this way (Jetten & Hornsey, 2014; Levine, 1989; Levine & Kerr, 2007;

Marques, Paez, & Abrams, 1998). However, questions remain about the motivations for how different types of deviants are treated, as well as when deviants are most likely to be tolerated by the group.

The purpose of this dissertation is to examine the role of two social identity motives—self-esteem and uncertainty reduction—in subjective group dynamics processes, specifically, deviant derogation. The review in this chapter begins with a brief overview of social identity theory (Tajfel & Turner; 1979, 1986; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987) and the two key social identity motives. This is followed by a review of subjective group dynamics theory (SGDT; Marques et al., 1998) and its relevant research. Next, the relationship of each social identity motive to deviant derogation is discussed. Finally, three experiments are outlined to test the hypothesized relationships presented throughout the review.

Social Identity Theory, Self-Esteem, and Uncertainty Reduction

According to social identity theory (Tajfel & Turner, 1979, 1986; Turner et al., 1987; see Abrams & Hogg, 2010; Hogg, 2018), individuals derive an important part of their self-concept—their social identity—from the groups with which they identify. Self-categorization theory (Turner et al., 1987), the cognitive component of social identity theory, further explains the processes involved in group identification. Specifically, people cognitively represent a group in terms of a *prototype*—a fuzzy set of attributes (e.g., attitudes, thoughts, behaviors) that maximizes both intragroup similarities and intergroup differences.

When individuals categorize themselves into a group, they engage in a process of *depersonalization*: they begin to define themselves based on the group's prototype. In other words, there is a shift from an individual sense of self to a group-based, or collective sense of self. Because the self is defined by group membership, people desire social identities that are

both positive and distinct (Hogg, 2018; Tajfel & Turner, 1986; Turner et al., 1987). This desire describes two social identity motives—self-esteem and uncertainty reduction—that underlie the majority of social identity processes.

Self-Esteem

The first social identity motive relates to self-esteem (Abrams & Hogg, 1998)—people's desire to establish and maintain a positive self-concept (Aronson, 2007; Baumeister, 1993).

Because group memberships make up an important part of a person's self-concept, people want to have a positive view of the groups with which they identify. One way this is achieved is by making favorable comparisons with relevant outgroups (Tajfel & Turner, 1979, 1986).

The need to achieve and maintain a positive social identity is well established in the social identity literature. For example, studies using the minimal group paradigm have shown that individuals display ingroup favoritism even when categorizations are based on arbitrary criteria (Tajfel, 1970; Tajfel, Billig, Bundy, & Flament, 1971). Moreover, a plethora of research has examined the various strategies group members use to deal with negative or threatened social identity (see Ellemers, 1993; Ellemers, Spears, & Doosje, 2002).

Uncertainty Reduction

The second key social identity motive is uncertainty reduction. According to Hardin and Higgins (1996), the validity and reliability of people's experiences depends on the degree to which their experiences are shared and verified by others. The more an experience is consensually verified, the more it is regarded as a valid representation of objective reality. Similarly, uncertainty-identity theory (Hogg, 2007, 2012, 2015, in press) states that there is a fundamental human motivation to reduce feelings of uncertainty, especially uncertainty regarding one's self-concept. Moreover, identification with groups effectively reduces

uncertainty because group prototypes prescribe how group members should think, feel, and behave. Research has consistently supported these assertions (Grieve & Hogg, 1999; Mullin & Hogg, 1998; for meta-analysis, see Choi & Hogg, in press).

Research has also demonstrated that highly entitative groups—those characterized by a clear structure, homogenous membership, distinct boundaries, shared goals, and common fate—reduce uncertainty most effectively (Hogg, Sherman, Dierselhuis, & Maitner, 2007; Sherman, Hogg, & Maitner, 2009). This occurs because these groups tend to have a high degree of consensus around group norms, which validates the individual members' experiences and reduces uncertainty. In addition, highly entitative groups have distinct intergroup boundaries that provide a sense of certainty about what the ingroup stands for relative to the outgroup.

In conclusion, the processes of identification and depersonalization lead people to define themselves in terms of a salient group membership. Individuals are therefore motivated to achieve and maintain social identities that are both positive (i.e., serve as a source of esteem for the individual) and distinct (i.e., effectively reduce uncertainty). These two motives underlie many group and intergroup behaviors.

Subjective Group Dynamics Theory

According to the SGDT (Marques et al., 1998), individuals differentiate members within groups based on prescriptive norms—those norms that prescribe the attitudes, values, and behaviors that are expected of group members. Distinguishing between group members who conform to prescriptive ingroup norms and group members who do not allows individuals to upgrade the former relative to the latter. This dynamic intragroup process establishes and maintains intergroup differences by creating a perceived consensus around the ingroup's prescriptive norms, thus subjectively validating those norms (Abrams, Palmer, Rutland,

Cameron, & Van de Vyer, 2014; Frings, Hurst, Cleveland, Blascovich, & Abrams, 2012; Marques, Abrams, & Serodio, 2001). Research on the SGDT has varied in terms of how deviants are defined (i.e., the type of norm on which group members are being evaluated). Additionally, the pattern of evaluations of deviant and normative members differs depending on the type of norm being used (Abrams et al., 2014).

Deviations from Generic Norms

Much of the SGDT research has operationalized deviants as group members who violate a generic prescriptive norm. Generic norms are conceptualized as general or societal norms (e.g., respectfulness, honesty), and they apply to both ingroup and outgroup members in an intergroup context (Abrams, 2012; Abrams et al., 2014). Therefore, they do not allow for categorization of group membership; an individual cannot be reliably categorized as an ingroup or outgroup member based exclusively on how socially desirable or undesirable he or she is (i.e., they are not descriptive).

Although generic norms do not provide a reliable basis for categorization, ingroup and outgroup members are evaluated differently based on their adherence to these norms. Specifically, research has consistently demonstrated that normative ingroup members are evaluated more positively than normative outgroup members, and deviant ingroup members are evaluated more negatively than deviant outgroup members (Marques et al., 2001; Marques, Yzerbyt, & Leyens, 1988). This pattern of ingroup extremity—a greater evaluative difference between normative and deviant ingroup members relative to the difference between normative and deviant outgroup members—is known as the black sheep effect (BSE; Marques & Paez, 1994; Marques et al., 1988).

Deviations from Oppositional Norms

Other SGDT research has operationalized deviants in terms of their adherence to oppositional norms. Oppositional norms occur when an ingroup and an outgroup hold competing norms, and acceptance of one group's norm indicates rejection of the other group's norm (Abrams 2012; Abrams et al., 2014). Therefore, oppositional norms can be considered both descriptive (i.e., they are characteristic of a specific group membership in an intergroup context), as well as prescriptive. Oppositional norms also differ from generic prescriptive norms in that members can deviate from their group's norm in two directions. Individuals who reject their group's norm and deviate toward the normative position of the outgroup are referred to as antinorm deviants; whereas, people who deviate away from an outgroup and hold a more extreme position than the typical member of their group are known as pronorm deviants (Abrams, Marques, Bown, & Dougill, 2002; Abrams, Marques, Bown, & Henson, 2000).

Importantly, when oppositional norms are salient, the process of differentiating members within a group generates a pattern of results that is distinct from that of the BSE. In these instances, a crossover-effect typically emerges in which ingroup normative members and outgroup antinorm deviants are preferred relative to outgroup normative members and ingroup antinorm deviants (Abrams et al., 2002; Abrams et al., 2014; Hichy, Mari, & Capozza, 2008). That is, outgroup members who deviate toward the ingroup's normative position are preferred over ingroup members who deviate toward the outgroup's normative position.

In sum, the SGDT states that ingroup deviants are derogated as a way of maintaining or restoring the subjective validity of the ingroup's prescriptive norms. However, research on these processes has found that the patterns of evaluation of ingroup and outgroup targets differ depending on how deviants are defined (e.g., deviating from a generic norm vs. an oppositional

norm). One possible explanation for these different patterns of results is that the primary underlying motivation for derogating each type of deviant is different.

Motivations for Derogating Generic Norm and Oppositional Norm Deviants

Derogation of generic norm deviants may be primarily motivated by the self-esteem motive. Because self-categorization leads people to define themselves and others in terms of the framework of the group, the value of their self-image becomes more interdependent with the other members of their group. This relates to the violation of generic norms and the BSE because an ingroup member who conforms to generic, socially valued norms validates one's positive image of the group and, thus, the self. In contrast, an ingroup member who deviates from these norms threatens the positive image of the group, and in turn threatens one's positive view of the self. Desirable and undesirable outgroup members are evaluated more homogenously because they do not directly impact one's self-concept.

Research is consistent with this theorizing. For example, ingroup members who violate generic norms have been shown to threaten the positivity of group members' self-concept (Chekroun & Nugier, 2011; Eidelman & Biernat, 2003). Similarly, some BSE research has demonstrated that the derogation of deviant ingroup members is greatest when the group's status or superiority is in question (Branscombe, Wann, Noel, & Coleman, 1993; Marques et al., 2001). Hutchison, Abrams, Gutierrez, & Viki (2008) that deviant derogation serves to protect or restore the positive image of the group. These researchers found that higher ingroup identification was related to more negative evaluations (and possible exclusion) of an undesirable ingroup member; in turn, negative evaluations of the undesirable group member predicted a more positive stereotype of the group.

Rather than self-esteem concerns, the derogation of oppositional norm deviants may be primarily motivated by the uncertainty reduction motive. Although there is no research directly testing oppositional norm deviants' effect on uncertainty, some of the findings from SGDT research can be interpreted through this lens. For example, research has found that the direction of deviance has important implications for derogation (Abrams, Randsley de Moura, Hutchison, & Viki, 2005; Hogg et al., 2005). Specifically, pronorm deviants are evaluated more favorably and seen as more typical of the ingroup than antinorm deviants, even when the degree of deviation from the norm is equal (Abrams et al., 2002; Abrams et al., 2000). From an uncertainty reduction perspective, both types of deviants create uncertainty by reducing the consensus around the group norm. However, antinorm deviants are derogated more harshly because they also blur intergroup boundaries and reduce distinctiveness.

As previously mentioned, highly entitative groups reduce uncertainty most effectively because they provide a high degree of consensus and distinct intergroup boundaries (Hogg et al., 2007; Sherman et al., 2009). When engaging in intragroup differentiation to subjectively validate the norms of the group, individuals likely consider the degree to which ingroup and outgroup members consensually verify the normative position of the ingroup, relative to other members of their respective groups. Relative to normative ingroup members, both pronorm and antinorm ingroup deviants decrease the consensus around the ingroup norm. However, antinorm ingroup deviants may be perceived as blurring intergroup boundaries and validating the outgroup's norm, whereas pronorm ingroup deviants do not. While antinorm outgroup deviants also reduce intergroup distinctiveness, they increase consensus around the ingroup norm relative to normative and pronorm outgroup members.

The Current Research

Three studies were designed to test the general hypothesis that different social identity motives underlie the derogation of different types of ingroup deviants. Specifically, these studies assessed if the derogation of generic norm deviants is primarily motivated by self-esteem concerns, whereas the derogation of oppositional norm deviants is primarily motivated by uncertainty reduction. The final study also examined how these different motives influence the conditions under which groups are most likely to derogate versus tolerate deviant group members. In all three studies, participants were primed to focus on their group's positive image (i.e., self-esteem motive) or consensus around a group relevant norm (i.e., uncertainty reduction motive).

