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Abrams, Dominic and Travaglino, Giovanni A. and Marques, Jose M. and Davies, Ben and Randsley de Moura, Georgina (2020) Collective deviance: Scaling up subjective group dynamics to superordinate categories reveals a Deviant Ingroup Protection effect. *Journal of Personality and Social Psychology* . ISSN 0022-3514. (In press)

DOI

<https://doi.org/10.1037/pspi0000356>

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Running Head: COLLECTIVE DEVIANCE AND IN-GROUP PROTECTION

Collective deviance: Scaling up subjective group dynamics to superordinate categories
reveals a Deviant Ingroup Protection effect.

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The authors wish to thank Rachel Calogero and Tirza Leader for comments on an earlier draft. This research was also supported by an ESRC grant to the fourth author, #ES/P00072x/1.

Data transparency statement: Data and data description are available for Experiments 2 and 6 from the first author's institutional academic repository. See supplemental materials,

and <https://data.kent.ac.uk/131/> and <https://data.kent.ac.uk/132/>. Data for other studies cannot be shared as permission for sharing was not sought from participants at the time of collection.

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ABSTRACT

Six experiments examined responses to groups whose attitudes deviated from wider social norms about asylum and immigration (in the United Kingdom), or taxation levels (in the U.S.). Subjective group dynamics (SGD) theory states that people derogate in-group individuals who deviate from prescriptive in-group norms. This enables members to sustain the subjective validity of those norms and, hence, a positive social identity. Research also shows that in-group deviants who accentuate the difference between the in-group and out-group norm (e.g. extremists) are derogated less than deviants who attenuate that difference (e.g. a member who veers toward the outgroup's norm; Abrams et al., 2000). We hypothesized that these effects and the associated group dynamics should scale up when people evaluate deviant groups that are part of larger in-categories. Consistent with SGD theory, participants in Experiments 1, 2, and 3 derogated an in-category attenuating deviant group and upgraded an out-category attenuating deviant group relative to groups that consolidated or accentuated the respective norms of those categories – thereby reinforcing in-category norms relative to out-category norms. Across all experiments, this pattern of differential evaluation was associated with greater subjective validity of the in-category norm. We also hypothesized a novel Deviant Ingroup Protection (DIP) effect, wherein people should curtail derogation of an in-category deviant group when that group is their own. Consistent with this hypothesis, , participants in Experiments 4, 5 and 6 evaluated an accentuating in-group (Experiments 4 and 6), or an attenuating in-group (Experiments 5 and 6) equally to or more positively than other in-category groups. Implications for political and organizational entrenchment are discussed.

Keywords: Deviance, Group Dynamics, Social Identity

An extensive body of social psychological research has examined how people react to other *individuals'* deviations from norms across contexts and types of groups (Abrams et al., 2005; Jetten & Hornsey, 2014; Levine & Marques, 2016). However, so far, little is known about how deviance is perceived and evaluated when an *entire group* deviates from the overarching norms of multiple groups in the context of a superordinate category. Historically, this has been the case of many 'rogue' or 'pariah' states, such as countries that persist in breaking international conventions and appear to resist even the most extreme pressure to conform until there is either an internal crisis or a very severe external intervention (e.g. military). The apartheid regime in South Africa, Saddam Hussein's rule in Iraq, Mohammad Gadhafi in Libya, or Robert Mugabe's reign in Zimbabwe are just some examples. Moreover, there are also parallels with lesser instances of deviance within confederations, such as the persistent flouting of international fishing quotas by certain countries, the stance on homosexual clergy taken by certain churches within the Anglican and Catholic communities, or even recent British criticisms of (and vote to exit) the European Union (e.g., Abrams & Travaglino, 2018). The present research extends theories about people's reactions to deviant individuals within groups to the way they react to deviant groups within larger social intergroup contexts (a predicted 'category-based differential evaluation effect'). Further, it considers how predictions derived from the former theories are qualified by the in-group's own deviance from the norms of its superordinate category (e.g. an alliance): a predicted Deviant Ingroup Protection effect.

Whilst on the one hand a simple extrapolation from the intragroup context seems uncontroversial, on the other, a deviant group poses different challenges and opportunities for the larger category than a deviant individual does within a group. First, deviant groups may be considerably more threatening. This is possible because of their capacity to sustain an internal consensus, and because their characteristics may be variable (e.g., a group's size might become relatively smaller or larger than other groups within the category). Second, if

viewed as a minority faction, these groups may be able to use social influence tactics to induce opinion shift in the larger set of groups (e.g. the vocal minority), whereas a lone individual seems unlikely to have comparable potential in the context of a group. Third, deviant groups may be able to provide psychological or real protection for their members in a manner that is not possible for deviant individuals within groups. Fourth, larger consortia may regard extreme or deviant subgroups as potential assets that can be used to spearhead either conciliation or conflict with opposing consortia. Fifth, individuals can belong to deviant groups, and thus either identify with, and/or be protected by, in-group members, whereas lone deviant individuals have nowhere to hide or seek psychological refuge. However, being a member of a deviant group also pits in-group norms against in-category norms and thus also poses a dilemma of how to reconcile in-group and in-category identity.

Anecdotally, reactions to deviant groups sometimes appear more heated within categories (e.g. among member states of the European Union, among churches within the Anglican community) than toward similarly extreme groups within alternative categories (e.g. the Anglican community seems comparatively less pre-occupied with arguments about different branches of Islam). Moreover, a hallmark of rogue states may be their dogged commitment to their (usually extreme) positions, which they may justify through claims of issues of principle, or by the distinctive values or needs of the group within the category.

These observations suggest interesting hypotheses based on social identity theory (Tajfel & Turner, 1979) and subjective group dynamics (SGD) theory (Marques, Páez & Abrams, 1998; Pinto et al., 2010, Pinto, Marques, Levine & Abrams, 2016; Travaglino et al., 2014). The hypotheses concern the relationship between being a member of a social group and the larger intergroup context in which that group is embedded. When people judge *individual* members of groups, they are motivated to sustain the validity of their in-group's norms because this contributes positively to their social identity. To sustain this 'subjective

validity' people are often more derogatory towards deviant individuals from their in-group than similar deviants from an out-group (Marques, Páez & Abrams, 1998).

In-groups may be contained within larger in-categories and out-groups may be contained within larger out-categories. What happens when people judge *groups* (e.g. states, clubs, or political groups) that are part of larger social categories (e.g. countries, leagues, alliances)? Some evidence suggests that groups may engage in intra-category differentiation. For example, White et al. (2003) observed 'horizontal hostility' among vegans when an adjacent group (vegetarians) in a shared in-category (non-meat eaters) was closer to a superordinate out-category (meat eaters). However, White et al. did not provide participants with an array of groups within each category and did not consider how people would judge a similar range of groups within a different category, limiting the generality of the findings. In this article, we extend research on deviance, by examining experimentally how individuals appraise deviant groups from a shared super-ordinate in-category and from an out-category.

Subjective Group Dynamics and Intra-Category Differentiation: The *Scaling-Up* Process

Small group research indicates that group members who deviate from relevant social norms receive more negative evaluations than do normative members (cf. Levine, 1989; Shaw, 1976). According to SGD theory, individuals' evaluations of groups and their members are a key mechanism through which individuals legitimate the positive distinctiveness of the social identity that is salient within a particular intergroup context. By differentiating between normative and deviant ingroup members, people can feel more positive and secure in their social identity (Pinto, Marques & Paez, 2016). In addition, in-group deviants are often derogated more strongly than similar deviants from out-groups while normative in-group members are evaluated more positively than similarly normative out-group members, because the positions of in-group members are more relevant to the value assigned to the in-group's identity than are the positions of out-group members – the Black Sheep Effect (Marques et al.,

1988, see also Branscombe et al., 1993; Castano et al., 2002; Khan & Lambert, 1998; Marques, Abrams et al., 1998; Marques et al., 2001; Marques et al., 1992; Pinto, et al., 2010; Rullo et al., 2015; Shin et al., 1999).

Differential evaluation, the selective favoring of individuals who offer most validation of in-group norms relative to other individuals, is motivated by, and sustains, individuals' positive social identity, both in minimal and real social groups. For example, differential evaluation is associated with greater in-group bias and stronger identification with the in-group (e.g. Abrams et al., 2002; Abrams et al., 2000; Abrams et al., 2008; Abrams et al., 2003; Branscombe et al., 1993; Marques et al., 2001). In addition, research indicates that increased differential evaluation of members within the group actually increases positive differentiation of the entire in-group from the entire out-group (Marques, Abrams, et al., 1998).

Drawing on SGD research, we can predict that reactions to groups that deviate from superordinate categories should follow a pattern similar to reactions to individuals that deviate from groups. Specifically, we can extrapolate a '*scaling-up*' process such that people should be more derogatory toward deviant groups from their in-category than deviant groups from an out-category. For example, citizens from some US states may feel negative toward US states that have policies that break with practices of the majority, such as allowing marriage at the age of 13, or use of capital punishment. However, they may feel more indifferent, to similar policies in countries or states in world regions outside the US.

In this article, we present six experiments testing whether a) deviant groups are derogated more if they are in-category groups than out-category groups, b) given an opportunity, people show favoritism to their specific in-group within an in-category, c) this also occurs when their in-group deviance is pro-normative/extremist, accentuating the inter category difference, and d) it occurs when their in-group's deviance is anti-normative/disloyal, attenuating the inter-category difference. Moreover, in Experiment 6, we

systematically manipulate the stance of participants' in-group within the in-category. This enables us to examine variations in reactions to group deviance as a function of the participant's own group's position in relation to the in-category norm.

Subgroups Within Categories: Consolidation, Accentuation and Attenuation of Inter-Category Differences

Intergroup relationships are often conceptualized in terms of bilateral conflicts and comparisons (e.g. Sherif, 1966; Tajfel & Turner, 1979). However, self-categorization theory (Turner et al., 1987) proposes that comparisons between particular groups gather their meaning with reference to a shared membership to a more abstract level of categorization (see also Rijsman, 1984). In principle, the same processes could apply at any level of abstraction. For instance, just as people might focus on differences between two individuals within the same group, they could focus on differences between two groups within a social category.

In general, people assume their groups are likely to adhere to their in-category norms, and we label this adherence 'consolidatory'. As noted above, it is important to contrast two directions of deviance in intergroup situations, which correspond to the polar differences in positions held by an in-group and relevant out-group (Abrams, 2011). Deviants that endorse the in-group's normative position much more extremely than other members can be labeled 'accentuators' because they make differentiation between the in-group and out-group more salient. Deviants who endorse a position that is towards an opposing group's norms can be labeled 'attenuators', because their position implies greater legitimacy to the out-group norms, and attenuates the in-group's distinctiveness from the out-group. Attenuative in-group deviance is potentially more undermining of subjective validity than accentuative in-group deviance because it generates greater uncertainty about the validity of the normative position advocated by the group. Conversely, attenuative out-group deviance is more reinforcing of in-group validity than is accentuative out-group deviance, because the former reduces uncertainty about the validity of in-group norms.

In order to test the above idea, Abrams et al. (2000, Study 2) made psychology students aware of a comparison between psychologists' and immigration workers' views on policy regarding the number of asylum seekers allowed to remain in the UK. The in-group (psychologists) was (accurately) depicted as advocating no reduction in (0% change) but the out-group, immigration workers, advocated 30% reduction. Participants then judged six members from either the in-group or the out-group. Four members expressed views that consolidated the group norm. Another member deviated in an extreme direction that accentuated normative differences (either a lenient psychologist advocating a 15% increase or a restrictive immigration worker advocating a 45% reduction). Another group member deviated in the other direction (15% reduction in both cases), attenuating differences between the groups. As predicted, participants showed differential evaluation by favoring the out-group attenuator relative to other out-group members and derogating the in-group attenuator relative to other in-group members. Moreover, participants rated the out-group attenuator more favorably than the in-group attenuator even though both occupied identical attitude positions. Finally, participants evaluated consolidator and accentuator members similarly. In a nutshell, people strategically favored members from either an in-group or an out-group, who gave relatively greater credence to the in-group norm, whereas they strategically derogated members who potentially undermined that norm.

By extension, groups within larger categories may adopt collective positions that can be perceived as attenuating, consolidating or accentuating inter-category differences. Self-categorization theory holds that the prototypical position for one's group emerges as a function of a meta-contrast between within-group and between-group differences (Turner et al., 1987). Individuals, generally, like to consider themselves as closer to an in-group's prototype. Similarly, research shows that people tend to view their group as occupying a position that is representative of a superordinate category to which it belongs (e.g. Mummendey & Wenzel, 1999; Wenzel et al., 2003). Thus, differential evaluations, observed

in prior SGD research, might ‘scale up’ to affect judgments of consolidator, attenuator and accentuator groups within categories. The more that people show bias favoring their own category versus an out-category, the more we might expect a stronger differential evaluation of attenuator versus consolidator or accentuator groups within each category. Individual differences in differential evaluation can be captured by an index (the difference of ratings of attenuators vs consolidators and accentuators). Greater differential evaluation of groups should be associated with higher subjective validity of the in-category norm.

The present studies develop the Abrams et al. (2000) paradigm to investigate these previously untested scaling up predictions that deviant groups within broader categories are evaluated in an analogous way to deviant individuals within particular groups. We examine whether differential evaluations, observed in prior SGD research, might ‘scale up’ to affect judgments of consolidator, attenuator and accentuator groups within categories. The more that people show bias favoring their own category versus an out-category, the stronger should be differential evaluation of attenuator versus consolidator or accentuator groups within each category. In addition, greater differential evaluation of groups should be associated with higher subjective validity of the in-category norm. Thus, the present studies extend the Abrams et al. (2000) paradigm to investigate these previously untested scaling up predictions. Specifically, we expect that evaluations of deviant groups within broader categories should be analogous to evaluations of deviant individuals within particular groups. If this proposition of *category-based differential evaluation* is correct, it has important implications for the handling of dissent and difference within multigroup decision-making bodies (e.g. the UN, WHO, fora on climate change, UNESCO, multi-agency disaster relief coordination, the European Union).

A Deviant Ingroup Protection (DIP) Effect

Social identity theory would suggest that the in-group, being closer to the self (cf. Aron et al., 2004), and being a more distinctive minority (cf. Brewer, 1991; Mullen, 1991) is

likely to be a more salient social identity (Tajfel & Turner, 1979). Intergroup comparisons between large-scale social categories may also seem somewhat abstract whereas membership of a *particular* longstanding group may be more accessible and more frequently activated. As a result, in-groups may provide relatively richer meanings for the self-concept than do in-categories (cf. Deaux et al., 1995), and be more optimally distinctive from other groups (Abrams, 1994; Brewer, 1991; Hornsey & Hogg, 2000; Hornsey & Jetten, 2004; Pickett & Brewer, 2001). There may also be a higher probability of encountering in-category members from one's own in-group than in-category members from other groups, so people may also anticipate more immediate normative pressure from the in-group. Previous research shows that differential evaluation against attenuative deviants increases when people feel accountable to in-group members (Marques, Abrams et al., 1998).

If a person's in-group is already distinctive from the out-category (cf. Brewer, 1991) and the in-group holds an in-category normative (consolidating) position, that person might be equally concerned about distinguishing both the attenuator and accentuator deviant groups in the in-category from the consolidator groups. Moreover, if people know that their own group is normative (Experiment 3), they may project in-group norms to the superordinate in-category and so the in-group's position may be accorded greater weight than other in-category groups (Mummendey et al., 1999). This could reduce the metacontrastive polarization of the in-category norm. For these reasons, people may be less inclined to tolerate in-category accentuator deviants when their own group is known to occupy a consolidator position than they would be if the groups are not identifiable (cf Experiments 1 and 2).

What might happen if the in-group actually occupies a deviant (accentuator or attenuator) position in the in-category? We propose that people will then engage in in-group protective strategies to preserve a positive social identity. That is, we should observe a *Deviant In-group Protection* (DIP) effect. Previous research has considered how individuals

respond when they themselves are peripheral, deviant, or newcomers within an in-group (e.g. Jetten et al., 2002; Levine & Moreland, 1994). Being a deviant individual is a potentially threatening situation that might put a person at risk of being ostracized or rejected by the group, a highly consequential prospect (see Williams, 2001). However, when one's *group* does not conform to wider in-category norms there are two alternative sources of social identity in play – the group and the category identity. In this case, defending social identity as a group member entails commitment to a position that differs from the superordinate category's norm. Indeed, by committing to the category norm, individuals may actually jeopardize their identity as a member of the subordinate group. Conversely, unlike the situation of being a deviant individual in a group, there is still the scope for social identity to be sustained, by evaluating one's group highly. For example, people might feel differently about an in-category such as the United Nations or the European Union if their own country within that alliance endorses a deviant position (e.g. exercises a veto).

How might a DIP effect manifest when the in-group is non-conformist? Specifically, if the ingroup adopts an accentuating or attenuating position, evaluation of the in-group may remain favorable despite the group's deviation from the superordinate category norm. When the in-group is an accentuator (Experiment 4) we would anticipate a reduction in differentiation between the in-group and the consolidator groups. Both should be evaluated positively, and possibly the in-group would be evaluated most positively. The in-group's deviance poses little or no threat to the in-category norm in comparison with the out-category norm, so we would expect a positive relationship between evaluative differentiation and subjective validity.

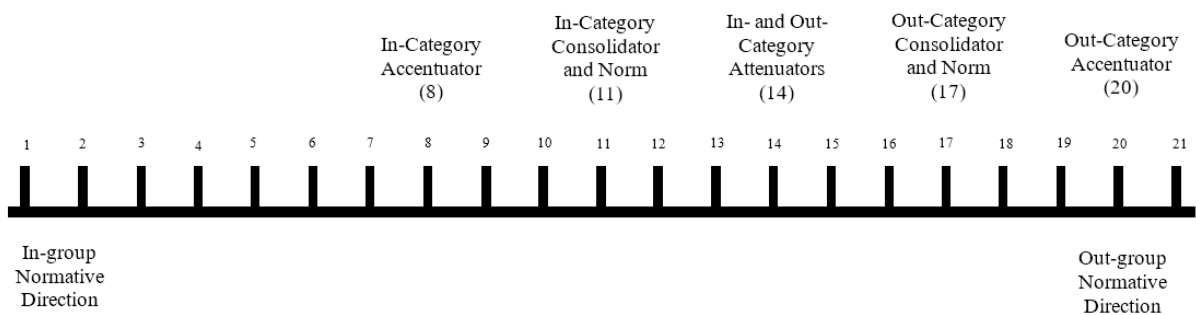
The situation becomes more complex if the in-group occupies an attenuator position (Experiment 5). In order to defend an attenuator group's identity its members would have to reduce their derogation of that position relative to their evaluations of in-category consolidator and accentuator groups. However, supporting the in-group then undermines the

in-category norm and therefore the absolute levels of evaluation of the other groups and category as a whole would need to remain high. A DIP effect would be indicated by a reduction or absence of differences in evaluations of the attenuator group vis-à-vis consolidator or accentuator groups. Moreover, subjective validity of the in-category should still be positively related to categorical differential evaluation.

Overview of the Experiments and Hypotheses

We report six experiments. In Experiments 1, 2 and 3, we tested the impact of the normativeness of participants' in-group within the in-category on the judgments of consolidative, accentuative, and attenuative in-groups and out-groups. Figure 1 shows in general form how these positions are depicted on a 21 point scale in the experiments. The key point to note is that the attenuator positions of the in-group and out-group are actually identical.

Figure 1. Policy Positions Presented for Accentuator, Consolidator and Attenuator Groups



Scaling Up

The general scaling up process is tested in Experiments 1 and 2 in which the groups are anonymized and the in-category and in-group norms are implicitly consistent. We expect

different findings when people's in-group position is explicit, particularly if it is explicitly deviant. In-group deviance poses a dilemma of whether to respond to the potential threat to the in-category, or whether instead to focus on validating in-group identity. We contend that people may be more motivated to defend the norms of in-groups than in-categories.

Experiment 1 is based on Abrams et al. (2000) work, which examined judgments of anonymous attenuator, consolidator and accentuator individuals within an in-group and an out-group. As in Abrams et al we use norms about the correct levels at which the UK should grant asylum. Here we contrasted participants' in-category (Social-Humanitarian groups) with an out-category (Authority-Governance groups) that favored more restrictive policies. We test whether an anonymous in-category attenuator group is more likely to be treated as a pariah than an out-category attenuator that advocates similar views. Pilot testing ensured that participants would assume that their in-group occupied a norm consolidating position because it showed that the in-category norm was perceived to be the same as the in-group norm (cf. also Mummendey & Wenzel, 1999). Therefore, judgments that defend the in-category and in-group should be consistent with one another.

According to the *scaling up* hypothesis, in the in-category, an accentuator group should be evaluated similarly to consolidator (normative) groups because both sustain the in-category's contrast with the out-category (cf. Abrams et al., 2000). In turn, an attenuator group should be evaluated less favorably than other groups, and less favorably than an out-category group that expresses an objectively identical attitude, because it most clearly undermines the in-category norm. Conversely, in the out-category we would expect the attenuator group to be evaluated more favorably than other groups. Based on SGD theory, differential evaluation of attenuator groups versus other groups should bolster the subjective validity of the in-category. Note also that, based on self-categorization theory, the meta-contrast between the in-category and out-category should encourage participants to be relatively more tolerant of an in-category accentuator group than an attenuator group because

the comparison between the in-category and out-category norms may result in subjective polarization of both norms towards more extreme (accentuative) positions.

Experiment 2 tests the scaling up prediction using a different context (North American respondents regarding personal taxation levels, contrasting the (lower tax) norms of US states with the (higher tax) norms of European Union countries. Experiment 2 also tests a boundary condition which is that the effects should only arise if the in-category norm in general is perceived as valid (i.e. that US taxation levels are in general more appropriate than EU levels in general).

Deviant In-Group Protection

The remaining studies use the asylum scenario as in Experiment 1. We test the hypothesis that it is the meaning and not just the magnitude of the differences from the in-category norm that affects evaluations of the different groups. Experiment 3 explicitly depicts the in-group's position as norm consolidating relative to other in-category groups, while accentuator and attenuator groups differ equally in the magnitude of their differences from the in-category norm. In Experiments 4, 5, and 6, the in-group's explicit position is varied, either by presenting it as accentuator (Experiment 4), an attenuator (Experiment 5).

In Experiment 6, we examine the effects of the in-group position (attenuator, consolidator, or accentuator) as well as the effect of naming groups that occupy different positions in the out-category. When the in-group is a norm consolidator, we expect to observe category-based differential evaluation. When the in-group is deviant (either attenuator or accentuator) we expect that participants will protect their in-group identity, revealing a DIP effect. This should be most pronounced when the in-group is an attenuator because that is the condition in which there is the most direct conflict between the in-group and in-category identity. Specifically, differential evaluation should be associated with positive identification with the superordinate category in all conditions. However differential evaluation should be

associated with positive in-group identification only in the conditions in which the in-group is a consolidator or accentuator.