Study 1 sought to replicate previous research on generic norm deviants and the BSE, while demonstrating that this effect is enhanced when people are focused on the self-esteem compared to uncertainty reduction. Study 2 attempted to replicate SGDT research on oppositional norm deviants and examine if those effects are stronger when individuals are focused on uncertainty reduction compared to self-esteem. Study 3 focused only on ingroup targets and crossed the two types of norms (e.g., desirable-antinorm, undesirable-normative, etc.) to investigate when ingroup deviants are most likely to be derogated versus tolerated.

CHAPTER 2

Study 1

Study 1 tested whether self-esteem is the primary motivation behind the derogation of group members who violate generic prescriptive norms. Workers from Amazon's Mechancial Turk (MTurk)—a crowdsourcing website for data collection—were primed to focus either on the positivity of their group or the certainty of their group image. Participants then read about and evaluated either two ingroup (MTurk workers) or two outgroup (office workers) targets. One target was socially desirable (i.e., generic norm normative) and one was socially undesirable (i.e., generic norm deviant). Target evaluations were the main dependent variables, which included attractiveness, target typicality of their respective group, group image conveyed by the target, and perceived similarity of the target to the self. Attractiveness of the ingroup was also measured as a dependent variable following the target evaluations.

Study 1 examined if the self-esteem motive was the primary motivation underlying the BSE. Specifically, it was predicted that participants focused on the self-esteem motive would evaluate desirable ingroup targets more positively and undesirable ingroup targets more negatively than those focused on uncertainty reduction (H1a). Similarly, it was hypothesized that participants primed with the self-esteem motive would rate the ingroup more positively following the evaluation of ingroup targets than would those primed with uncertainty reduction (H1b). Prior to Study 1, two pilot studies were conducted to create the materials that would be used throughout the main studies.

Pilot Testing and Material Generation

In the first pilot study, MTurk workers were asked to either list three negative evaluations others have of their group or three issues on which MTurk workers disagree and are the most

divided. Participants' responses regarding others' negative evaluations of their group included themes such as MTurk workers being unintelligent, dishonest, careless, unsociable, and unskilled. Responses regarding issues on which MTurk workers were divided indicated that fair payment was a divisive issue, as 17 of the 20 respondents mentioned pay rate at least once. The second pilot study asked MTurk workers to indicate what they felt was the average cents per minute that MTurk workers should be paid for a HIT. Consistent with the responses from the first pilot study, there was a large amount of variability. However, the mode and the median of the responses was 20 cents per minute, and the average was approximately 20 cents per minute after accounting for outliers.

The data from the first pilot study were used to create vignettes intended to undermine, and thus prime, a specific social identity motive. One prime aimed to focus participants on the self-esteem motive by undermining MTurk workers' positive image of their group. The other prime was intended to focus participants on the uncertainty reduction motive by undermining the consensus around the group's norm on a relevant issue. A variation of these primes was used in each of the three studies. Additionally, target descriptions for all three studies were created based on the pilot data.

Methods

Participants and Design

Study 1 was a 2 (identity motive: self-esteem vs. uncertainty reduction) by 2 (group membership of the target: ingroup vs. outgroup) by 2 (generic norm position: socially desirable, socially undesirable) mixed design. Identity motive and group membership were between-subject factors, while generic norm position was a within-subject factor. Identity centrality was measured as a possible covariate. An a priori power analysis was conducted using G-Power 3.1 determined

that a minimum sample of 164 participants was needed to be able to detect a small to medium effect ($f_2 = .15$, $\alpha = .05$, Power = .90) for this mixed design. More than 164 were recruited to account for potential dropout.

A total of 242 participants were recruited through TurkPrime, an extension of MTurk. Research on MTurk as a source for data collection suggests that data from MTurk is comparable, or better, to data obtained from traditional sampling sources (e.g., Hauser & Schwarz, 2016; Paolacci & Chandler, 2014). Participants were removed from the sample if they responded incorrectly to the attention check (n = 6), took more than 30 minutes or less than 2 minutes to complete the study (n = 13), or were multivariate outliers (n = 11). The final sample (N = 212, $M_{Age} = 39.72$, $SD_{Age} = 12.74$) was evenly split among gender (49.1% female) and predominantly White (76.9%).

Procedure and Measures

Those who consented to the study (Appendix A) were told that the purpose of the study was to understand how motivation influences perception and impression formation. Participants began by completing an identity centrality measure regarding their identity as an MTurk worker (Appendix B). Next, they were randomly assigned to receive one of two possible vignettes, each intended to prime a specific social identity motive (self-esteem vs. uncertainty reduction). The primes were followed by an attention check that asked about the topic of the information presented (Appendix C). Participants were then randomly assigned to read about and evaluate either two ingroup (MTurk workers) or two outgroup (office workers) targets. In both instances, participants read about one socially desirable and one socially undesirable target presented in a counterbalanced order (Appendix D).

Following each description, targets were evaluated in terms attractiveness, typicality of their group, image they conveyed of their group, and similarity to the participants (Appendix E). Participants then evaluated MTurk workers as a whole (Appendix F), before completing several demographic items (Appendix G) and being debriefed about the nature of the study (Appendix H).

Identity centrality. The centrality of participants' identity as MTurk workers was measured using six items adapted from previous social identity research (Grant, Hogg, & Crano, 2015; Hogg, Meehan, & Farquharson, 2010; Rast, Hacket, Alabastro, & Hogg, 2015). The scale included items such as "How important is being an MTurk worker to you?" and "How often are you aware of being an MTurk worker?," 1 *not at all*, 9 *very much*.

Target evaluations. Target attractiveness was measured using a series of nine-point bipolar scales: cold-warm, unfriendly-friendly, dishonest-honest, inconsiderate-considerate, unreliable-reliable, irresponsible-responsible, not respected-well respected, incapable-capable. The following items were used to measure the target's typicality their respective group, the type of image a target conveyed of their group, and how similar participants felt a target was to themselves, respectively: "How typical of an MTurk worker [office worker] do you feel this individual is?," 1 not typical, 9 very typical; "What type of image of MTurk workers [office workers] do you feel this individual conveys?," 1 very bad, 9 very good; "How similar do you feel you are to this individual?," 1 not at all, 9 very similar. These evaluation measures were adapted from previous BSE and SGDT research (Abrams et al., 2002; Abrams et al., 2000; Hutchison et al., 2008; Marques et al., 1988)

Group attractiveness. Participants' perceptions of MTurk workers as a group were measured with the same bipolar items used to evaluate target attractiveness. An additional single

item asked, "What is your overall feeling toward MTurk workers?," 1 very negative, 9 very positive.

Demographics and debriefing. Participants reported their age, gender, and ethnicity before being debriefed about the full nature of the study and completing a re-consenting to allow their responses to be used.

Results

Scale Assessment, Variable Creation, and Demographic Analysis

Three exploratory factor analyses with oblimin rotations were conducted on the multiitem scales: desirable target attractiveness, undesirable target attractiveness, and group
attractiveness. One-factor solutions emerged for each set of items. For the desirable target
attractiveness items, a single factor explained 67.47% (Eigenvalue = 5.40), and all factor
loadings were above .78. For the undesirable target attractiveness items, one factor explained
62.25% (Eigenvalue = 4.98) of the variance, with all factor loadings above .64. For the nineitems assessing attractiveness of the ingroup, a single factor explained 68.70% (Eigenvalue =
6.18) of the variance; all factor loadings were above .69.

A univariate analysis of the variables indicated that evaluations of target attractiveness, image conveyed by the target, and similarity of the target to the self were all non-normally distributed, with skewness ranging from -1.15 (SE = .17) to 3.07 (SE = .17) and kurtosis ranging from .90 (SE = .33) to 10.88 (SE = .33). Because the hypotheses could be tested based on the magnitude of evaluative differences between the two targets, difference scores were computed for each of the target evaluation measures. Ratings of the undesirable target were subtracted from those of the desirable target, with larger positive scores indicating more positive evaluations of

the desirable target and more negative evaluations of the undesirable target. The maximum possible difference score was 8.

However, the difference scores for attractiveness, image, and similarity were still non-normally distributed. Several transformations were considered, but none could get all three variables to meet the assumption of normality. Therefore, the difference scores for these three outcomes were split into binary variables. For each variable, cases were coded 1 if the difference score was the maximum value and 0 if the difference score was less than the maximum. Typicality of the target remained a continuous difference score. Table 1 displays means, standard deviations, alphas, and correlations for all outcome variables.

Finally, the demographic variables and identity centrality were analyzed as possible covariates. Two-way ANOVAs (identity motive, group membership) were used to assess if the age or identity centrality were related to the independent variables. No significant main effects or interactions were observed, all ps > .05. Furthermore, a series chi-square tests of independence found no significant relationships (all ps > .05) between the independent variables and gender or ethnicity.

Focal Analyses

Target evaluations. Three hierarchical binary logistic regressions were used to test the contribution of identity motive, group membership of the target, and their interaction in predicting the likelihood that respondents reported the maximum possible difference between the two targets on the measures of attractiveness, image conveyed by the target, and similarity of the target to the self. For each regression, the main effects were entered at step 1, and the interaction term was entered at step 2. Because the difference score for typicality met the necessary assumptions, it was analyzed with a two-way ANOVA.

Table 1

Descriptives, Cronbach's Alphas, and Correlations of Outcome Variables (Study 1)

Variables	M (SD)	1	2	3	4
1. Attractiveness Difference	.24 (.43)				
2. Image Difference	.64 (.48)	.29***			
3. Similarity Difference	.37 (.48)	.33***	.41***		
4. Typicality Difference	3.10 (3.02)	0.05	.15*	.31***	
5. Group Attractiveness ($\alpha = .94$)	6.66 (1.29)	.18**	.18**	.39***	.66***

N = 212; * p < .05, ** p < .01, *** p < .001. Attractiveness Difference, Image Difference, and Similarity Difference were binary variables (1 = max difference, 0 = below max). Reported means for these variables correspond to the percentage of participants in the maximum condition.

Attractiveness difference. There was no significant main or interaction effect at the final step of the regression. This failed to support H1a.

Image difference. There was a significant main effect of group membership in the final step of the regression. Participants who evaluated ingroup members, compared to those who evaluated outgroup members, had a higher probability of reporting the maximum difference between the targets (i.e., desirable targets conveying the best image of the group and undesirable targets conveying the worst image of the group), 67.59% vs. 59.62%, $\chi_{2(1)} = 4.51$, p = .034. This is consistent with previous research on the BSE.

Additionally, there was a marginally significant interaction of identity motive by group membership, $\chi_{2(1)} = 3.31$, p = .069. Figure 1 shows the mean predictive probabilities for each condition. For participants primed with the self-esteem motive, those who evaluated ingroup

members had a higher probability than those who evaluated outgroup members of rating desirable and undesirable targets as maximally different. This supports H1a.

Similarity difference. A significant main effect of group membership was observed in the final step of the regression. Participants who evaluated ingroup members, compared to those who evaluated outgroup members, had a higher probability of indicating the maximum evaluative difference between desirable and undesirable targets on perceived similarity to the self, 48.15% vs. 25.00%, $\chi_{2(1)} = 5.89$, p = .015. This is consistent with the findings of the BSE; however, the absence of a significant interaction term failed to support H1a.