General Design and Procedure of the Six Experiments

Experiments 1, 3, 4 and 5 employ a 2 (Category: In-Category vs. Out-Category) x 3 (Group Position: Attenuator, Consolidator, Accentuator) design. Category is a between-participants factor and Group Position (hereafter called ‘Position’) is a within-participants factor. Participants are presented with an in-category and out-category that hold contrasting norms, and are then presented with a set of groups within either the in-category or the out-category. Participants’ in-group (Psychologists) is part of the more lenient or ‘open’ in-category of *social-humanitarian* occupations. A specified out-group (customs and immigration officers) is part of a more conservative or ‘closed’ out-category of *authority-governance* occupations. Then, within either the in-category or out-category, participants judge and evaluate six groups. These are comprised of four *consolidator* groups, one *accentuator* group, and one *attenuator* group. Participants also rate the validity of the norms of the in-category and out-category. Experiment 2 adopts a similar design but employs an additional between-participants factor (Norm Validity: In-Category Valid vs. Out-Category Valid) and replicates these effects using a different group identity and context (US vs. European Union perspectives on taxation). Experiment 6 extends the asylum paradigm and design to enable direct comparison between conditions in which the in-group occupies the attenuator, consolidator or accentuator positions in the category, and examines the link between differential evaluation of the groups and identification with the category and the in-group.

Sample sizes are based on the known effect sizes from previous studies (cf. Abrams, Travaglino et al, 2018; Yetkili et al., 2018). Sample sizes were based on prior evidence that the effect size in this paradigm was likely to be large (Abrams et al, 2000; $f = .44$). However,

norms for sample sizes have increased in recent years and we note that Experiments 2 and 6 provide the hypothesis tests with greatest power.

Across experiments, we assume that evaluations of groups within categories should have a similar function to evaluations of individuals within groups. Specifically, in-category bias should be positively related to differential evaluation between deviant attenuator groups vis a vis consolidator and accentuator groups. Additionally, differential evaluation should be associated with higher subjective validity of the in-category norm.

All studies complied with APA ethical standards and were approved by the university's Psychology ethics board (ID 2011855). Data are available for Studies 2 and 6 from the first author's institutional academic repository (see supplemental materials, and <https://data.kent.ac.uk/131/> and <https://data.kent.ac.uk/132/>). Data for other studies cannot be shared as permission for sharing was not sought from participants at the time of collection. Supplemental Materials Table S1 provides a summary of the manipulation checks from each study indicating that participants correctly perceived the differences in positions adopted by different groups.

Experiment 1: Testing the *Scaling Up Effect* of Differential Evaluations

Method

Participants

Thirty-nine introductory psychology students participated as a course requirement. Participants were assigned randomly to conditions (20 In-Category, 19 Out-Category). The majority were female ($n = 35$). At the time of the study we recruited all available students to participate. A post hoc power analysis indicated that the N in this study provided power of 76% to detect an effect size of $f = .44$.

Procedure

The experiment was introduced as being:

“about how you perceive social groups and social issues. We are interested in your ideas and feeling towards some specific types of groups. Certain occupations are seen to take a social and humanitarian perspective on social issues such as asylum seeking. The category of *Social-Humanitarian* occupations is made up of several groups, including Psychologists, Social Workers, Legal Aid Solicitors, Teachers, Psychiatrists, and Sociologists. On the other hand, there are occupations which take a more economic and legalistic perspective of social issues. These can be classed as *Authority-Governance* occupations, which include groups such as, the British Association of Immigration and Customs Officers (BAICO), Police Officers, Prosecution Lawyers, Transport Workers, Tax Officers, and Bank Clerks”.

These groups had been selected on the basis of pilot work that showed they fitted to the categories.

Next, participants were presented with a brief introduction to the topic of asylum seeking in Europe. A newspaper article was described, containing a series of graphs and tables reporting the numbers granted asylum in different European countries. Britain was the middle of the range. Participants then read a document entitled, ‘Survey Research on Asylum Seeking’. This presented two opposing views regarding asylum regulations in Britain. An introductory paragraph highlighted the importance and emotiveness of the issues involved, and provided (accurate) statistical information about the number of asylum seekers entering Britain each year, and that 22% were granted asylum. The second paragraph gave a series of strong reasons why the numbers granted asylum should be increased.

The third paragraph provided information from a bogus survey conducted among the *Authority-Governance* occupations to define the out-category norm. This paragraph stated reasons why the numbers granted asylum should be reduced (arguments were matched for strength and number against those in the preceding paragraph). At the end of this paragraph we included the sentence stating that “the survey of the *Authority-Governance* occupations

showed that on average they support a policy that the proportion of asylum seekers who are ultimately granted permission to stay in Britain should be reduced by at least 30%”.

The final paragraph described a survey, ostensibly conducted among the Social-Humanitarian occupations, and stated that the results indicated: “widespread support for the status quo. On average the Social-Humanitarian occupations believed that the current level of admissions for asylum seekers set by the present Government was about right”. This accurately reflected pre-tested attitudes from the same population as participants. Participants were then told that the survey would be continued, and that they would be asked to give their impressions of other participants.

Category Evaluations

After reading the general introduction, participants evaluated Social-Humanitarian occupations and Authority-Governance occupations by responding to the question: “How favorable do you feel towards [Social-Humanitarian occupations; Authority-Governance occupations]” (1 = *not at all*, 7 = *extremely*).

Perceptions and Evaluations of Groups

Next, participants viewed how the six groups in the category, labeled A to F, had responded to 10 attitude items. They were also shown each group’s specific recommendations about the percentage change in numbers that should be granted asylum. In the In-Category condition, the groups listed, which included Psychologists, were all from the social-humanitarian category. In the Out-Category condition they were all from the authority-governance category and the list included the (fictitious) British Association of Immigration and Customs Officers (BAICO). Psychology and BAICO were the two groups that had been used as the in-group and out-group in Abrams et al. (2000), and in subsequent experiments in the present research.

Groups’ average attitude responses were represented on 21-point bipolar scales, which allowed precise manipulation of deviance. Across the 10 items, each group’s attitudes did not

vary by more than ± 1 from its overall position. Four groups (A, C, D, F) were depicted as holding normative attitudes for their category (consolidators). Group B was extreme pro-normative (accentuating) and E was anti-normative (attenuating) (see Figure 1). In absolute terms, the accentuating and attenuating groups were equally divergent from the normative group mean, and their attitudes fell outside of the range expressed by consolidating groups. In the Social-Humanitarian (In-Category) condition, the 4 consolidating groups' positions corresponded to the attitudinal positions of psychology students observed in previous research (e.g. Abrams et al., 2000). These attitude positions each averaged 11, with a range from 10 to 12 across the attitude items. The recommended percentage change in people granted asylum averaged 0% across the consolidator groups, with a range from -5% to +5%.

The accentuator (group B) attitude averaged 8 (range 7-9) on the 21 point scales, and it recommended an increase (+15%) in the numbers granted asylum. The attenuator (group E) averaged 14 (range 13-15) on the 21 point scales, and recommended a reduction (-15%) in the numbers granted asylum. These were determined so that they fell outside the 95% confidence interval (and differed significantly) relative to attitudes held by consolidator groups.

In the Out-Category condition, the 4 consolidator groups each averaged 17 on the attitude scales, with a range of 16-18 across the items. The recommended percentage change in people to be granted asylum averaged -30% across the consolidator groups, with a range from -25% to -35%. The accentuator averaged 20 (range 19-21) on the attitude items, and recommended a large decrease in the numbers granted asylum (-45%). The attenuator group averaged 14 (range 13-15) and recommended a smaller reduction in the numbers granted asylum (-15%). Thus, the average position of the attenuator groups the In-Category and Out-Category conditions was identical.

Policy orientation check. Participants were then asked to report the policy orientation of groups A to F by asking “to what extent does each occupational group support a more open

or a more closed policy towards asylum seekers” (1 = *more open*, 7 = *more closed*). This was to ensure that they accurately perceived the magnitude of differences among the groups.

Evaluations of groups. To measure *evaluations of groups*, participants then rated how favorable they felt towards each group. Groups labeled A to F were presented in rows in a matrix table and participants were asked: “Please, indicate how favorable you feel towards each group [A to F] in the Social Humanitarian [Authority-Governance] category (1 = *not at all*, 7 = *extremely*).

Category Subjective Validity. Two sets of items (one for Social-Humanitarian category, another for the Authority-Governance category) asked participants to rate (1 = *not at all*, 7 = *extremely*): “To what extent do you think the [category’s] views are reasonable, fair, and valid (3 items). At the end of the experiment participants were asked whether they had any suspicions and were debriefed. No suspicions were expressed by participants.

Results and Discussion

Policy Manipulation Check

Means for the policy check for groups within conditions for each experiment are shown in Table S1 earlier. In line with manipulations, in Experiment 1 and all other experiments, participants correctly characterized the in-category accentuator group as more open than the consolidator groups, which in turn were more open than the attenuator group. They also correctly identified the reverse pattern in the out-category condition and all pairwise comparisons within condition were significant ($p < .001$).

Inter-category Bias

In the UK, where Experiments 1 and 3-6 were conducted, psychology students enroll for their Psychology Honors degree from the first year and this constitutes over 70% of their courses. Prior research established that ‘psychologist’ is a meaningful social identity for these students (e.g. Abrams et al., 2000; 2008). A basic requirement to test the subjective group dynamics predictions is that the categories are meaningful and salient for identity. Evidence

for this is that participants show *inter-category bias* by evaluating the in-category more positively than the out-category. For all experiments the mean scores and tests of in-category versus out-category differences for category evaluations are provided in Supplementary Materials Table S2. As shown in Table S2, the Social Humanitarian category was favored significantly more than the Authority-Governance category, $F(1, 37df) = 23.58, p < .01, \eta_p^2 = .18$. The difference between the two evaluations (in-category minus out-category) was used to create an *inter-category bias* score for each participant.

Evaluations of Groups

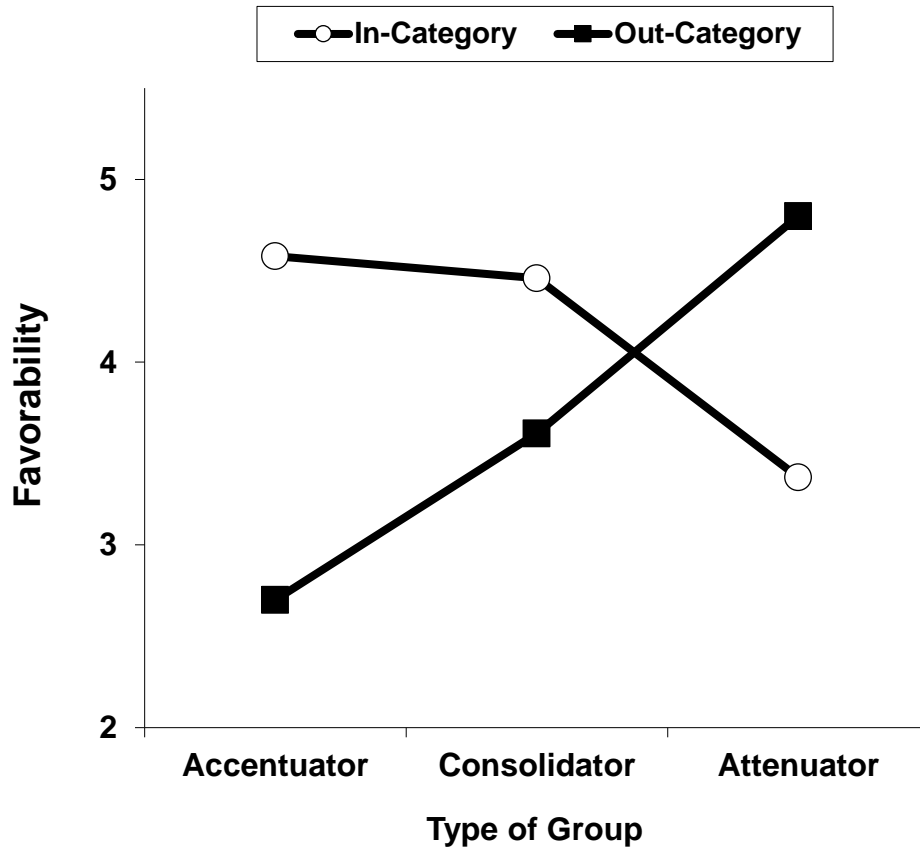
We averaged the favorability ratings of the 4 consolidator groups (cf. Abrams et al., 2000, Study 2) and analyzed these and the ratings of the attenuator and consolidator groups with a Category (In-category vs. Out-category) x Group Position (Attenuator, Consolidator, Accentuator) ANOVA with repeated measure on the Position factor. The composite measures for consolidator groups all had good reliability (*alphas* > .80 in all experiments).