Typicality difference. A two-way ANOVA (identity motive, group membership) on the difference in target typicality ratings found a significant main effect of group membership, F (1, 208) = 9.85, p < .01, $\eta_{P2} = .045$. The difference in perceived typicality of desirable and undesirable targets was greater for participants who evaluated ingroup members (M = 3.71, SE = .28) than for those who evaluated outgroup members (M = 2.73, SE = .28). This finding is consistent with previous research on the BSE. There was also a marginally significant interaction, F (1, 208) = 3.52, P = .062, $\eta_{P2} = .017$. A test of simple effects indicated that for participants who evaluated ingroup targets, the evaluative difference was greater when participants were focused on self-esteem (M = 4.43, SE = .39) rather than uncertainty reduction (M = 2.98, SE = .41), F (1, 208) = 6.59, P = .011, $\eta_{P2} = .031$. There was no significant difference for those who evaluated outgroup targets. This supports H1a.

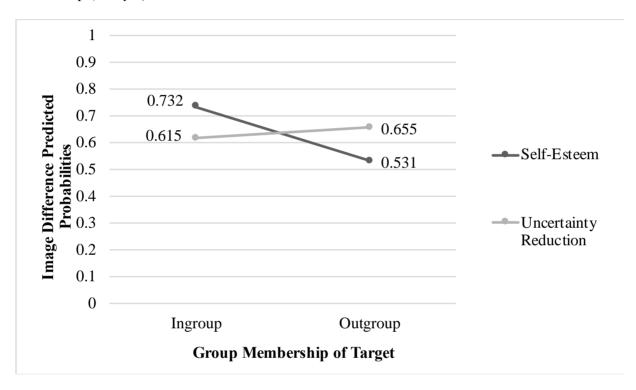
Group attractiveness. A two-way ANOVA (identity motive, group membership) found a marginally significant main effect of group membership such that participants who evaluated ingroup members rated the ingroup (i.e., MTurk workers) as more attractive (M = 6.82, SE = .12) than did participants who evaluated outgroup members (M = 6.49, SE = .13), $F_{(1,208)} = 3.70$, p

=.056, η_{P2} = .017. This effect is consistent with the BSE; however, no other significant effect was observed, so the results did not adequately support H1b.

Figure 1

Mean Predicted Probabilities of Image Difference as a Function of Identity Motive and Group

Membership (Study 1)



Note: Higher values indicate greater likelihood participants rated desirable targets as conveying the most positive, and undesirable targets as conveying the most negative, possible image of target's group.

Discussion

Study 1 examined the effects of two social identity motives on individuals' evaluations of generic norm deviants. It was hypothesized that priming participants to focus on the self-esteem

motive, compared to the uncertainty reduction motive, would enhance the BSE. Specifically, participants primed with the self-esteem motive were expected to evaluate desirable ingroup members more positively, and undesirable ingroup members more negatively, than participants primed with uncertainty reduction (H1a). Additionally, participants were expected to perceive the ingroup as more attractive after evaluating ingroup targets if they had been primed with self-esteem rather than uncertainty reduction (H1b).

The results were generally consistent with previous research on the BSE, and there was some support for H1a. For ratings of image conveyed by the targets, the probability of evaluating desirable targets as positively as possible, and undesirable targets as negatively as possible, was highest for participants who were primed with the self-esteem motive and who evaluated ingroup members. Moreover, desirable and undesirable ingroup targets were rated as more typical and less typical of the ingroup, respectively, by participants who were primed with self-esteem compared to those primed with uncertainty reduction. Although participants who evaluated ingroup targets tended to see the ingroup as more attractive than did those who evaluated outgroup targets, the effect was not stronger for those primed with the self-esteem motive. Therefore, H1b was not supported. A notable limitation of this study, and thus its findings, was that some of the data failed to meet the necessary assumptions of the pre-planned analyses.

CHAPTER 3

Study 2

Whereas Study 1 examined how the social identity motives related to generic prescriptive norms, Study 2 focused on testing uncertainty reduction as underlying motivation for derogating members who deviate from oppositional norms. Similar to Study 1, MTurk workers were recruited and primed to focus on self-esteem or uncertainty reduction. Participants also read about and evaluated either ingroup targets (MTurk workers) or outgroup targets (office workers). However, for this study, targets were described as holding one of three positions (normative, antinorm, pronorm) on a group relevant norm (fair payment for MTurk workers). As in Study 1, the dependent variables were target evaluations, including ratings of attractiveness, typicality, and similarity to the self. Additionally, identity uncertainty (i.e., participants feelings about the clarity and distinctiveness of the group's identity) was measured in place of group attractiveness.

Study 2 attempted to replicate the findings of SGDT research done on oppositional norm deviants, while demonstrating that these effects are enhanced when participants are focused on uncertainty reduction rather than self-esteem. Specifically, it was predicted that participants primed with uncertainty reduction, compared to those primed with self-esteem, would rate ingroup normative and outgroup antinorm targets as more attractive, as well as outgroup normative and ingroup antinorm targets as less attractive (H2a). Compared to participants primed with self-esteem, participants primed with uncertainty reduction were expected to rate normative and pronorm targets as more typical of their respective groups than antinorm targets (H2b).

It was also hypothesized that participants would rate ingroup antinorm targets as less similar to the self than outgroup antinorm targets when they were primed with uncertainty reduction compared to when they were primed with self-esteem (H2c). Finally, for participants

evaluating ingroup targets, those primed with uncertainty reduction were expected to report less identity uncertainty than those primed with self-esteem (H2d).

Methods

Participants and Design

Study 2 was a 2 (identity motive: self-esteem vs. uncertainty reduction) by 2 (group membership of the target: ingroup vs. outgroup) by 3 (oppositional norm position: normative, antinorm, pronorm) mixed design. Similar to Study 1, identity motive and group membership were between-subject factors, oppositional norm position was a within-subject factor, and identity centrality was measured as a possible covariate. An a priori power analysis conducted using G-Power 3.1 determined that a minimum sample of 136 participants was needed to be able to detect a small to medium effect ($f_2 = .15$, $\alpha = .05$, Power = .90) for this mixed design. Again, a larger number of participants was recruited to account for dropout.

A total of 250 subjects were recruited through TurkPrime. As with Study 1, participants were removed from the sample if they responded incorrectly to the attention check (n = 6), took more than 30 minutes or less than 2 minutes to complete the study (n = 4), or were multivariate outliers (n = 6). The final sample (N = 234, $M_{Age} = 36.79$, $SD_{Age} = 10.84$) was 41.5% female and predominantly White (79.9%).

Procedure and Measures

Those who consented to the study (Appendix A) were given the same cover story that was used in Study 1. Again, participants began by completing the identity centrality measure (Appendix B). This was followed by one of the two social identity motive primes (Appendix C). After the attention check, participants read the following information:

A previous poll measured MTurk workers' and office workers' (i.e., non-MTurk workers) opinions about what constitutes fair pay for MTurk workers. On average, MTurk workers felt that 20 cents per minute (\$12 per hour) was the most fair. However, the typical office worker felt that 10 cents per minute (\$6 per hour) was fair payment for MTurk workers.

They were then told they would be reading three targets' opinions regarding the issue of payment for MTurk workers before evaluating each target. As in Study 1, participants were randomly assigned to read about either ingroup (MTurk workers) or outgroup (office workers) targets. Each participant read about three targets: one normative, one antinorm, and one pronorm target (Appendix I).

Following each description, participants evaluated the target using the same attractiveness, typicality, and similarity measures as Study 1 (Appendix E). Next, they completed a measure assessing their level of uncertainty about their identity as an MTurk worker (Appendix J). Finally, participants answered demographics questions (Appendix G) and were fully debriefed (Appendix H).

Identity centrality. Identity centrality was measured using the same six-item scale from Study 1.

Target evaluations. Attractiveness, typicality, and similarity of the target to the self were assessed using the same measures as Study 1.

Identity uncertainty. Six-items adapted from Wagoner, Belvadi, and Jung (2017) were used to measure identity uncertainty. Example items include "I feel that the definition of [group is unclear].," and "I feel uncertain about the distinctiveness of [group's] identity.," 1 *not very much*, 9 *very much*.

Demographics and debriefing. The demographic questions and debriefing procedures were the same as Study 1.

Results

Scale Assessment and Demographic Analysis

As in Study 1, factor analyses were conducted for multi-item measures. One-factor solutions emerged for normative, antinorm, and pronorm target attractiveness. Single factors explained 86.71% (Eigenvalue = 6.94), 81.67% (Eigenvalue = 6.53), and 88.65% (Eigenvalue = 7.09) of the variance on each respective scale. Across each analysis, all factor loadings were above .83. An additional factor analysis was conducted on the six items measuring identity uncertainty. A one-factor solution was found, with the single factor explaining 73.26% (Eigenvalue = 4.40) of the variance and all factor loadings .81.

Finally, the demographic variables and identity centrality were analyzed as possible covariates. As in Study 1, two-way ANOVAs (identity motive, group membership) and chi-square tests of independence found no significant relationships (all ps > .05) between the independent variables and the possible covariates. Table 2 displays the means, standard deviations, alphas, and correlations for all measured variables in Study 2.

Table 2

Descriptives, Cronbach's Alphas, and Correlations of Outcome Variables (Study 2)

Variables	M (SD)	α	1	2	3	4	5	6	7	8	9
1. Normative Attractiveness	5.85 (1.94)	.98									
2. Antinorm Attractiveness	6.10 (1.52)	.97	.27***								
3. Pronorm Attractiveness	4.97 (2.54)	.98	.84***	.10							
4. Normative Typicality	6.51 (1.88)		.50***	.15*	.40***						
5. Antinorm Typicality	5.35 (1.82)		.12	.33***	.06	.18**					
6. Pronorm Typicality	5.06 (2.49)		.50***	.00	.62***	.50***	.12				
7. Normative Similarity	5.06 (2.63)		.80***	.15*	.73***	.49***	.04	.42***			
8. Antinorm Similarity	4.87 (2.14)		.15*	.59***	03	.13*	.41***	05	.29***		
9. Pronorm Similarity	4.03 (2.89)		.70***	02	.88***	.34***	.01	.61***	.77***	.01	
10. Identity Uncertainty	4.03 (2.06)	.93	11	16*	08	01	13*	09	07	.04	06

N = 234; * p < .05, ** p < .01, *** p < .001

Focal Analyses

Target evaluations. Three 2x2x3 repeated-measures ANOVAs were conducted on target attractiveness, typicality, and similarity of the target to the self. Identity motive (self-esteem vs. uncertainty reduction) and group membership (ingroup vs. outgroup) were between-subject factors, and oppositional norm position (normative, antinorm, pronorm) was a within-subjects factor. There was a violation of the sphericity assumption for each test (*Mauchley's Ws* \leq .931, χ_{2S} (2) \geq 16.41, $p_S \leq$.001). Therefore, the Huynh-Feldt correction was used for within-subject effects on each outcome (target attractiveness, $\varepsilon = .80$; target typicality, $\varepsilon = .96$; target similarity to self, $\varepsilon = .83$).

Attractiveness. There were significant main effects of group membership, $F_{(1,230)} = 184.02$, p < .001, $\eta_{P2} = .444$, and oppositional norm position, $F_{(1.60,367.47)} = 64.12$, p < .001, $\eta_{P2} = .218$. Ingroup targets (M = 6.69, SE = .11) were more attractive than outgroup targets (M = 4.55, SE = .11). Furthermore, antinorm targets (M = 6.10, SE = .10) were more attractive than normative targets (M = 5.83, SE = .09, p = .009), who were in turn more attractive than pronorm targets (M = 4.94, SE = .11, p < .001). These effects were qualified by a significant group membership by oppositional norm position interaction, $F_{(1.60,367.47)} = 184.33$, p < .001, $\eta_{P2} = .445$ (see Table 3 for means). For ingroup targets, normative were more attractive than pronorm (p = .032), who were in turn more attractive than antinorm (p < .001). For outgroup targets, antinorm were more attractive than normative (p < .001), and normative were more attractive than pronorm (p < .001). No other interaction was significant. Planned comparisons showed that attractiveness ratings did not differ across identity motive condition for ingroup normative (p = .373), outgroup antinorm (p = .573), outgroup normative (p = .666), or ingroup antinorm (p = .763) targets. Thus, H2a was not supported.

Table 3

Evaluations of Targets as a Function of Group Membership and Oppositional Norm Position

(Study 2)

	Ingroup	Outgroup
Attractiveness		
Antinorm	6.04a(.14)	6.16a (.14)
Normative	7.14b (.13)	4.51d (.13)
Pronorm	6.90c (.15)	2.99 _e (.15)
Typicality		
Antinorm	5.31a (.17)	5.41a (.17)
Normative	7.13ь (.16)	5.87d (.17)
Pronorm	6.12c (.21)	3.98e (.21)
Similarity		
Antinorm	4.77a (.20)	4.98a (.20)
Normative	6.89b (.17)	3.17d (.17)
Pronorm	6.20c(.17) $1.79e(.17)$	

Note: Differing subscripts indicate significant differences (p < .05) for within-outcome comparisons.

Typicality. As with attractiveness, there were main effects of group membership, $F_{(1,230)}$ = 36.64, p < .001, $\eta_{P2} = .137$, and oppositional norm position, $F_{(1.91,439.30)} = 47.88$, p < .001, $\eta_{P2} = .172$. Ingroup targets (M = 6.19, SE = .13) were more typical of their group than outgroup targets (M = 5.08, SE = .13). Normative targets (M = 6.50, SE = .12) were more typical than antinorm (M = 5.36, SE = .12, p < .001) and pronorm targets (M = 5.05, SE = .15, p < .001), but antinorm targets and pronorm targets did not differ in typicality (p = .23).

A significant group membership by oppositional norm position interaction was also observed, $F_{(1.91, 439.30)} = 25.90$, p < .001, $\eta_{P^2} = .101$ (see Table 3). For ingroup targets, normative were more typical than pronorm (p = .001), and pronorm were more typical than antinorm (p < .001); whereas for the outgroup targets, normative were more typical than antinorm (p = .029), who were in turn more typical than pronorm (p < .001). The finding that outgroup pronorm targets were rated as less typical than outgroup antinorm targets is inconsistent with previous research, and it failed to support H2b.

Similarity to self. Significant main effects were observed for group membership, $F_{(1,230)}$ = 189.54, p < .001, $\eta_{P2} = .452$, and oppositional norm position, $F_{(1.65,379.30)} = 28.82$, p < .001, $\eta_{P2} = .111$. Participants perceived ingroup targets (M = 5.95, SE = .13) as more similar to themselves than outgroup targets (M = 3.31, SE = .14). Additionally, participants felt less similar to pronorm targets (M = 3.99, SE = .12) than normative (M = 5.03, SE = .12, p < .001) and antinorm targets (M = 4.88, SE = .14, p < .001), but normative and antinorm targets did not differ in perceived similarity to the self (p = .77).

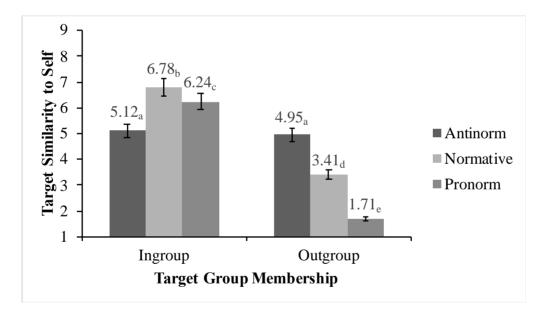
There was a significant group membership by oppositional norm position interaction, $F_{(1.65, 379.30)} = 144.00$, p < .001, $\eta_{P2} = .385$ (see Table 3). For the ingroup targets, participants saw normative as most similar to themselves, followed by pronorm, and then antinorm (ps < .001). For the outgroup targets, antinorm were perceived as most similar to the self, followed by normative and pronorm (ps < .001). The three-way interaction was marginally significant, $F_{(1.65, 379.30)} = 3.17$, p = .053, $\eta_{P2} = .014$ (see Figure 2). Simple effects tests showed no significant difference between ingroup and outgroup antinorm targets in the uncertainty reduction condition (p = .13), although the means were in the predicted direction. Overall, the results failed to support H2c.

Identity uncertainty. A two-way ANOVA (identity motive, group membership) found a significant main effect of identity motive. Participants in the uncertainty reduction condition (M = 4.16, SE = .19) reported more identity uncertainty than those in the self-esteem condition (M = 3.63, SE = .19), $F_{(1, 230)} = 3.93$, p < .05, $\eta_{P2} = .017$. There was no significant interaction, which failed to support H2d.

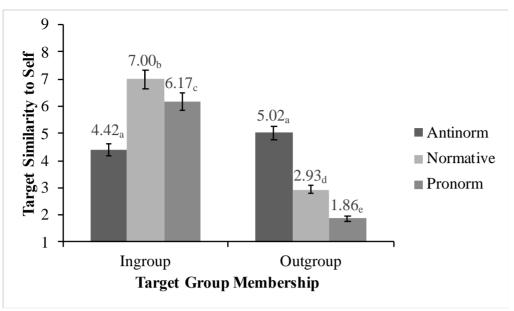
Figure 2

Three-way Interaction of Identity Motive, Group Membership, and Oppositional Norm Position on Similarity (Study 2)





Panel B: Uncertainty Reduction Motive



Note: Differing subscripts indicate significant differences at p < .05 for comparisons within panels.

Discussion

Study 2 assessed if uncertainty reduction is the primary motivation for derogating ingroup members who violate oppositional norms. It was predicted that the effects found in previous SGDT research on oppositional norms would be enhanced when participants were focused on uncertainty reduction compared to self-esteem. Specifically, participants primed with uncertainty reduction, compared to those primed with self-esteem, were predicted to see ingroup normative and outgroup antinorm targets as more attractive, as well as outgroup normative and ingroup antinorm targets as less attractive (H2a). They were also expected to view normative and pronorm targets as more typical, and antinorm targets as less typical, of the targets' respective group (H2b). It was also hypothesized that antinorm ingroup targets would be perceived as less similar to the self than antinorm outgroup targets when participants were primed with uncertainty reduction rather than self-esteem (H2c). Finally, participants who evaluated ingroup targets were

expected to report less identity uncertainty when primed with uncertainty reduction, compared to self-esteem (H2d).

The results failed to support these predictions. Furthermore, the study failed to replicate the findings of previous SGDT research on oppositional norm deviants. Specifically, no crossover effect emerged such that outgroup antinorm targets were evaluated more favorably than ingroup antinorm targets. Additionally, for outgroup targets, pronorm were rated the least typical. One possibility for the lack of effects is that the range of MTurk workers' opinions about fair pay that was used to emphasize a lack of cohesion in the uncertainty reduction prime may have influenced participants perceptions of ingroup deviants. Compared to the extreme minimum (3 cents) and maximum (75 cents) opinions described in the vignette, ingroup antinorm and pronorm targets may have seemed relatively normative. To account for this possibility, slight changes were made to the social identity motive primes for Study 3.

CHAPTER 4

Study 3

The previous two studies examined how two social identity motives relate to the evaluation of ingroup and outgroup targets who violate different types of group norms—generic and oppositional, respectively. Study 3 focused on ingroup targets only and crossed the two types of norm violations that were previously within-subject factors. As with the previous two studies, MTurk workers were primed to focus on either self-esteem or uncertainty reduction. Participants then read about and evaluated a single ingroup target. The target was described as either socially desirable or undesirable and holding either a normative, antinorm, or pronorm position on a group relevant norm. Once again, target attractiveness, target typicality of the group, image conveyed by the target, and target similarity to the self were measured as the dependent variables. Participants' opinions on fair payment for MTurk workers were also measured to see if the target they evaluated influenced their own opinion.

Study 3 was focused on the conditions under which different types of ingroup deviants were most likely to be derogated vs. tolerated. More specifically, it was hypothesized that undesirable antinorm targets would be evaluated most negatively; whereas, desirable normative targets would be evaluated most positively (H3a). It was also predicted that participants primed with uncertainty reduction would evaluate undesirable normative targets more positively than would those primed with self-esteem (H3b). Additionally, participants primed with self-esteem, compared to those primed with uncertainty reduction, were expected to evaluate desirable antinorm targets more positively (H3c). Similarly, participants who evaluated desirable antinorm targets were expected to report opinions about fair payment for MTurk workers that were more

similar to the antinorm position (i.e., less cents per minute) if they had been primed with selfesteem, compared to uncertainty reduction (H3d).

Methods

Participants and Design

Study 3 was a 2 (identity motive: uncertainty reduction vs. self-esteem) by 2 (generic norm position: socially desirable vs. socially undesirable) by 3 (oppositional norm position: normative vs. antinorm vs. pronorm) between-subjects design. As in the previous studies, identity centrality was measured as a possible covariate. An a priori power analysis conducted using G-Power 3.1 determined that a minimum sample of 394 was needed to detect a small to medium effect size ($f_2 = .18$, $\alpha = .05$, Power = .90). More participants were recruited to account for potential dropout.

A total of 425 participants were recruited through TurkPrime. The exclusion criteria were the same as the previous studies, and participants were removed if from they responded incorrectly to the attention checks (n = 25), took more than 30 minutes or less than 2 minutes to complete the study (n = 5), or were multivariate outliers (n = 10). The final sample (N = 385) had an average age of approximately 36 (M = 36.39, SD = 10.91), was 39.7% female and predominantly White (75.3%).

Procedure and Materials

The procedure of Study 3 closely followed that of the previous two studies, with some adjustments. Several attention checks (Appendix K) were administered immediately after the consent form (Appendix A). Participants who passed the attention checks completed a measure of identity centrality (Appendix B). Participants then read one of the two adapted identity motive

primes, which were followed by a manipulation check (Appendix L). Next, they were given the following instructions,

In the next part of the study, you will read about and evaluate a fellow MTurk worker who participated in a previous research project. There will be a short description of the individual, followed by their opinion about how much MTurk workers should be paid for a HIT. For context, the average non-MTurk worker (i.e., person who does not use MTurk) feels that MTurk workers should be paid 10 cents per minute (\$6.00/hr). In comparison, the average MTurk worker feels that they should be paid 20 cents per minute (\$12.00/hr).

Participants were randomly assigned to read about an ingroup target (i.e., MTurk worker) who was either socially desirable or undesirable and who held one of three opinions (normative, antinorm, or pronorm) on the issue of average pay for MTurk workers (Appendix M). Following the description, participants evaluated the target using the same measures as the previous studies. They also indicated how much they endorsed the target's position on the issue of payment for MTurk workers (Appendix E). Participants were then asked to provide their own opinions about fair payment for MTurk workers (Appendix N). Finally, participants answered demographics questions (Appendix G) and were debriefed (Appendix H).

Identity centrality. Identity centrality was measured using the items as the previous two studies.