The Category x Position ANOVA revealed that the main effect of Category was not significant, $F(1, 37) = 1.80, p = .19, \eta_p^2 = .046$, nor was the effect of Position, $F(2, 74) = 1.31, p = .28, \eta_p^2 = .034$. The Category x Position interaction was significant, $F(2, 74) = 15.82, p < .001, \eta_p^2 = .30$ (see Figure 2). The latter result is consistent with the scaling up hypothesis for differential evaluation. Specifically, in the In-Category condition the significant simple effect of Position, $F(2, 36) = 4.12, p = .024, \eta_p^2 = .186$ indicated that the attenuator group ($M = 3.37, SD = 1.42$) was evaluated significantly less favorably than the consolidator ($M = 4.46, SD = 1.25, p < .05$) and accentuator ($M = 4.58, SD = 1.50, p < .01$) groups, and the latter two did not differ significantly.

In the Out-Category condition, the simple main effect of Position, $F(2, 36) = 7.09, p = .003$, showed that the attenuator group ($M = 4.80, SD = 1.44$) was evaluated more favorably than the consolidator ($M = 3.61, SD = 1.19, p < .01$) and accentuator ($M = 2.70, SD = 1.95, p < .01$) groups, respectively, and the consolidator and extremist groups also differed

significantly ($p < .01$). Tests of the simple effects of Category for each group show that in-category accentuator group was evaluated more positively than out-category accentuator group, $F(1, 37) = 11.28$, $p = .002$, $\eta_p^2 = .234$, and the in-category consolidator groups were evaluated more positively than the out-category consolidator groups, $F(1, 37) = 4.74$, $p = .036$, $\eta_p^2 = .114$. In contrast, as shown in Figure 2, the in-category attenuator group was evaluated significantly less favorably than the out-category attenuator group, $F(1, 37) = 9.77$, $p = .003$, $\eta_p^2 = .209$. Thus, in both conditions the pattern of means is consistent with scaling up of differential evaluation. The out-category attenuator group was favored above other out-category groups, the in-category attenuator group was derogated more than other in-category groups, and in fact was derogated more than the comparable out-category attenuator group.

Figure 2. Experiment 1: Mean Favorability to Accentuator, Consolidator (Normative) and Attenuator Groups as a Function of Category (In-Category vs Out-Category).



For further analyses we computed a differential evaluation score. In the In-Category Judged condition, the differential evaluation score is the (mean of in-category consolidators + accentuator) minus the in-category attenuator. In the Out-Category Judged condition the differential evaluation score is attenuator minus (mean out-category consolidators plus accentuator).

Category Subjective Validity

The three items measuring validity were averaged for each category (α s > .85). In-category validity was significantly higher than out-category validity, $F(1,37) = 5.16$, $p < .05$, $\eta^2 = .122$, as was the case in all experiments and the relevant condition of Experiment

2 (see Table S2). A *subjective validity* score was created by subtracting mean out-category validity from mean in-category validity.

Relationship between Category Judgements and Differential Evaluation

We next examined the relationship between differential evaluation of the groups within category and the evaluations and subjective validity of the categories. Table 1 shows the correlations between differential evaluation scores and inter-category bias and category subjective-validity, respectively for all experiments. As predicted by subjective group dynamics theory, participants who showed stronger inter-category bias also showed stronger differential evaluation, $r = .54, p < .001$). Moreover, those who showed stronger differential evaluation regarded in-category subjective validity to be higher, $r = .38, p < .05$.

In summary, participants selectively favored groups within either an in-category or out-category whose positions showed relatively greater support for the in-category norm. Moreover, even though the in-category attenuator group and the out-category attenuator group expressed an identical attitude, participants were significantly more favorable towards the out-category attenuator group. This is consistent with the idea that people value the symbolic significance of rejecting the out-category's norm more strongly than the actual (objective) position advocated by deviants. Taken together, these findings are consistent with the scaling up of the differential evaluation results from Abrams et al. (2000). When groups deviate from the norms of their superordinate in-category or out-category, subjective group dynamics operate similarly to the way they operate when individuals deviate from the norms of in-groups and out-groups.

More importantly, the data illuminate the process underlying these effects. Specifically, the motivation for differentiating between consolidator and deviant groups appears to be consistent with the SGD model's assumption that people wish to validate norms that are important for social identity. In category attenuator groups undermine such norms,

whereas out-category attenuator groups provide relative validation of in-category norms by undermining the out-category norms.

Experiment 2: The Moderating Effect of Norm Validity

Experiment 1 demonstrated that people differentiate between groups with the goal of upholding the norms of the in-category. Although the effect size from previous studies using this paradigm was large (Abrams et al., 2000; 2002), we accept that the sample size of Experiment 1 was smaller than conventional standards (cf Yetkili et al, 2018). Experiment 2 therefore aimed to replicate the scaling up effect found in Experiment 1 using a larger sample and alternative context and norm. Specifically, with North American participants we use norms surrounding personal income tax between US states (in-category) and European Union countries (out-category).

We also test a potential moderator in the form of norm validity. In line with subjective group dynamics theorizing, Experiment 1 shows that people derogate in-category attenuator groups and upgrade out-category attenuator groups with the aim of validating the norms of the in-category. In order for people to engage in this differentiation, it is expected that they must accept the validity of the in-category norm. Individuals who reject the validity of the in-category norm, or even accept the out-category norm as more valid, should not be motivated to differentiate between groups and uphold in-category norms. Based on subjective group dynamics, only participants who accept their in-category norm as valid should respond favorably to accentuator groups and derogate attenuator groups. In Experiment 2, we test the moderating effects of participants' assumption of in-category validity as a boundary condition for the emergence of the scaling up effect.

Method

Participants

One-hundred-and-sixty-five US residents were recruited from the crowdsourcing platform Prolific. To ensure there were equal numbers of participants in our Norm Validity factor (In-Category Valid vs. Out-Category Valid), participants were first pre-screened and answered the subjective validity measures from Experiment 1 to assess whether they thought US or European Union norms on taxation were more valid. Participants were classified as belonging to the in-category valid condition if their mean score on the US subjective validity measure was greater than their score on the European Union subjective validity measure. There were 80 participants in the in-category valid condition and 85 in the out-category condition. Participants were then randomly assigned to condition (85 in the In-Category condition, 80 in the Out-Category condition). Group Position (Attenuator, Consolidator, Accentuator) was the within participants factor. There were 94 males, 67 females, and four participants who identified as other. Post-hoc power analysis indicated that the sample size was sufficient to detect effect sizes of $f = .09$ for the two-way interaction between Category and Position and effect sizes of $f = .12$ for the three-way interaction between Category, Position and Norm Validity.

Procedure

The procedure closely followed Experiment 1 but was set within the context of US and European Union norms towards personal income taxation levels, with the level of taxation varying between state within the US and varying between country within the European Union. The study was introduced to participants as:

“This study is about how you view social groups and social issues. We are interested in what you think and feel about how different countries and different states choose to impose personal tax levels. Across the world, countries differ in how much income and sales tax they make their citizens pay. There is much debate about

what the right level of taxation should be. The United States (US) has generally adopted a taxation approach which minimizes personal income tax levels and ensures personal economic freedom. The European Union (EU) has generally adopted a taxation approach which applies substantial taxation levels and ensures access to public services. Generally, personal incomes taxes are measured as a percentage of the amount of personal income that is taken by the government. Averaging across different states in the US, state taxation levels are generally around 7%. This contrasts with the European Union (EU). Across different countries in the EU, country tax levels are generally around 21%.”

The position of each category was taken from the average level of taxation among states and countries within the US and European Union respectively.

Participants then read a short article on previous survey research on personal income tax that set out the views of the US and European Union. The US was positioned as adopting a more liberal perspective on taxation, which gave citizens the right to spend their money as they pleased and limited the amount taken by Government. The European Union was positioned as placing higher levels of taxation on citizens, which limited personal freedom but provided wider access to public services. Participants were informed that among a survey of American states, Americans generally supported low taxes and preferred reductions in tax levels. Among a survey of European Union countries, Europeans were comfortable with higher taxes and supported increases in taxation levels.

To manipulate the norm within each category, participants were displayed a color chart which ranged from 0% tax (labeled as Very Low Taxation and colored Yellow) to 14% tax (Medium Taxation: Red) to 28% (Very High Taxation: Blue). In the in-category condition, each group was labeled as 1-6, with state 2 as the accentuator group (0% taxation) and state 5 as the attenuator group (14% taxation). The consolidator groups (states 1, 3, 4, and 6) ranged from 6-8% taxation levels, with the mean as 7%. In the out-category condition,

each group was labeled as country 1-6, with country 2 as the accentuator group (28% taxation) and country 5 as the attenuator group (14% taxation). The consolidator groups (countries 1, 3, 4, and 6) ranged from 20-22% taxation, with the mean as 21%. As with Experiment 1, the attenuator group for both the in-category and out-category condition adopted the same position.

Participants then completed the same measures as in Experiment 1, adapted to the present groups and categories.

Results and Discussion

The results for the Policy Manipulation Check can be seen in Table S1 which shows, consistent with Experiment 1, that participants correctly perceived the relative differences of policy positions of groups within the categories.

Evaluations of Groups

We conducted a 2 (Category: In-category vs. Out-category) x 2 (Norm Validity: In-Category Valid vs. Out-Category Valid) x 3 (Position: Accentuator vs. Consolidator vs. Attenuator) mixed ANOVA, with Position as the within-subjects factor. The main effect of Category was not significant, $F(1, 161) = 0.01, p = .917, \eta_p^2 = < .001$, nor was the main effect of Norm Validity, $F(1, 161) = 0.26, p = .608, \eta_p^2 = .002$. The main effect of Position was significant, $F(2, 322) = 4.41, p = .013, \eta_p^2 = .027$. The Category x Position interaction was significant, $F(2, 322) = 26.82, p < .001, \eta_p^2 = .14$. In line with Experiment 1, the significant simple main effect of Position within the in-category condition, $F(2, 160) = 7.07, p = .001, \eta_p^2 = .08$, and pairwise comparisons, indicated that the attenuator group was evaluated significantly less favorably ($M = 3.48, SD = 1.70$) than both the consolidator ($M = 4.21, SD = 1.21, p < .01$) and accentuator ($M = 4.31, SD = 2.36, p < .001$) groups, and the latter two did not differ significantly.