Manipulation checks. Participants who received the self-esteem motive prime were asked, "Based on the information from the previous page, how do you feel other people tend to view MTurk workers?", 1 *very negatively*, 9 *very positively*. Those who received the uncertainty

reduction prime were asked, "Based on the information from the previous page, how much do you feel MTurk workers disagree about fair payment for a HIT?", 1 *not at all*, 9 *very much*.

Target evaluations. Attractiveness, typicality, image conveyed by the target, and similarity of the target to the self were assessed using the same measures as Study 1. A single-item measured participants' endorsement of the targets' position on the oppositional norm: "How much do you endorse this individual's opinion regarding the issue of payment for MTurk workers?", 1 *not at all*, 9 *very much*.

Participant opinions. Three different items asked participants to indicate what they felt was the average, minimum, and maximum cents per minute that MTurk workers should be paid, on a scale from 0-40 cents per minute.

Demographics and debriefing. Demographic questions and debriefing procedures were the same as the previous two studies.

Results

Scale Assessment, Manipulation Checks, and Demographic Analysis

Factor analyses conducted on the multi-item attractiveness measure revealed a single-factor solution. The single factor explained 90.54% (Eigenvalue = 7.24) of the variance, and all factor loadings were above .93. Univariate analyses suggested that participants given the self-esteem prime felt others had negative opinions of their group (M = 2.95, SD = 2.31, 1 *very negative*, 9 *very positive*), and participants given the uncertainty reduction prime felt that MTurk workers disagreed on the issue of fair payment (M = 6.94, SD = 1.84, 1 *not at all*, 9 *very much*). For items measuring participants' opinions about fair payment for MTurk workers, only cases that followed the logical pattern of maximum \geq average \geq minimum were included in the analyses (N = 258).

To test for possible covariates, a series of ANOVAs (identity motive, generic norm position, oppositional norm position) and chi-squared tests were conducted on the demographic variables and identity centrality. A significant main effect of generic norm position on age, $F_{(1, 373)} = 4.67$, p = .031, $\eta_{p2} = .012$, and a significant identity motive by oppositional norm position interaction, $F_{(2,373)} = 4.03$, p = .019, $\eta_{p2} = .021$, were observed. Additionally, a chi-square test of independence showed that sex was related to generic norm position, $\chi_{2(2)} = 7.96$, p = .019. Therefore, identity centrality, age, and sex were entered as covariates in all of the analyses. Table 4 displays the sample size, means, standard deviations, alphas, and correlations for all measured variables and continuous covariates.

Table 4

Descriptives, Chronbach's Alphas, and Correlations of Outcome Variables and Continuous Covariates (Study 3)

Variables	N	M (SD)	1	2	3	4	5	6	7	8	9
1. Attractiveness ($\alpha = .99$)	385	5.57 (2.59)									
2. Typicality	385	5.05 (2.39)	.75***								
3. Image	385	5.15 (2.94)	.92***	.77***							
4. Similarity	385	4.67 (2.95)	.88***	.80***	.91***						
5. Endorsement	385	5.46 (2.87)	.65***	.63***	.70***	.72***					
6. Average Pay	258	20.28 (5.19)	01	.05	02	02	.02				
7. Minimum Pay	258	15.76 (4.94)	.00	.06	.00	.02	.05	.77***			
8. Maximum Pay	258	32.16 (7.47)	.05	04	.01	01	.01	.51***	.32***		
9. Identity Centrality ($\alpha = .94$)	385	5.10 (2.20)	.20***	.32***	.20***	.28***	.25**	02	.03	14*	
10. Age	385	36.39 (10.91)	.04	01	.06	.04	.03	09	04	09	02

Note: *p < .05, **p < .01, ***p < .001

Focal Analyses

Target evaluations. Three-way ANOVAs (identity motive, generic norm position, oppositional norm position) were conducted on attractiveness, typicality, image conveyed by the target, similarity of the target to the self, and endorsement of the target's position. Planned comparisons were used to test if undesirable normative targets were rated more positively when participants were primed with uncertainty reduction compared to when they were primed with self-esteem (H3b), and if desirable antinorm targets were evaluated more positively by participants primed with self-esteem compared to those primed with uncertainty reduction (H3c).

Attractiveness. There was a significant main effect of generic norm position, with desirable targets (M = 7.48, SE = .12) rated more attractive than undesirable targets (M = 3.67, SE = .12), $F_{(1,370)} = 480.76$, p < .001, $\eta_{P2} = .565$. The three-way interaction was the only other significant effect, $F_{(2,370)} = 4.87$, p = .008, $\eta_{P2} = .026$ (see Figure 3). Comparisons across identity motive condition showed that undesirable pronorm targets were rated as more attractive by participants primed with uncertainty reduction (M = 4.40, SE = .32) than by those primed with self-esteem (M = 3.04, SE = .29), $F_{(1,370)} = 9.71$, P = .002, $\eta_{P2} = .026$. However, H3b was not supported as undesirable normative targets were not more attractive in the uncertainty reduction condition than the self-esteem condition (p = .47). Additionally, desirable antinorm targets were not significantly more attractive in the self-esteem condition than in the uncertainty reduction condition (p = .53), so H3c was not supported.

Table 5

Evaluations of Targets as a Function of Generic Norm Position and Oppositional Norm Position
(Study 3)

	Desirable	Undesirable	
Attractiveness			
Antinorm	7.00a (.22)	3.72c (.20)	
Normative	7.59b (.20)	3.58c (.21)	
Pronorm	7.85ь (.21)	3.72c (.22)	
Typicality			
Antinorm	5.74a(.24)	3.88c (.23)	
Normative	6.71ь (.22)	3.47c (.24)	
Pronorm	6.55b (.23)	3.85c (.24)	
Image			
Antinorm	6.15a (.25)	3.25c (.24)	
Normative	7.78b (.24)	3.08c (.25)	
Pronorm	7.57b (.25)	2.93c (.25)	
Similarity			
Antinorm	5.43a (.26)	2.76c (.24)	
Normative	7.07ь (.24)	2.61c (.26)	
Pronorm	7.19ь (.25)	2.83c (.26)	
Endorsement			
Antinorm	$4.74_a (.30)$ $3.26_c (.29)$		
Normative	7.40 _b (.28)	7.40_b (.28) 5.29_d (.30)	
Pronorm	7.47ь (.29)	4.44e (.30)	

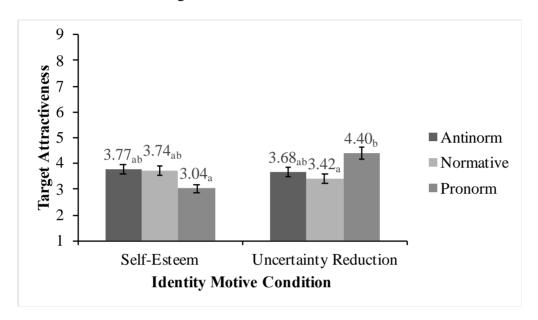
Note: Differing subscripts indicate significant differences at p < .05 for within-outcome comparisons.

Figure 3

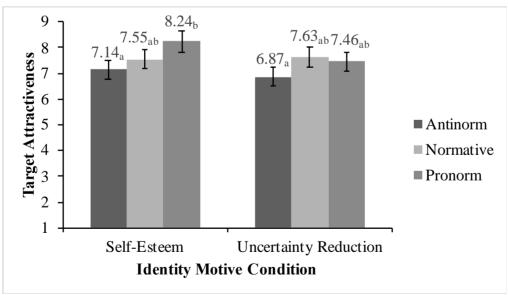
Three-way Interaction of Identity Motive, Generic Norm Position, and Oppositional Norm

Position on Attractiveness (Study 3)

Panel A: Undesirable Targets



Panel B: Desirable Targets



Note: Differing subscripts indicate significant differences at p < .05 for comparisons within panels.

Typicality. A significant main effect of generic norm position was found, with desirable targets (M = 6.33, SE = .13) being seen as more typical of the ingroup than undesirable targets (M = 3.73, SE = .14), $F_{(1,370)} = 182.94$, p < .001 $\eta_{P2} = .331$. The generic norm position by oppositional norm position interaction was also significant, $F_{(2,370)} = 4.50$, p = .012, $\eta_{P2} = .024$ (see Table 5 for means). For desirable targets, antinorm were less typical than normative (p = .003) and pronorm (p = .016), but normative and pronorm did not significantly differ (p = .616). Additionally, there were no significant differences between undesirable targets, which failed to support H3a. No other significant interaction was observed.

Planned comparisons showed that participants did not perceive undesirable normative targets to be more typical as a function of identity motive condition (p = .419), so H3b was not supported. However, desirable antinorm targets were rated as more typical of the ingroup by participants primed with self-esteem (M = 6.22, SE = .33) than by those primed with uncertainty reduction (M = 5.27, SE = .35), $F_{(1,370)} = 3.95$, p = .048, $\eta_{P2} = .011$. This supports H3c.

Image conveyed. There were significant effects of generic norm position, $F_{(1,370)} = 404.69$, p < .001, $\eta_{P2} = .552$, oppositional norm position, $F_{(2,370)} = 4.83$, p = .009, $\eta_{P2} = .025$. Desirable targets (M = 7.16, SE = .14) conveyed a better image of the group than did undesirable targets (M = 3.08, SE = .14). Moreover, antinorm targets (M = 4.70, SE = .17) conveyed a worse image of the group than both normative (M = 5.43, SE = .17, p = .003) and pronorm targets (M = 5.25, SE = .18, p = .026), who did not significantly differ from one another (p = .470).

The generic norm position by oppositional norm position interaction was also significant, $F_{(2,370)} = 8.69$, p < .001, $\eta_{p2} = .045$ (see Table 5). The pattern of the interaction mirrored that of typicality rating, so it failed to support H3a. There was an additional two-way interaction of identity motive by generic norm position, $F_{(1,370)} = 8.94$, p = .003, $\eta_{p2} = .024$. Desirable targets

were seen as conveying a better image of the group by participants in the self-esteem condition (M = 7.56, SE = .20), compared to those in the uncertainty reduction condition, (M = 6.77, SE = .20), $F_{(1,370)} = 7.96$, p = .005, $\eta_{P2} = .021$. No other interaction effect was significant.

Planned comparisons showed that undesirable normative targets were not rated significantly different based on identity motive condition (p = .901). Thus, H3b was not supported. However, an unexpected effect emerged in which undesirable pronorm targets were seen as conveying a better image of the group by those in the uncertainty reduction (M = 3.45, SE = .38) than those in the self-esteem condition (M = 2.41, SE = .34), $F_{(1,370)} = 4.19$, p = .041, $\eta_{p2} = .011$. This was consistent with the effect of target attractiveness ratings for undesirable pronorm targets. Finally, desirable antinorm targets were perceived as conveying a better image of the group by participants primed with self-esteem (M = 6.96, SE = .34) than by those primed with uncertainty reduction (M = 5.34, SE = .37), $F_{(1,370)} = 10.24$, p = .001, $\eta_{p2} = .027$. Thus, H3c was supported.

Similarity to self. Significant main effects were observed for generic norm position, $F_{(1, 370)} = 341.31$, p < .001, $\eta_{P2} = .48$, oppositional norm position, $F_{(2, 370)} = 7.60$, p = .001, $\eta_{P2} = .039$. Desirable targets (M = 6.56, SE = .14) were seen as more similar to the self than undesirable targets (M = 2.73, SE = .15). In addition, antinorm targets (M = 4.09, SE = .18) were evaluated as less similar to the self than normative (M = 4.84, SE = .18, p = .003) and pronorm targets (M = 5.01, SE = .18, p < .001), but normative and pronorm targets did not significantly differ (p = .491).

There was also a significant generic norm position by oppositional norm position interaction, $F_{(2,370)} = 8.10$, p < .001, $\eta_{P2} = .042$ (see Table 5). The effects were the same as typicality and image conveyed by the target; therefore, as with those previous outcomes, H3a

was not supported. Additionally, there was a significant interaction of identity motive by generic norm position, $F_{(1,370)} = 6.01$, p = .015, $\eta_{p2} = .016$. Desirable targets were seen as more similar to the self than undesirable targets across both conditions, but the effect was stronger when participants were primed with self-esteem, $F_{(1,370)} = 221.79$, p < .001, $\eta_{p2} = .375$, than when primed with uncertainty reduction, $F_{(1,370)} = 129.99$, p < .001, $\eta_{p2} = .260$.

The three-way interaction was marginally significant, $F_{(2,370)} = 2.63$, p = .073, $\eta_{P2} = .014$ (Figure 4). Again, planned comparisons failed to support H3b (p = .970). However, similar to the effects found for attractiveness and image conveyed by the target, undesirable pronorm targets were seen as more similar to the self by participants primed with uncertainty reduction (M = 3.34, SE = .39), compared to those primed with self-esteem (M = 2.32, SE = .35), $F_{(1,370)} = 3.90$, p = .049, $\eta_{P2} = .01$. Finally, comparisons supported H3c, showing that desirable antinorm targets were viewed as more similar to the self by participants primed with self-esteem (M = 6.29, SE = .35) than by those primed with uncertainty reduction (M = 4.56, SE = .38), $F_{(1,370)} = 11.12$, p = .001, $\eta_{P2} = .029$.

Endorsement of opinion. Again, there were significant main effects of generic norm position, $F_{(1,370)} = 82.57$, p < .001, $\eta_{P2} = .182$, and oppositional norm position, , $F_{(2,370)} = 36.97$, p < .001, $\eta_{P2} = .167$. Participants reported greater endorsement of desirable targets' positions (M = 6.54, SE = .17) than undesirable targets' positions (M = 4.33, SE = .17). Moreover, participants reported less endorsement of the antinorm position (M = 4.00, SE = .21) than the normative (M = 6.35, SE = .21, p < .001) and pronorm positions (M = 65.96, SE = .21, p < .001), which were endorsed similarly (p = .188).

There was also a generic norm by oppositional norm position interaction, $F_{(2,370)} = 3.50$, p = .031, $\eta_{P2} = .019$ (see Table 5). Participants who evaluated undesirable targets endorsed the

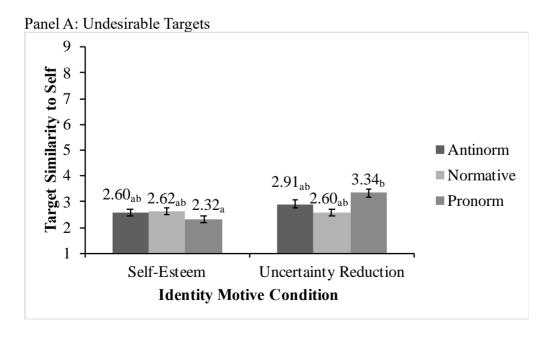
antinorm position less than the pronorm position (p < .001), which in turn was endorsed less than the normative position (p = .046). This provides partial support for H3a. For those who evaluated desirable targets, the antinorm position was endorsed less than both the normative and pronorm positions (ps < .001); however, the endorsement of the normative and pronorm positions did not differ (p = .854). This latter finding failed to support H3a.

There was no other significant main or interaction effect. Planned comparisons revealed that endorsement of an undesirable normative targets' opinion did not differ across the identity motive conditions (p = .906), so H3b was not supported. However, consistent with H3c, participants were more willing to endorse a desirable antinorm target's position if they had been primed with self-esteem (M = 5.53, SE = .41) rather than uncertainty reduction (M = 3.95, SE = .44), $F_{(1,370)} = 6.75$, p = .01, $\eta_{P2} = .018$.

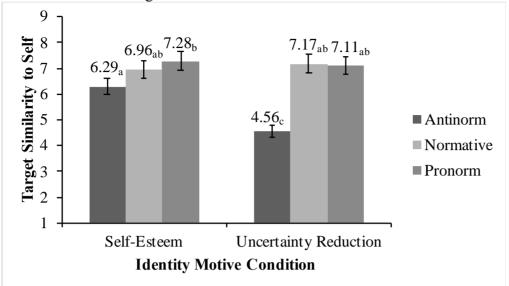
Figure 4

Three-way Interaction of Identity Motive, Generic Norm Position, and Oppositional Norm

Position on Similarity (Study 3)



Panel B: Desirable Targets



Note: Differing subscripts indicate significant differences at p < .05 for comparisons within panels.

Participant opinions. Three-way ANOVAs (identity motive, generic norm position, oppositional norm position) were conducted on participants opinions about fair payment for MTurk workers (average, minimum, and maximum). Planned contrasts across identity motive condition on participants who evaluated desirable antinorm targets were used to test H3d.

Average pay. The only significant main or interaction effect was a generic norm position by oppositional norm position interaction, $F_{(2,243)} = 3.59$, p = .029, $\eta_{p2} = .029$ (see Table 6 for means). The planned comparison found that when participants read about and evaluated a desirable antinorm target, their opinion about fair payment for MTurk workers was closer to the target's opinon if they were primed with self-esteem (M = 16.10, SE = 1.17) compared to if they were primed with uncertainty reduction (M = 20.50, SE = 1.14), $F_{(1,243)} = 9.45$, p = .002, $\eta_{p2} = .037$. This finding supports H3d.

Minimum pay. There was a significant main effect of generic norm position such that participants who evaluated undesirable targets (M = 16.39, SE = .45) indicated a higher

minimum pay amount than those who evaluated desirable targets (M = 15.16, SE = .42), $F_{(1, 243)} = 4.00$, p = .047, $\eta_{P2} = .016$. There were also significant main effect of identity motive, $F_{(1, 243)} = 7.22$, p = .008, $\eta_{P2} = .029$, which was qualified by an identity motive by oppositional norm position interaction, $F_{(2, 243)} = 3.72$, p = .026, $\eta_{P2} = .03$. For participants primed with self-esteem, those who rated antinorm targets (M = 14.02, SE = .78) had a lower minimum than those who rated normative targets (M = 16.33, SE = .76, p = .034), but they did not differ from those who rated pronorm targets (M = 14.52, SE = .74). For participants primed with uncertainty reduction, their opinion on minimum pay did not significantly vary as a function of the target's position. There was no other significant interaction effect.

The planned comparison for individuals who rated desirable antinorm targets found participants' opinions were more similar to that of the target if the participants were primed with self-esteem (M = 11.64, SE = 1.11) than if they were primed with uncertainty reduction (M = 16.43, SE = 1.01), $F_{(1,243)} = 10.17$, p = .002, $\eta_{P2} = .04$. Moreover, participants focused on self-esteem who evaluated desirable antinorm targets were the only individuals who included the antinorm position (12 cents/hr.) within their minimum to maximum range. This supports H3d.

Maximum pay. The only significant effect was a generic norm position by oppositional norm position interaction, $F_{(2, 243)} = 4.44$, p = .013, $\eta_{P2} = .035$ (see Table 6). The planned comparison of participants who rated desirable antinorm targets (H3d) found that opinions about maximum pay did not significantly differ (p = .168) for those primed with self-esteem (M = 30.04, SE = 1.70) and those primed with uncertainty reduction (M = 33.21, SE = 1.54), though the means were in the predicted direction.

Table 6

Participant Opinions as a Function of Generic Norm Position and Oppositional Norm Position

	Desirable	Undesirable	
Average pay			
Antinorm	18.53a (.79)	20.73abc (.81)	
Normative	19.88ab (.72)	22.01c (.80)	
Pronorm	20.96bc (.77)	19.44ab (.83)	
Minimum pay			
Antinorm	14.03a (.75)	16.84c (.76)	
Normative	15.23ab (.68)	16.77bc (.76)	
Pronorm	16.22bc (.73)	15.57bc (.78)	
Maximum pay			
Antinorm	31.63ab (1.14)	32.52ab (1.17)	
Normative	31.83ab (1.05)	33.09a (1.15)	
Pronorm	34.08a (1.12)	29.25ь (1.20)	

Note: Differing subscripts indicates significant differences at p < .05 for within-outcome comparisons.

Discussion

Study 3 combined the two types of norms from the previous studies and examined the conditions under which different types of ingroup deviants are most likely to be derogated versus tolerated. Specifically, it was hypothesized that desirable ingroup targets would be evaluated the most positively, and undesirable antinorm targets would be evaluated the most negatively (H3a). Additionally, it was expected that undesirable normative targets would be evaluated more positively by participants primed with uncertainty reduction than by those primed with self-esteem (H3b). Finally, desirable antinorm targets were expected to be evaluated more favorably

(H3c) and have a greater impact on participants' own opinions (H3d) for participants primed with self-esteem, compared to those primed with uncertainty reduction.

Overall, H3a and H3b were not supported. However, the effects predicted for undesirable normative targets were unexpectedly found for undesirable pronorm targets instead. Undesirable pronorm targets were rated as more attractive, seen as conveying a better image of the group, and perceived as more similar to the self by participants focused on uncertainty reduction compared to those focused on self-esteem. In contrast to the first two hypotheses, H3c and H3d were supported. Desirable antinorm targets were seen as more typical of the group, conveying a better image of the group, and being more similar to self by participants primed with self-esteem than those primed with uncertainty reduction. Additionally, compared to participants primed with uncertainty reduction, those primed with self-esteem expressed greater endorsement the desirable antinorm target's opinion and had personal opinions that were more similar to that of the target.

CHAPTER 5

General Discussion

According to SGDT (Marques et al., 1998), groups upgrade normative members and derogate deviant members as a way of restoring or maintaining the subjective validity of the group's norms. SGDT research has examined group members' reactions to two different types of deviants: those who violate generic social prescriptions, and those who violate oppositional, group defining norms. Moreover, the evaluation of deviants is different depending on which type of norm is being violated (Abrams et al., 2014). Three studies tested the general prediction that two different social identity motives—self-esteem and uncertainty reduction—underlie the derogation of different types of group deviants.

Study 1 tested if self-esteem was the primary motivation for derogating generic norm deviants. MTurk workers were primed to focus on either the self-esteem motive or the uncertainty reduction motive. Participants then evaluated two targets (one desirable and one undesirable) from either the ingroup or the outgroup, as well as the ingroup as a whole. The findings provided mixed support for the hypotheses. On measures of target typicality of the group and the type of image conveyed by the target, the evaluative difference of desirable and undesirable ingroup members was enhanced for participants primed with self-esteem compared to those primed with uncertainty reduction. This effect was not observed for the other evaluative measures, although the results on those measures tended to be consistent with previous research on the BSE (Marques & Paez, 1994; Marques et al., 1988).

Study 2 investigated uncertainty reduction as the primary motive underlying the derogation of oppositional norm deviants. The design was similar to Study 1, but participants evaluated three targets (normative, antinorm, pronorm) from either the ingroup or outgroup, and

they reported their uncertainty about their group's identity. The results failed to support the hypotheses, and they did not replicate the effects of previous SGDT research on oppositional norm deviants (Abrams et al., 2002, 2000; Hichy et al., 2008). Specifically, the cross-over interaction in which antinorm targets from the outgroup are evaluated more positively than antinorm targets from the ingroup did not occur. Moreover, outgroup pronorm targets were seen as less typical of the outgroup than outgroup antinorm targets. This is inconsistent with previous SGDT research and social identity theorizing about intergroup distinctiveness.