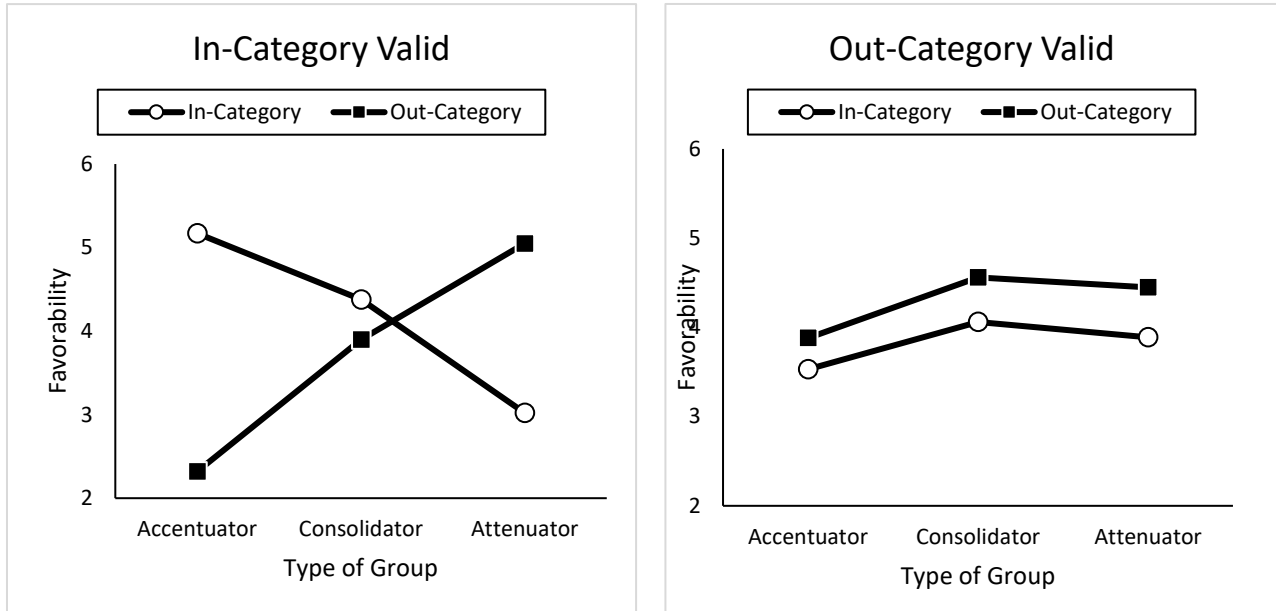
In the out-category condition, the main effect of Position was also significant, $F(2, 160) = 18.89, p < .001, \eta_p^2 = .19$. Pairwise comparisons indicated that the attenuator group

was evaluated significantly more favorably ($M = 4.75$, $SD = 1.64$) than both the accentuator group ($M = 3.10$, $SD = 1.97$, $p < .001$) and the consolidator groups ($M = 4.23$, $SD = 1.30$, $p < .05$). The consolidator and accentuator groups also differed significantly ($p < .001$). Tests of simple effects of Category within each group revealed that the in-category condition accentuator group was evaluated significantly more favorably in the than the out-category accentuator group, $F(1, 161) = 15.64$, $p < .001$, $\eta_p^2 = .09$. In contrast, the in-category attenuator group was evaluated significantly less favorably than the out-category attenuator group $F(1, 161) = 25.68$, $p < .001$, $\eta_p^2 = .14$. The simple effect of Category for the consolidator group was not significant, $F(1, 161) = 0.04$, $p = .947$, $\eta_p^2 < .001$.

However, these effects were qualified by the significant Category x Norm Validity x Position interaction, $F(2, 322) = 22.41$, $p < .001$, $\eta_p^2 = .12$. We decomposed the three-way interaction by examining the Category x Position interaction within each level of Norm Validity (see Figure 3). Within the in-category valid condition, the Category x Position interaction was significant, $F(2, 156) = 59.99$, $p < .001$, $\eta_p^2 = .44$. Within the out-category valid condition it was non-significant, $F(2, 166) = 0.09$, $p = .912$, $\eta_p^2 = .001$.

Within the in-category valid condition, simple main effects and pairwise comparisons indicated that the in-category attenuator was evaluated significantly less favorably ($M = 3.02$, $SD = 1.67$) than both the in-category consolidator ($M = 4.38$, $SD = 1.17$, $p < .001$) and the in-category accentuator ($M = 5.17$, $SD = 2.06$, $p < .001$) groups, $F(2, 160) = 11.16$, $p < .001$, $\eta_p^2 = .12$. In contrast, the out-category attenuator group was evaluated significantly more favorably ($M = 5.05$, $SD = 1.65$) than both the out-category consolidator ($M = 3.90$, $SD = 1.33$, $p < .001$) and out-group accentuator ($M = 2.32$, $SD = 1.69$, $p < .001$) groups, $F(2, 160) = 19.63$, $p < .001$, $\eta_p^2 = .20$.

Figure 3. Experiment 2: Mean Favorability to Accentuator, Consolidator (Normative) and Attenuator Groups as a Function of Category (In-Category vs Out-Category) and Norm Validity (In-Category Valid vs Out-Category Valid).



Overall, the scaling up effects found in Experiment 1 only occurred in the in-category valid condition. In this context, attenuator groups are derogated when belonging to the in-category, but upgraded when belonging to the out-category. More concretely, a group that advocates a higher (than US normative) tax rate across the US is evaluated more negatively if that group is a US state than if it is a European Union country. Moreover, in line with subjective group dynamics theory, we find that people are only motivated to differentiate between evaluations of groups when they perceive their in-category's norms as valid and hence worth defending. When people view the out-category's norms to be more valid they no longer differentiate between groups within the categories.

Category Judgments and Differential Evaluation

Means for inter-category bias and category subjective validity can be seen in Table S2. Only in the In-Category Valid Condition did we expect the results to match those of Experiment 1. Consistent with this prediction, participants favored the in-category and

attributed higher subjective validity to the in-category in that condition, with larger effect sizes than Experiment 1 in both cases. As we expected, these differences reversed in the Out-Category Valid condition. The effect size was twice as large for subjective validity, reflecting the basis of assignment of participants to that condition. Table 1 shows that the relationships between differential evaluation and the category judgments and replicates the evidence from Experiment 1. Stronger differential evaluation is highly significantly associated with greater inter-category bias and greater in-category subjective validity.

Experiment 3: Introducing Identifiable Consolidator Groups

The situation in Experiments 1 and 2 was one in which the in-category and in-group norms were implicitly consistent. Moreover, based on self-categorization theory, the meta-contrast between the in-category and out-category would have encouraged participants to be relatively favorable to the accentuator group in the in-category because the in-category norm may have been subjectively polarized towards that extreme position. However, in real life it is more common that people know for sure whether their own group supports the consensus line. One possibility is that the greater experimental realism might simply strengthen the category-based differential evaluation observed in Experiments 1 and 2. However, another possibility is that when people know that their own group is normative this may reduce the effect of the meta-contrast. Specifically, given that people tend to project in-group norms to superordinate categories, the in-group's position may be accorded greater weight than that of other normative groups (Mummendey et al., 1999), and so accentuator groups may be less favored when one's in-group is known to occupy a normative position. This question is investigated in Experiment 3 in which the in-group's position as a consolidator member of the in-category is made explicit.

Given that participants know their own group is neither an attenuator nor an accentuator, they may defend the category norm and also the in-group norm by differentiating from both attenuator and accentuator groups. Thus, we might expect less favorability to the

accentuator group than we observed in Experiments 1 and 2, although it should still be greater than favorability toward the attenuator group. Moreover, consistent with Experiments 1 and 2, differential evaluation should continue to be related to subjective validity of the in-category norm because there is congruence between supporting the in-category and supporting the in-group norm.

For consistency of manipulations in the two Category conditions, in the out-category we defined BAICO (customs officers) as holding a normative position for the out-category. Naming an out-category group should have little or no effect because there is no reason for participants to care *which* particular group in the out-category happens to support or oppose the out-category norm.

Method

Participants

Forty-four introductory psychology undergraduate students participated as part of course requirements. Participants were assigned randomly to condition (19 in the In-Category condition, 25 in the Out-Category condition). Group Position (Attenuator, Consolidator, Accentuator) was the within participants factor. The majority of participants were female ($n = 39$), but as no gender differences emerged in the data analysis this variable was not considered further. At the time of the study, all participants available in the classroom were recruited. Post hoc power analysis confirmed this sample size provided 82% power to detect a large effect at $p < .05$.

Procedure

The procedure was identical to Experiment 1 but additionally, when the group attitudes were presented, participants were informed that (consolidator) group C was Psychologists (in-category condition) or BAICO (out-category condition).

Results and Discussion

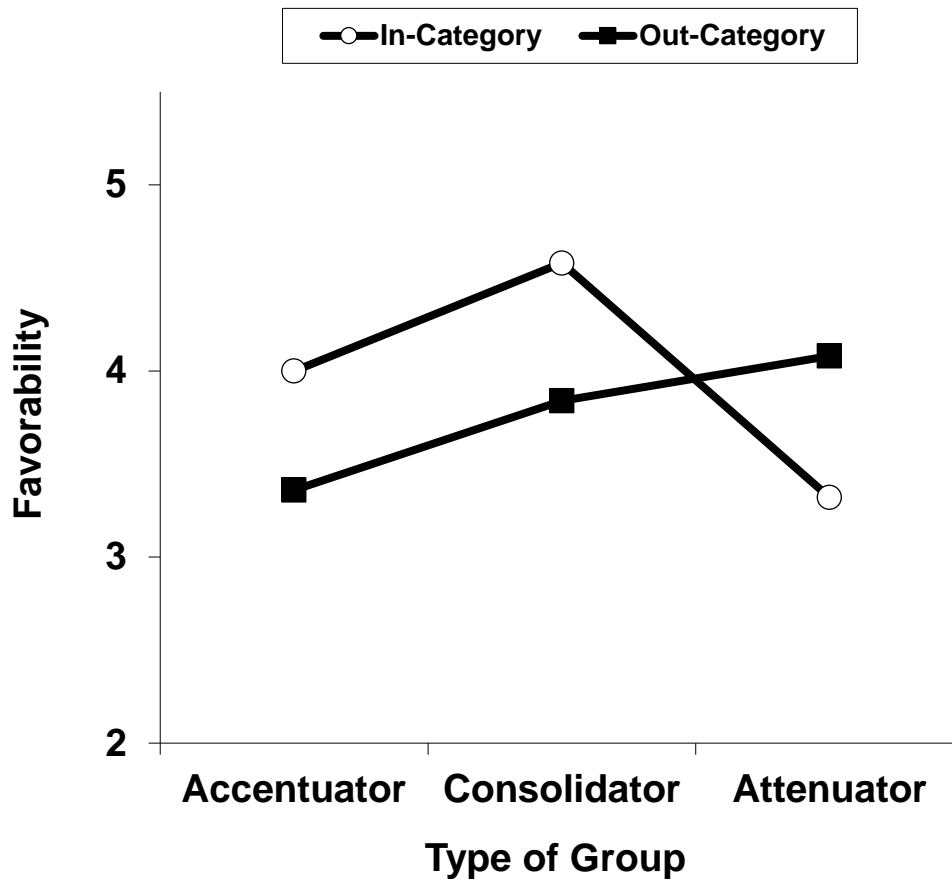
The results for the Policy Manipulation Check can be seen in Table S1, which shows findings consistent with Experiment 1. Participants correctly perceived the relative differences of policy positions of the groups within the categories.