Study 3 crossed the two types of norm violations and assessed the conditions under which different types of deviants are more likely to be derogated or tolerated. Again, MTurk workers were primed to focus on either self-esteem or uncertainty reduction before they evaluated an ingroup target who was either socially desirable or undesirable and held either a normative, antinorm, or pronorm opinion on a group relevant issue. Overall, the findings supported the prediction desirable antinorm targets would be more tolerated by participants focused on self-esteem than by those focused on uncertainty reduction. This effect was even reflected in participants' own opinions regarding fair payment for their ingroup. These results are in line with research examining the participants' change in agreement with a prescriptive norm following the evaluation full versus marginal normative and deviant group members (Pinto, Marques, Levine, & Abrams, 2010, 2016). However, the current study crossed two-types of norms rather than group member roles, and it tested between-subjects' effects instead of within-subjects' effects.

The results of Study 3 failed to support the prediction that undesirable normative targets would be more tolerated by participants focused on uncertainty reduction than by those focused on self-esteem. Instead, across several measures, undesirable pronorm targets were evaluated more positively by participants focused on uncertainty reduction than by those focused on self-

esteem. Additionally, for those focused on uncertainty reduction, undesirable targets who held a normative position were evaluated more negatively than undesirable antinorm or pronorm targets, although the differences were not significant.

There were several limitations of the current studies. First, a large portion of the data in Study 1 was non-normally distributed, so the planned repeated measure ANOVAs could not be conducted to test the hypotheses. Participants' evaluations of desirable and undesirable targets were extremely positive and negative, respectively. The skewness of the evaluations for each target were so extreme that even the difference scores of the evaluative measures did not meet the assumption of normality. To analyze the data, difference scores were split into binary variables, with participants who evaluated desirable and undesirable targets as maximally different being categorized as 1, and all those below the maximum difference categorized as zero. The need to split the continuous measures into binary variables should be considered a significant limitation.

An additional limitation across all three studies involves the use of MTurk workers as the ingroup. MTurk workers are an online group, who are not required to interact with other group members, and do not directly rely on each other for their outcomes. Therefore, they may not be a highly entitative group. However, recent research has found that the MTurk worker identity is strong enough to elicit ingroup bias (Almaatouq, Krafft, Dunham, Rand, & Pentland, 2020). Still, an individual's identity as an MTurk worker may not be as important as other identities (e.g., political affiliation, religion, etc.). Indeed, participants' mean identity centrality score for each of the three studies was at, or slightly below the mid-point on a 9-point scale. Previous research has shown that SGDT processes are enhanced for high identifying group members (Branscombe et

al., 1993; Castano, Paladino, Coull, & Yzerbyt, 2002; Hutchison et al., 2008). Future research should test these predictions on more important group identities.

Finally, a related limitation was the operationalization of the oppositional norm. Fair payment for MTurk workers is a highly relevant group issue on which participants can deviate from the normative position in either direction. However, there is no relevant outgroup that holds an opposing position, and one had to be created for the purposes of the studies. Furthermore, the amount of money MTurk workers make on a task may be a source from which they derive positive value, impacting the self-esteem motive in addition to the uncertainty reduction motive. Future research should use a group defining norm that is less connected to self-worth and has a more relevant outgroup with an opposing position.

Although support for the general hypothesis was mixed, these studies provide insight into the motivations underlying the derogation of group deviants and the conditions under which different types of deviants are most likely to be tolerated. Consistent with previous research (Branscombe et al., 1993; Hutchison et al., 2008; Marques et al., 2001), the results support the idea that derogating ingroup members who violate generic prescriptive norms is primarily motivated by a desire to restore or maintain the positive image of the group, and thus the self. Furthermore, the current findings suggest that oppositional norm deviants who reflect positively on the group may be more accepted and more influential when the group is focused on restoring its positive image. Additional research should be conducted to test how antinorm deviant members can effectively highlight their socially desirable qualities when the group is focused on restoring its esteem.

The prediction that uncertainty reduction is the primary motive for the derogation of oppositional norm deviants was not adequately supported. However, an unexpected pattern

emerged in which undesirable pronorm targets were rated more positively when participants were focused on uncertainty reduction compared to when they were focused on self-esteem. Future research should investigate the possibility that group members who are focused on restoring the cohesion and distinctiveness of their group will be willing to overlook the undesirable qualities of a member who takes an extreme pro-ingroup stance on a relevant issue.

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APPENDIX A: CONSENT FORM (ALL STUDIES)



AGREEMENT TO PARTICIPATE IN MAKING US LOOK BAD VS. MAKING US UNCERTAIN: EXAMINING THE MOTIVATIONS UNDERLYING DEROGATION (IRB #3604)

You are invited to take a survey for a research project. Participation will not benefit you directly, though you will be compensated, and you will be helping us explore how motivation influences person perception. If you volunteer, you will be asked to answer some questions about yourself and to read about and evaluate one or more individuals. This will take about 7 – 10 minutes of your time. Volunteering for this study involves no more risk than what a typical person experiences on a regular day. Your involvement is entirely up to you. You may withdraw at any time for any reason. Please continue reading for more information about the study.

STUDY LEADERSHIP: This research project is led by Mark Rinella, a doctoral student of psychology at Claremont Graduate University and supervised by Michael Hogg, a professor of psychology at Claremont Graduate University.

Purpose: The purpose of this study is to examine how motivation influences people's perception and evaluation of others.

ELIGIBILITY: To be in this study, you must be 18 years of age or older, a citizen of the United States, and fluent in English.

PARTICIPATION: During the study, you will be asked to complete a questionnaire that will take about 7-10 minutes. You will be asked about your feelings about being an MTurk worker. You will read some information about MTurk workers before being asked to read about and evaluate one or more individuals. Then you may be asked questions about your perceptions of your group. Finally, you will be asked a few more questions, like your age and sex.

RISKS OF PARTICIPATION: The risks that you run by taking part in this study are minimal. At most the risks include possible discomfort answering questions. All responses are confidential, and in no case will responses from individual participants be identified. This description of the study's risk level is accurate, but there is one detail about the study that has to be withheld until after you are finished with the questionnaire. We will explain fully at the end, so please do not skip the final page.

BENEFITS OF PARTICIPATION: We **do not** expect the study to benefit you personally. This study will benefit the researcher(s) by helping to complete my graduate education and enabling us to publish the results in a scientific journal. This study is also intended to benefit psychologists through the advancement of theory and understanding of motivation and person perception.

COMPENSATION: You will be directly compensated \$1.00 for participating in this study. You will need to fulfill all the eligibility criteria listed above and provide a code which will be given at completion of the survey.

VOLUNTARY PARTICIPATION: Your participation in this study is completely voluntary. You may stop or withdraw from the study at any time or refuse to answer any particular question for any reason without it being held against you. Your decision whether or not to participate will have no effect on your current or future connection with anyone at CGU.

CONFIDENTIALITY: Your individual privacy will be protected in all papers, books, talks, posts, or stories resulting from this study. We may share the data we collect with other researchers, but we will not reveal

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your identity with it, or any identifiable information. In order to protect the confidentiality of your responses, we will transfer and keep the data directly from this survey into data analysis software. All data and analysis will be stored with arbitrary ID numbers and be secured on password protected machines. Analysis of the data will no include any specific participant scores.

FURTHER INFORMATION: If you have any questions or would like additional information about this study, please contact Mark Rinella (mark.rinella@cgu.edu), Department of Behavioral and Organizational Sciences, 123 E. 10th St. Claremont, CA, USA 91711. You may also contact Michael Hogg at (Michael.Hogg@cgu.edu). The CGU Institutional Review Board has approved this project. If you have any ethical concerns about this project or about your rights as a human subject in research, you may contact the CGU IRB at (909) 607-9406 or at irb@cgu.edu.

CONSENT: Your agreement below means that you understand the information on this form, that someone has answered any and all questions you may have about this study, and you voluntarily agree to participate in it.

participate in it.	
I voluntarily consent to participate in this research (please check the appropriate box below):	
○ Yes	
○ No	

APPENDIX B: IDENTITY CENTRALITY (ALL STUDIES)

INSTRUCTIONS: Please respond to the following items from 1 (*not at all*) to 9 (*very*...).

1.	How impo	ortant is be	eing an M	Turk wor	ker to you	1?			
	Not at all 1	2	3	4	5	6	7	8	Very important 9
2.	How impo	ortant to y	our identi	ty is bein	g an MTu	rk worke	r?		
	Not at all 1	2	3	4	5	6	7	8	Very important 9
3.	How centr	al is being	g an MTu	rk worke	r to your s	ense of w	ho you ar	e?	
4.	Not at all 1 How often	2 n are you a	3 aware of t	4 being an N	5 MTurk wo	6 orker?	7	8	Very central 9
	Not at all 1	2	3	4	5	6	7	8	Very often 9
5.	How often	do you t	hink abou	t your ide	entity as a	n MTurk	worker?		
	Not at all 1	2	3	4	5	6	7	8	Very often 9
6.	To what ex	xtent does	s your ide	ntity as ar	n MTurk v	worker in	fluence yo	ur life	choices?
	Not at all 1	2	3	4	5	6	7	8	Very much 9

APPENDIX C: IDENTITY MOTIVE PRIMES (STUDIES 1, 2)

Self-esteem prime

A recent survey found that people generally have negative attitudes about Amazon's MTurk workers. Respondents tended to view MTurk workers as relatively uneducated, unskilled, and lazy. In addition, respondents who were especially familiar with the MTurk platform saw workers as dishonest and unreliable. When asked about MTurk workers, one respondent said:

"Half of them are scammers. They use bots to take surveys for them, or they share survey codes with each other on message boards. The other half are just plain lazy. They don't want to get a real job, so they carelessly rush through surveys without reading instructions or paying any sort of attention. In either case, they are unreliable."

PAGE BREAK

According to the information on the previous page, other people's opinions about MTurk workers tend to be

- 1. positive.
- 2. negative.
- 3. Cannot tell from previous information.

Uncertainty reduction prime

A recent survey of Amazon MTurk workers found that there is a severe lack of agreement regarding the issue of fair payment. MTurk workers were asked what they believe the average payment per minute on a HIT should be. Responses ranged from a minimum of 3 cents per minute (\$1.8 per hour) to a maximum of 75 cents per minute (\$45 per hour). The average of the responses was approximately 20 cents per minute (\$12 per hour), but there was considerable variability across the workers. According to one MTurk worker:

"Workers disagree about a lot: Master's qualifications, what constitutes a fair rejection, etc. But the biggest issue MTurk workers disagree on is what constitutes fair pay. Without more agreement on what to aim for, the pay rates are unlikely to change."

PAGE BREAK

According to the information on the previous page, MTurk workers disagree with each other the most on which of the following issues?

- 1. The best scripts to use.
- 2. Fair payment.
- 3. Cannot tell from previous information.

APPENDIX D: GENERIC NORM TARGET DESCRIPTIONS (STUDY 1)

Desirable Target

MTurk Worker A [Office Worker A] is well-liked by others. Those who know him describe him as kind, intelligent, sociable, and responsible. MTurk Worker A [Office Worker A] is a hard worker. He puts care and effort into every task, and he strives to produce honest, high-quality work.