Evaluations of Groups

The main effect of Category was not significant, $F(1, 42) = 0.87, p = .36, \eta_p^2 = .020$, nor was the main effect of Position, $F(2, 84) = 2.48, p = .09, \eta_p^2 = .056$. The Category x Position interaction was significant, $F(2, 84) = 4.89, p = .01, \eta_p^2 = .104$, see Figure 4. Specifically, in the In-category condition the significant simple effect of Position, $F(2, 41) = 10.16, p < .001, \eta_p^2 = .331$, and pairwise comparisons indicated that the in-category consolidator groups were evaluated significantly more favorably ($M = 4.58, SD = 0.67$) than both the in-category accentuator ($M = 4.00, SD = 1.00, p < .01$) and the in-category attenuator groups ($M = 3.32, SD = 1.38, p < .001$). Moreover, evaluations of the in-category attenuator and accentuator groups did not differ significantly ($p > .20$). In the Out-category the simple effect of Position was not significant $F(2, 41) = 1.68, p = .198, \eta_p^2 = .076$.

Tests of the simple effects of Category for each group show that the in-category accentuator group was evaluated similarly negatively as the out-category accentuator group, ($M = 3.36, SD = 1.75$), $F(1, 42) = 2.02, p = .16, \eta_p^2 = .046$, but the in-category consolidator group was evaluated more positively than out-category consolidator group ($M = 3.84, SD = 1.08$), $F(1, 42) = 6.99, p = .011, \eta_p^2 = .14$. As in Experiments 1 and 2, the in-category attenuator group was evaluated more negatively ($M = 3.32, SD = 1.38$) than the out-category attenuator group ($M = 4.08, SD = 1.22$), $F(1, 42) = 3.79, p = .058, \eta_p^2 = .083$.

Figure 4. Experiment 3: Mean Favorability to Accentuator, Consolidator (Normative) and Attenuator Groups, when the In-group is named as a Consolidator, as a Function of Category (In-Category vs Out-Category).



We probed for a Deviant Ingroup Protection effect (i.e., enhanced evaluation of the in-group within its category) by comparing evaluations of the in-group (Group C, $M = 4.74$, $SD = 0.81$) against the mean of evaluations of all other in-category groups ($M = 4.18$, $SD = 0.45$). This difference was significant, $F(1,41) = 20.98$, $p < .001$, $\eta_p^2 = .34$.

We also examined whether Group C was evaluated differently from the other consolidator groups in a Category x Group Evaluated (Group C vs the mean of other Consolidator groups) ANOVA. This revealed only a significant main effect of Category, $F(1,41) = 7.66$, $p = .008$, $\eta_p^2 = .16$. In-category groups were evaluated more favorably than

out-category groups. The gGroup Evaluated main effect and the interaction term were non-significant, $F_s < 2.16$, $p_s > .15$. We noticed, however that there was a tendency in the In-category condition for the in-group, Group C, to be evaluated slightly more favorably ($M = 4.74$, $SD = 0.81$) than the other consolidator groups ($M = 4.53$, $SD = 0.68$), $F(1,41) = 3.40$, $p = .072$, $\eta_p^2 = .077$. When we omitted Group C from the Category x Position analysis all effects were unchanged except that the pairwise comparison between In-category consolidator and accentuator means became marginal, ($p = .085$).

Category Judgments and Differential Evaluation

Table S2 shows that the in-category was rated significantly more favorably and as more subjectively valid than the out-category. Table 1 shows, consistent with the SGD model, that differential evaluation of the groups was significantly positively related to inter-category bias and to in-category subjective validity. Thus when people differentiate attenuator deviant groups from others this is associated with increased subjective validity of their in-category norm. We also examined the relationship between evaluation of the specific in-group and subjective validity. As expected, specific evaluation of the in-group was significantly positively related to subjective category validity ($r(19) = .48$, $p = .039$).

Taken together, Experiments 1, 2 and 3 show clearly that subjective group dynamics scale up when people judge groups within categories and when the in-group implicitly or explicitly holds a normative position. However, in line with a potential Deviant Ingroup Protection effect, Experiment 3 also suggests that, when people's in-group is identifiable within the in-category, they may prioritise the in-group above all others. The following experiments probe whether this parochial level of in-group favoritism extends to situations when the in-group is deviant.

Experiment 4: Accentuator Groups

Evaluation of the in-category accentuator group was less favorable in Experiment 3 than in Experiments 1 or 2. Also, evaluation of the specific consolidator in-group was

significantly higher than the average evaluation of all other in-category groups. This suggests that, given an opportunity, participants may seek to support *both* the in-category relative to the out-category and the in-group relative to other in-category groups, by favoring the in-group over others. Experiment 4 examines this idea by informing participants that the *accentuator* position is occupied by their own group (In-Category condition), or by BAICO (Out-Category condition).

Motivation to sustain the in-category norm would be reflected by differential evaluation that contrasts attenuator groups against other groups. However, if participants' primary concern is to protect their own group this pattern should change. In contrast to the results of Experiment 3, participants should be at least as favorable to their own (accentuator) group as to the in-category consolidator groups, and they should be less concerned to derogate the in-category attenuator group more than the in-category consolidator groups. Overall, we might expect reduced or eliminated differential evaluation to support the in-category. Finally, in Experiment 4, in-group and in-category norms are distinguishable, allowing us to examine with greater clarity how support for the in-category norm via differential evaluation, and evaluations of the in-group may distinctively relate to category subjective validity.

Method

Participants

Sixty-six psychology undergraduate students participated as part of course requirements.

Procedure

Participants were assigned randomly to condition (31 In-Category, 35 Out-Category). The majority of participants ($n = 58$) were female. The procedure was identical to Experiment 2 except that when the group attitudes were presented participants were informed that accentuator group (Group B) was in fact Psychologists (in the In-Category condition) or

BAICO (in the Out-Category condition). Post hoc power analysis indicated 94% power to detect a large effect with $p < .05$.

Results and Discussion

The results for the Policy Manipulation Check can be seen in Table S1, and are consistent with Experiments 1 and 3. Participants correctly perceived the relative differences of policy positions of the groups within the categories.

Evaluations of Groups

The main effect of Category was significant, $F(1, 65) = 5.97, p = .017, \eta_p^2 = .084$, $M_{\text{ingroup}} = 4.04, SE = .16, M_{\text{outgroup}} = 4.50, SE = .16$, but the main effect of Group Position was not, $F(2, 130) = 0.49, p = .60, \eta_p^2 = .007$.

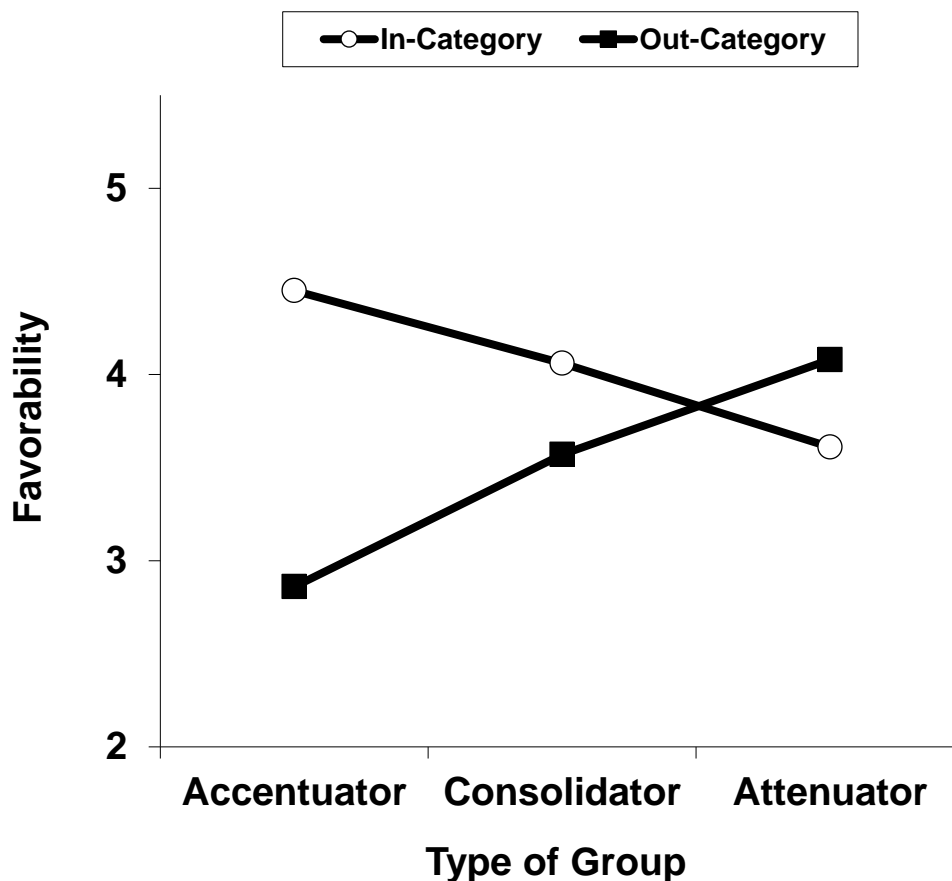
The Category \times Position interaction was significant, $F(2, 130) = 12.44, p < .001, \eta_p^2 = .161$, see Figure 5. In the In-Category condition the simple main effect of Position was non-significant, $F(2, 64) = 2.13, p = .13, \eta_p^2 = .062$, but the pairwise comparison between the attenuator and accentuator group was significant ($p < .05$), and the comparisons between the attenuator and consolidator, and the accentuator and consolidator were marginal (p 's $< .08$). To specifically test for the DIP we compared the evaluation of the in-category accentuator (i.e. in-group, $M = 4.45, SD = 1.34$) with the mean of all other in-category groups ($M = 3.83, SD = 0.78$). Participants significantly favored their in-group over all others, $F(2, 64) = 4.29, p = .018, \eta_p^2 = .062$.

In the Out-Category condition the simple main effect of Position was significant, $F(2, 64) = 6.42, p = .003, \eta_p^2 = .167$ and all pairwise comparisons between the 3 types of group were significant ($M_{\text{accentuator}} = 2.86, SD = 1.73, M_{\text{consolidator}} = 3.56, SD = 1.31, M_{\text{attenuator}} = 4.03, SD = 1.34; p$'s $< .05$).

The simple effects of Category for each group show that the in-category accentuator group was evaluated more positively ($M = 4.45, SD = 1.34$) than the out-category accentuator

group ($M = 2.86$, $SD = 1.73$), $F(1, 65) = 18.02$, $p < .001$, $\eta_p^2 = .217$. The in-category consolidator groups ($M = 4.06$, $SD = 0.55$) were evaluated more positively than the out-category consolidator groups ($M = 3.57$, $SD = 1.31$), $F(1, 65) = 3.73$, $p = .058$, $\eta_p^2 = .054$. As can be seen from Figure 5, the pattern of differential evaluation was weaker overall than in Experiments 1 and 3 because evaluation of the in-category attenuator group ($M = 3.61$, $SD = 1.38$) and out-category attenuator group ($M = 4.08$, $SD = 1.34$) did not differ significantly, $F(1, 65) = 1.99$, $p = .16$, $\eta_p^2 = .030$.

Figure 4. Experiment 4: Mean Favorability to Accentuator, Consolidator (Normative) and Attenuator Groups, when the In-group is named as Accentuator, as a Function of Category (In-Category vs Out-Category).



Category Judgments and Differential Evaluation

Table S2 shows that participants favored the in-category more than the out-category and regarded the in-category as more valid than the out-category. As shown in Table 1, in line with the scaling up hypothesis, differential evaluation was positively related to inter-category bias and to subjective validity. Specific evaluation of the in-group was also positively related to subjective validity, ($r(31) = .42, p = .019$) suggesting that belonging to an accentuator in-group did not undermine participants' sense of category validity.

Overall, in Experiment 4 the relationships between differential evaluation, in-group evaluation and subjective validity were all positive, consistent with the SGD theory. However, compared with Experiment 1, differential evaluation was reduced. Specifically, the scaled up pattern of differentiation among in-category groups, observed clearly in Experiments 1 and 2, was less pronounced in Experiment 4 (e.g. pairwise differences between types of group were not significant). Moreover, a DIP effect arose through participants' higher evaluation of their accentuator in-group than other in-category groups.

Experiment 5: Attenuator Groups

In-group extremism (accentuator positions) may not pose a severe challenge to in-category identity because people might sustain both the in-category and in-group by polarizing the in-category norm toward the in-group, whilst contrasting both of them with the out-category. Experiment 5 creates a psychologically more challenging scenario and stronger test of the DIP effect by depicting the in-group as attenuating, thereby directly pitting the group and category norms against one another.

To sustain the in-category norm participants would be hypothesized to show differential evaluation, even if their in-group is an attenuator. Moreover, their in-group should be evaluated less favorably than an out-category attenuator group that expresses identical attitudes. However, if participants prioritize protecting their attenuator in-group, they should not derogate it relative to other in-category groups, and should be less likely to derogate it relative an out-category attenuator group. Consequently, we might expect that differential

evaluation should be reduced or eliminated and that a DIP effect may emerge to protect the in-group.

Method

Participants

Seventy-nine introductory psychology undergraduate students participated as part of course requirements.

Procedure

Participants were assigned randomly to condition (43 In-Category, 36 Out-Category). The sample size provided 97% power to detect a large effect size, similar to those found in Studies 1 and 3. The majority of participants ($n = 62$) were female. The procedure and measures were identical to Experiment 3 except that participants were informed that the deviant group (Group E) was in fact Psychologists (in the In-Category condition) or BAICO (in the Out-Category condition).

Results and Discussion

The results for the Policy Manipulation Check can be seen in Table S1, and are consistent with Experiments 1, 3 and 4. Participants correctly perceived the relative differences of policy positions of the groups within the categories.

Evaluations of Groups

The main effect of Category was significant, $F(1, 77) = 6.88, p = .01, \eta_p^2 = .082$, $M_{ingroup} = 4.13, SE = .12, M_{outgroup} = 3.67, SE = .13$, as was the effect of Group Position, $F(2, 154) = 18.57, p < .001, \eta_p^2 = .194, M_{accentuator} = 3.18, SE = .18, M_{consolidator} = 4.95, SE = .13, M_{attenuator} = 4.57, SE = .18$.

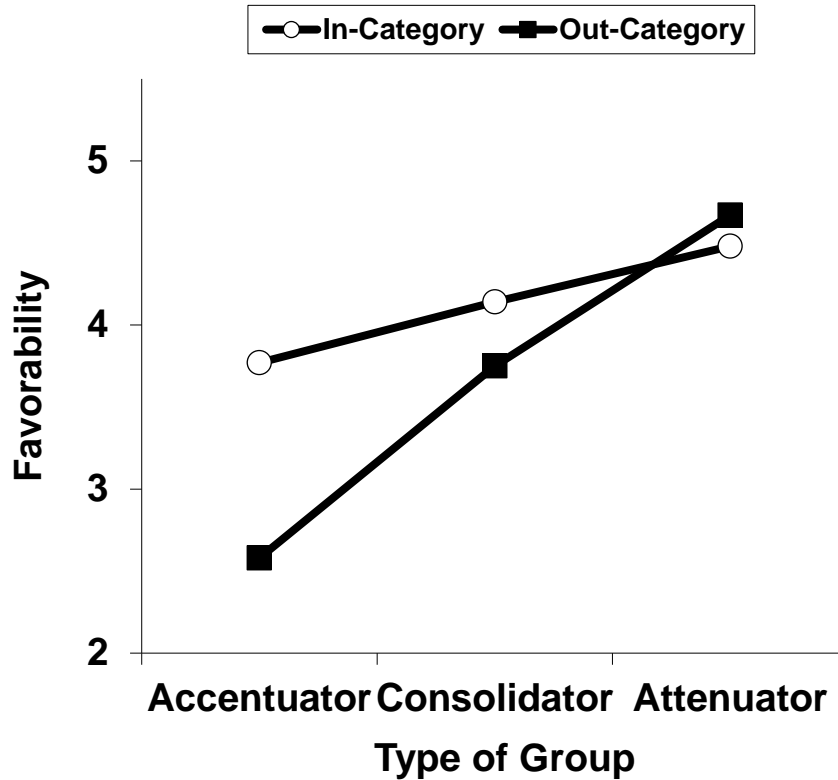
The Category x Position interaction was also significant, $F(2, 154) = 4.41, p = .014, \eta_p^2 = .054$, see Figure 6. In the In-Category condition the simple main effect of Position was not significant, $F(2, 76) = 1.62, p = .20$, and only the pairwise comparison between the accentuator and attenuator groups approached significance ($p = .08$). The specific test of the DIP effect compared evaluation of the in-category attenuator group ($M = 4.48, SD = 1.83$) with the mean of all other in-category groups ($M = 3.95, SD = 0.96$). Although this difference

was in the expected direction (i.e. counter to the usual derogation of in-category attenuating deviants), it only approached conventional significance, $F(1,77) = 2.68, p = .11, \eta_p^2 = .034$, perhaps because of the conflict between defending the deviant in-group and the in-category.

In the Out-Category condition the simple main effect of Group was significant, $F(2, 154) = 18.86, p < .001$ and all pairwise comparisons were significant ($M_{\text{accentuator}} = 2.58, SD = 1.44, M_{\text{consolidator}} = 3.75, SD = 1.15, M_{\text{attenuator}} = 4.67, SD = 1.22$; p 's $< .005$).

Tests of the simple effects of Category for each group show that in-category accentuator group ($M = 3.77, SD = 1.66$) was evaluated more positively than the out-category accentuator group ($M = 2.58, SD = 1.44$), $F(1, 77) = 11.23, p < .001, \eta_p^2 = .127$, and the in-category consolidator groups ($M = 4.14, SD = 0.92$) were evaluated marginally more positively than out-category consolidator groups ($M = 3.75, SD = 1.15$), $F(1, 77) = 2.80, p = .10, \eta_p^2 = .035$. However, evaluations of the in-category attenuator group ($M = 4.48, SD = 1.83$) and out-category attenuator group ($M = 4.67, SD = 1.58$) did not differ significantly, $F(1, 77) = 0.25, p = .62, \eta_p^2 = .003$.

Figure 6. Experiment 5: Mean Favorability to Accentuator, Consolidator (Normative) and Attenuator Groups, when the In-group is named as Attenuator, as a Function of Category (In-Category vs Out-Category).



These results bolster the conclusion from Experiment 4 that the Deviant Ingroup Protection effect occurs when participants' own group is deviant from an in-category norm. In this situation, participants defend the norm of their in-group and reduce the evaluative differences among groups within the in-category. Indeed, evaluations of the in-category groups changed the trend obtained in Experiments 1, 3 and 4 such that the attenuator in-group was evaluated more positively than the other in-category groups.

Category Judgments and Differential Evaluation

As in Experiments 1 – 4, participants significantly favored their in-category over the out-category, and perceived their in-category to have greater validity (see Table S2).

As shown in Table 1, in line with the SGD model, differential evaluation was significantly related to inter-category bias and to subjective validity. That is, participants who

expressed stronger inter-category bias did differentiate attenuator groups more from others in a fashion that supported the in-category norm. They then perceived the in-category norm to be more valid. The fact that participants generally favored their attenuator in-group over other in-category groups is in line with the idea that despite the attraction of a valid in-category norm, participants were motivated to ensure their in-group identity remained positive. Unlike in Experiments 3 and 4, but consistent with the DIP effect, specific in-group evaluations were *negatively* associated in-category subjective validity ($r(43) = -.37, p = .014$). This means that participants who defended their in-group did so by reducing the perceived validity of the in-category norms. Thus, when the in-group deviates in a direction that leans counter to in-category norms, it also weakens the subjective validity of those norms.

Experiment 6: Manipulating the Normative Stance of the In-Group

The previous studies respectively presented the stance of the in-group differently, as implicitly consolidator (Experiments 1,2), explicitly consolidator (Experiment 3), explicitly accentuator (Experiment 4), or explicitly attenuator (Experiment 5), but the experiments were conducted at different times and none directly compared the effects of different stances. This limited our ability to draw firm conclusions about how individuals' appraisal of deviance across categories might change as a function of the in-group's stance. Thus, in Experiment 6 we manipulate whether the in-group is attenuator, consolidator or accentuator. We expect participants' use of differential evaluation will remain significant when they view out-groups and when they view in-category groups amongst which the in-group is either consolidator or accentuator. However, differential evaluation should be reduced when the in-group is an attenuator. Moreover, in Experiment 6 we assess the relationship between differential evaluation and identification with the category and group. We expect these all to be positively related except when the in-group is an attenuator, in which case participants' differential evaluation should be related to their in-category identification but not to their in-group identification.

Method

Participants and Design. Participants were one hundred fifty-five introductory psychology students at a UK University ($M_{age} = 19.4$ years, $SD = 4.25$; 80% female). The sample size was determined on the basis of the availability of students. A priori power analysis indicated this would be sufficient for 99% power to detect a large effect size and 87% power to detect a medium effect size. Participants completed the experiment during a class exercise. Data were collected during a mass testing session and using the online survey software, Qualtrics.

Participants were presented with a superordinate in-category or out-category profile in which one of the groups occupied an anti-normative (attenuator), one occupied a pro-normative (accentuator) and the rest occupied normative (consolidator) positions. When out-category groups were presented the occupation of these positions was not linked with particular group names. However, when in-category groups were presented we explicitly described the in-group as occupying either the attenuator, consolidator or accentuator position. To summarize, participants were randomly assigned to condition in a 4 (Condition: In-group Attenuator vs In-group Consolidator vs In-group Accentuator vs. Out-group) x 3 (Position: Attenuator, Consolidator, Accentuator) mixed factorial design with repeated measures on the Position factor.

Procedure. Participants took part in the study during a class exercise, using a computer and a Qualtrics survey. The procedure was identical to Experiments 3, 4 and 5 except for the differences outlined below. Figures were updated to reflect contemporary asylum-seeking statistics, and the normative position held by psychology students (re-tested via a pilot study). Finally, participants were shown the results of two distinct (bogus) surveys conducted across Social-humanitarian and Authority-Governance professions. Specifically, participants were informed that in the survey of Social Humanitarian (SH) [or Authority Governance (AG)] occupations there were 5 participant groups, one of which was

psychologists [or BAICO in the out-category]. The in-category subgroup's (Psychologist) responses to the survey changed depending on the condition. In the consolidator condition psychologists advocated a 30% increase in the number of asylum seekers allowed in the country. In the attenuator condition, psychologists advocated an increase of only 10% in the number of asylum seekers. Finally, in the accentuator condition psychologists were described as advocating an increase of 50% in the number of asylum seekers. In line with Experiments 1-5, BAICO was always described as holding a normative position relative to its category (specifying which out-group happened to support or oppose the out-category norm should have no effect because there is no reason to suspect participants would be particularly concerned about which group in the out-category express a specific position).