Undesirable Target

MTurk Worker B [Office Worker B] is disliked by others. Those who know him describe him as unpleasant, ignorant, aloof, and irresponsible. MTurk Worker B [Office Worker B] is a lazy worker. He puts minimal effort and care into tasks, and he is unconcerned with the quality of work he produces. He consistently looks for ways to get out of work and still get paid.

APPENDIX E: TARGET EVALUATIONS (STUDIES 1, 2, 3)

INSTRUCTIONS: Please indicate your impression of [target] on the following dimensions:

Attractiveness (All Studies)

I feel that [target] is...

Cold					Warm
Unfriendly					Friendly
Dishonest					Honest
Inconsiderate					Considerate
Unreliable					Reliable
Irresponsible					Responsible
Not respected					Well respected
Incapable					Capable

Typicality (All Studies)

How typical of an [target group member] do you feel this individual is?

Not								Very
typical								typical
1	2	3	4	5	6	7	8	9

Image Conveyed by Target (Studies 1 and 3)

What type of image of [target group] do you feel this individual conveys?

Very								Very
bad								good
1	2	3	4	5	6	7	8	9

Similarity (All Studies)

How similar do you feel you are to this individual?

Not at								Very
all								similar
1	2	3	4	5	6	7	8	9

Endorsement of Target Opinion (Study 3)

How much do you endorse this individual's opinion regarding the issue of payment for MTurk workers?

Not at								Very
all								much
1	2	3	4	5	6	7	8	9

APPENDIX F: GROUP ATTRACTIVENESS (STUDY 1)

INSTRUCTIONS: Please indicate how you perceive **typical MTurk workers** on the following dimensions.

Specific

Cold					Warm
Unfriendly					Friendly
Dishonest					Honest
Inconsiderate					Considerate
Unreliable					Reliable
Irresponsible					Responsible
Not respected					Well respected
Incapable					Capable

Global

What is your overall feeling toward MTurk workers?

Very								Very
negative								positive
1	2	3	4	5	6	7	8	9

APPENDIX G: DEMOGRAPHICS (ALL STUDIES)

What is your age (please write in a number)?
What gender do you identify as?
Male
Female
Other
If "Other" selected, please indicate:
Please indicate which race/ethnicity you identify yourself (please select one): Asian/Asian-American
Black/African-American
Hispanic/Latino(a)/Mexican-American
White/Caucasian/European-American
Multi-racial
If "Multi" selected, please specify:
Other
If "Other" selected, please specify:

APPENDIX H: DEBRIEFING FORM (ALL STUDIES)

Thank you for participating in this study!

The purpose of this research is to test the motivations underlying the derogation of different types of group deviants. As stated on the original consent form, one detail about the nature of this study was withheld. Withholding information is sometimes necessary in psychological research, because informing participants about all aspects of the study can cause them to respond differently than they would in a natural context. The minor deception used in this study is as follows:

To focus your attention on a specific group-related motivation, we asked you to read one of two messages. The message you read either highlighted others' supposed negative evaluations of MTurk workers, or it described the lack of consensus among MTurk workers on important issues. **These messages were created by the experimenters, and they do not necessarily reflect the opinions of others.** We did conduct a pilot study; however, we did not survey non-MTurk workers about their opinions of MTurk workers, as you were told. Instead, we asked MTurk workers to provide some possible negative evaluations others may have of their group, as well as three issues on which MTurk workers tend to disagree. This data was used to create the messages.

Because the information in the messages was based on responses from MTurk workers, we do not anticipate that the messages you read should have caused any more discomfort than you might experience on a regular day. Additionally, previous research has shown that evaluating group deviants is an identity maintenance strategy that can be used to restore positive perceptions of the group. However, we would like to apologize if you did experience any discomfort about your identity as an MTurk worker.

False feedback can continue to have an effect even after an individual has been told the information was false. Therefore, if you did experience any negative feelings about your identity as an MTurk worker, or if you are continuing to experience these feelings, please consider additional steps to lessen this discomfort. For example, take a moment to think of the benefits of being an MTurk worker. MTurk workers enjoy more flexibility, independence, and job variety than others. Moreover, you should feel positive about making a valuable contribution to the field of psychology by participating in this study.

Finally, although the original consent form did state that some information would be withheld until the end of the study, we would like to give you the option of withdrawing your responses from the survey without penalty. Please choose an option below:

\bigcirc	Yes, you	ı may use r	ny respons	ses	
\bigcirc	No, I wo	ould like to	withdraw	my respon	nses

If you have any questions, concerns, or would like to learn more, please feel free to contact the Mark Rinella at mark.rinella@cgu.edu

APPENDIX I: OPPOSITIONAL NORM TARGET DESCRIPTIONS (STUDY 2)

Ingroup Normative

MTurk Worker A believes that MTurk workers should be paid 20 cents per minute (\$12 per hour). This is the amount that most MTurk workers feel they should be paid.

Ingroup Antinorm

MTurk Worker B believes MTurk workers should be paid 15 cents per minute (\$9 per hour). This is less than most MTurk workers feel they should be paid.

Ingroup Pronorm

MTurk Worker C believes MTurk workers should be paid 25 cents per minute (\$15 per hour). This is more than most MTurk workers feel they should be paid.

Outgroup Normative

Office Worker A believes MTurk workers should be paid 10 cents per minute (\$6 per hour). This is the amount that most office workers feel MTurk workers should be paid.

Outgroup Antinorm

Office Worker B believes MTurk workers should be paid 15 cents per minute (\$9 per hour). This is more than most office workers feel MTurk workers should be paid.

Outgroup Pronorm

Office Worker C believes MTurk workers should be paid 5 cents per minute (\$3 per hour). This is less than most office workers feel MTurk workers should be paid.

APPENDIX J: IDENTITY UNCERTAINTY (STUDY 2)

INSTRUCTIONS: Please indicate your level of agreement with each of the following statements from 1 (*strongly disagree*) to 9 (*strongly agree*).

Strongly								Strongly
disagree								agree
1	2	3	4	5	6	7	8	9

- 1. I feel that the definition of an Mturk worker.
- 2. I feel uncertain about what it means to be an MTurk worker.
- 3. I feel uncertain about the characteristics that define being an MTurk worker.
- 4. I feel uncertain about what MTurk workers stand for.
- 5. I feel uncertain about the distinctiveness of MTurk workers' identity.
- 6. I feel uncertain that the MTurk worker identity I know is correct.

APPENDIX K: ATTENTION CHECKS (STUDY 3)

Which sentence best describes you?

- 1. I am not a citizen of the United States.
- 2. I am a citizen of the United States.

Which sentence best describes you?

- 1. As of today, I am 17 years old or younger.
- 2. As of today, I am 18 years old or older.

Which sentence best describes you?

- 1. I do not consider myself fluent in English.
- 2. I **consider** myself fluent in English.

APPENDIX L: IDENTITY MOTIVE PRIMES (STUDY 3)

Self-esteem prime

A recent survey found that people generally have negative attitudes about MTurk workers. Respondents tended to view MTurk workers as relatively uneducated, unskilled, and lazy. In addition, respondents who were especially familiar with the MTurk platform saw workers as dishonest and unreliable. When asked about MTurk workers, one respondent said:

"Half of them are scammers. They use bots to take surveys for them, or they share survey codes with each other on message boards. The other half are just plain lazy. They don't want to get a real job, so they carelessly rush through surveys without reading instructions or paying any sort of attention. In either case, they are unreliable."

PAGE BREAK

Based on the information from the previous page, how do you feel other people tend to view MTurk workers?

Very								Very
negatively								positively
1	2	3	4	5	6	7	8	9

Uncertainty reduction prime

A recent survey found that there is a severe lack of agreement among MTurk workers regarding the issue of fair payment. MTurk workers were asked how much they feel they should be paid for a HIT. While the average of the responses from MTurk workers was 20 cents per minute (\$12.00/hr), there was significant variability and a clear lack of consensus. According to one MTurk worker:

"Workers disagree about a lot: Master's qualifications, legitimate rejections, etc. But the biggest issue MTurk workers disagree on is what constitutes fair pay. Without more agreement among workers, the pay rates are unlikely to change."

PAGE BREAK

Based on the information from the previous page, how much do you feel MTurk workers disagree about fair payment for a HIT?

Not at								Very
all								much
1	2	3	4	5	6	7	8	9

APPENDIX M: INGROUP TARGET DESCRIPTIONS (STUDY 3)

Desirable [Undesirable] Normative

MTurk Worker A tends to be well-liked by others [disliked by others]. Those who know him describe him as kind, intelligent, sociable, and responsible [unpleasant, ignorant, aloof, and irresponsible]. MTurk Worker A is a hard worker [lazy worker]. He puts care and effort into every task, and he strives to produce honest, high-quality work [He puts minimal effort and care into tasks, and he is unconcerned with the quality of the work he produces. He consistently looks for ways to get out of work and still get paid].

As you can see from the image below, MTurk Worker A believes that MTurk workers should be paid 20 cents per minute (\$12.00/hr). This is *equal to the average* that most MTurk workers feel they should be paid.



Desirable [Undesirable] Antinorm

MTurk Worker B tends to be well-liked by others [disliked by others]. Those who know him describe him as kind, intelligent, sociable, and responsible [unpleasant, ignorant, aloof, and irresponsible]. MTurk Worker B is a hard worker [lazy worker]. He puts care and effort into every task, and he strives to produce honest, high-quality work [He puts minimal effort and care into tasks, and he is unconcerned with the quality of the work he produces. He consistently looks for ways to get out of work and still get paid].

As you can see from the image below, MTurk Worker B believes that MTurk workers should be paid 12 cents per minute (\$7.20/hr). This is *lower than the average* that most MTurk workers feel they should be paid.



Desirable [Undesirable] Pronorm

MTurk Worker C tends to be well-liked by others [disliked by others]. Those who know him describe him as kind, intelligent, sociable, and responsible [unpleasant, ignorant, aloof, and irresponsible]. MTurk Worker C is a hard worker [lazy worker]. He puts care and effort into every task, and he strives to produce honest, high-quality work [He puts minimal effort and care into tasks, and he is unconcerned with the quality of the work he produces. He consistently looks for ways to get out of work and still get paid].

As you can see from the image below, MTurk Worker C believes that MTurk workers should be paid 28 cents per minute (\$16.80/hr). This is *higher than the average* that most MTurk workers feel they should be paid.



APPENDIX N: PARTICIPANT OPINIONS (STUDY 3)

INSTRUCTIONS: For each question below, please indicate *your opinion on the following issues*.

What do you feel is the average cents per minute that MTurk workers should be paid for a HIT?

\$0/hr \$3/hr \$6/hr \$9/hr \$12/hr \$15/hr \$18/hr \$21/hr \$24/hr

0 5 10 15 20 25 30 35 40

Average cents per minute ()

What do you feel is the minimum cents per minute that MTurk workers should be paid for a HIT?

\$0/hr \$3/hr \$6/hr \$9/hr \$12/hr \$15/hr \$18/hr \$21/hr \$24/hr

0 5 10 15 20 25 30 35 40

Minimum cents per minute ()

What do you feel is the maximum cents per minute that MTurk workers should be paid for HIT?

\$0/hr \$3/hr \$6/hr \$9/hr \$12/hr \$15/hr \$18/hr \$21/hr \$24/hr

0 5 10 15 20 25 30 35 40

Maximum cents per minute ()