Additional Measures. In addition to the measures in the previous experiments, we measured identification with the in-category (Social-Humanitarian occupations), and in the three in-group relevant conditions we also measured identification with the in-group (Psychologists) because we assumed that these should be positively correlated with one another across those conditions, and should both be associated with differential evaluation and subjective validity in all conditions except the in-group-attenuator condition. Specifically, *in-category identification* was measured using the items "I am pleased to think of myself as being from the Social-Humanitarian set of occupations", "I am glad I am from the Social-Humanitarian set of occupations" and *in-group identification* was measured using the items "I identify with psychologists as a group", "I am pleased to think of myself as a psychology student", "I am glad I am a psychology student". Responses were recorded on a scale from 1 (strongly disagree) to 7 (strongly agree). Spearman-brown reliability coefficients for both measures were good (> .85)

Results and Discussion

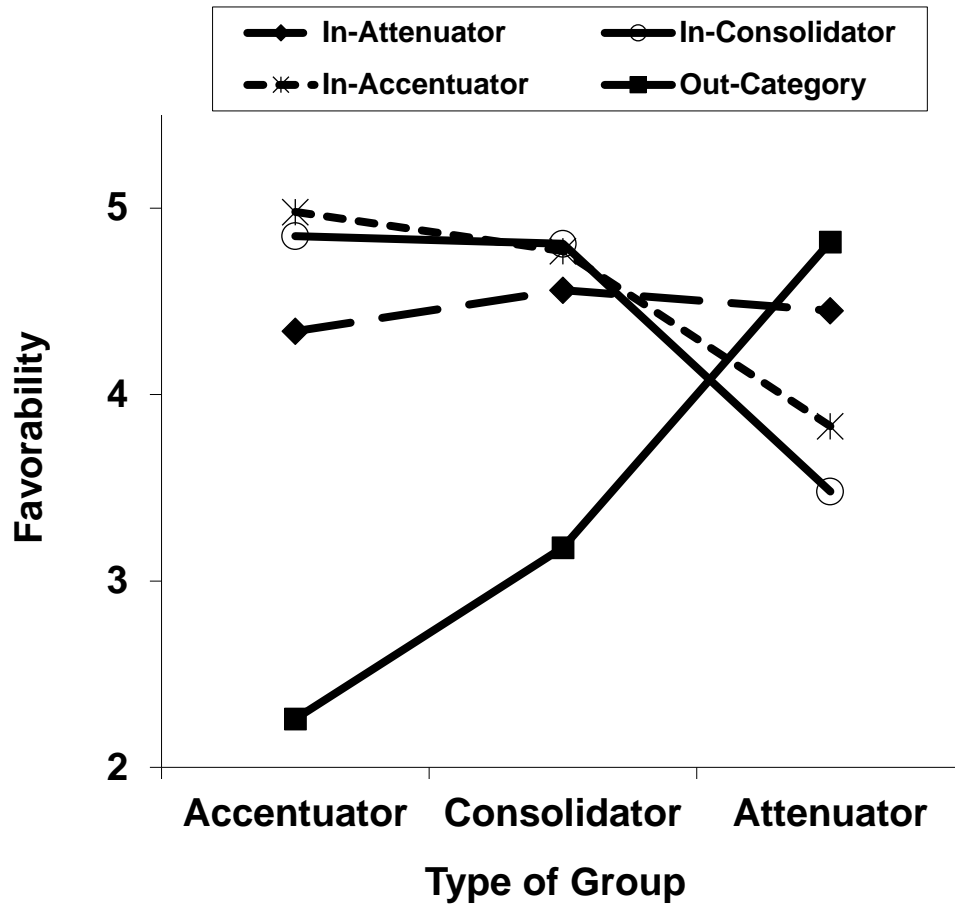
The policy manipulation checked followed the expected pattern in all conditions (see Table S1).

Evaluations of Groups

The main effect of Condition was significant, $F(3,152) = 15.54, p < .001, \eta_p^2 = .24$, as was the effect of Position, $F(1,152) = 7.34, p = .007, \eta_p^2 = .05$. More importantly, the Condition x Position effect was also significant, $F(3, 152) = 7.99, p < .001, \eta_p^2 = .14$, see Figure 7. In the in-group consolidator condition, the attenuator group was judged less favorably than both the consolidator and accentuator groups ($ps < .001$), which were evaluated similarly to one another ($p = .87$), $F(2, 151) = 13.74, p < .001, \eta_p^2 = .15$, ($M_{\text{accentuator}} = 4.85, SD = 1.76, M_{\text{consolidator}} = 4.81, SD = 0.97, M_{\text{attenuator}} = 3.48, SD = 1.28$). Likewise, in the in-group accentuator condition, evaluations of both the accentuator and the consolidator groups were significantly more favorable than evaluation of the attenuator group ($ps < .001$), but did not differ from one another ($p = .35$), $F(2, 151) = 6.51, p = .002, \eta^2 = .08$, ($M_{\text{accentuator}} = 4.98, SD = 1.90, M_{\text{consolidator}} = 4.77, SD = 1.05, M_{\text{attenuator}} = 3.83, SD = 1.57$). However, in the in-group attenuator condition, evaluations of all in-category groups were equally favorable ($ps > .34$), $F(2, 151) = 0.69, p = .50, \eta_p^2 = .009$, ($M_{\text{accentuator}} = 4.34, SD = 1.63, M_{\text{consolidator}} = 4.56, SD = 0.88, M_{\text{attenuator}} = 4.45, SD = 1.20$). Finally, in line with SGD theory, in the out-category condition participants favored the attenuator group more than the consolidator groups ($p < .001$), and favored the consolidator groups more than the accentuator group ($p < .001$), $F(2, 151) = 22.17, p < .001, \eta_p^2 = .23$, ($M_{\text{accentuator}} = 2.26, SD = 1.16, M_{\text{consolidator}} = 3.18, SD = 0.93, M_{\text{attenuator}} = 4.82, SD = 1.33$).

Figure 7. Experiment 6. Mean Favorability to Accentuator, Consolidator (Normative) and Attenuator Groups, when the In-Category groups are presented and the In-group is named as

Attenuator, Consolidator (Normative), or Accentuator, or when Out-category groups are Presented.



Evaluations of the attenuator position depended on which position the in-group held. Specifically, the attenuator group was evaluated significantly more favorably when it was the in-group than when the in-group held either a consolidator position ($p = .002$) or the accentuator position ($p = .045$). Evaluations of the in-group did not differ significantly when it held the consolidator or accentuator positions ($p = .251$). Moreover, in-category and out-category attenuators were only evaluated equally favorably when the in-group occupied the in-category attenuator position ($p = .24$). The in-category attenuator group was downgraded

vis a vis the out-category attenuator when the in-group occupied either the consolidator, ($p < .001$) or accentuator ($p = .002$) position.

These results bolster the conclusion from Experiment 5 that the Deviant Ingroup Protection effect occurs when participants' own group is deviant from an in-category norm. In this situation, participants defend the norm of their in-group and reduce the evaluative differences among groups within the in-category. Indeed, consistent with Experiment 5, evaluations of the attenuating in-group changed the trend obtained in Experiments 1, 3 and 4 such that the attenuator in-group was evaluated as or more, rather than less, positively than the other in-category groups.

Category Judgments and Differential Evaluation

Participants showed inter-category bias and regarded the in-category as more valid than the out-category, consistent with findings in Experiments 1, 3, 4 and 5 (see Table S2). As shown in Table 1, participants who showed greater inter-category bias also engaged in greater differential evaluation, which was also associated with greater category subjective validity. However, we expected that when the in-group held the attenuator deviant position, participants who defended the in-category validity by showing more differential evaluation would need to evaluate their in-group more negatively. To consider this issue, we examined the relationship between differential evaluation and subjective validity within each condition (see Table 1). We found the correlation to be significant and positive in the in-group consolidator condition ($r = .46$ $p = .004$), the in-group accentuator condition ($r = .55$ $p < .001$), and the out-group condition ($r = .46$ $p = .005$). However the relationship was smaller and not significant in the in-group attenuator condition ($r = .29$, $p = .082$). The fact that participants generally favored their attenuator in-group over other in-category groups is in line with the idea that despite the attraction of a valid in-category norm, participants were motivated to ensure their in-group identity remained positive. Moreover, consistent with the DIP effect, in the attenuator condition, in-group evaluations were not associated with in-

category subjective validity ($r(38) = -.04, ns$) whereas evaluations of the consolidator and accentuator groups were significantly positively associated with category validity ($r = .42, p = .009$; $r = .34, p = .036$). When the in-group was a consolidator in-group evaluations were strongly associated with in-category validity ($r(40) = .54, p < .001$). When the in-group was an accentuator the relationship was even stronger ($r(40) = .74, p < .001$). As in Experiment 5, this indicates that when the in-group adopts an attenuator position, its deviance also weakens the subjective validity of those norms.

Category and Group Identification

Mean levels of both category identification and group-identification were quite high, the latter being significantly higher ($M = 4.96, SE = .11$; $M = 5.85, SE = .08$, respectively), $F(1,116) = 89.37, p < .001, \eta_p^2 = .44$), but there was no interaction with condition, $F(1,116) = 2.21, p = .114, \eta_p^2 = .04$) and neither differed between conditions (F 's (2, 116df) = .86 and .32, $ps > .42$.respectively).

In the out-category condition, participants who identified more with the in-category engaged in stronger differential evaluation ($r = .42, p = .01$) and judged the in-category to have higher subjective validity ($r = .50, p < .001$).

Across the three in-category conditions, in-category identification was positively correlated with subjective validity ($r = .60, p < .001$) and differential evaluation ($r = .26, p = .005$). In-category identification and in-group identification were also positively correlated ($r = .51, p < .001$). However, in-group identification was not significantly correlated either with subjective validity ($r = .17, p = .064$) or with differential evaluation ($r = .075, p = .42$). Z tests for difference between related correlations showed that the correlation between in-category identification and subjective validity was higher than that between in-group identification and subjective validity, $Z = 5.45, p < .001$, whereas the correlation between in-category identification and differential evaluation was not significantly larger than that between in-group identification and differential evaluation, $Z = 1.04, p = .30$.

We expected that these relationships should depend on whether the in-group was attenuator to the superordinate category norm. We therefore combined the in-group consolidator and in-group accentuator (category-congruent) conditions and compared correlations with those in the in-group attenuator condition. In the congruent conditions, in-category identity and in-group identity were significantly positively correlated with each other ($r = .60, p < .001$) whereas in the in-group attenuator condition the correlation was smaller and non-significant ($r = .29, p = .07$).

In the category-congruent conditions, both levels of identification were significantly related to subjective validity (category identification, $r = .65, p < .001$; group identification $r = .31, p = .005$). Both levels of identification were also positively related to differential evaluation (category identification $r = .29, p = .008$; group identification $r = .23, p = .04$). However, in the attenuator condition, category-identification was positively related to both subjective validity ($r = .53, p < .001$), and differential evaluation ($r = .34, p = .036$), whereas group-identification tended to be *negatively* related to both measures ($r_s = -.14, -.38, p_s = .39, .018$, respectively). For both subjective validity and differential evaluation, the negative correlations in the attenuator condition were significantly different from the positive correlations in the congruent conditions (subjective validity: $Z = 2.27, p = .023$; differential evaluation $Z = 3.12, p < .001$).

Table 1.

Correlations between differential evaluation and inter-category bias and subjective validity in each experiment.

Experiment	Inter-category bias	Subjective Validity
1 (in-group anonymous) N = 39	.54***	.37*
2 (in-category valid condition) N = 80	.35**	.31**
2 (out-category valid condition) N = 85	.40***	.40***
3 (in-group normative) N = 44	.55**	.58***
4 (in-group accentuator) N = 67	.25*	.41***
5 (in-group attenuator) N = 77	.45***	.37***
6 (all in-group positions) N = 155	.33***	.45***
Attenuator (n = 38)	.23	.29
Normative (n = 39)	.47**	.46**
Accentuator (n = 40)	.43**	.55***
Out-group (n = 37)	.28	.46**

* $p < .05$; ** $p < .01$; *** $p < .001$

General Discussion

The six experiments in this article examined how people evaluate deviant groups within a superordinate in-category and out-category and, specifically, whether the judgment and evaluation patterns that have been repeatedly found by research driven by subjective group dynamics theory scale up from an individuals-within-groups to a groups-within-categories context. In this vein, we proposed that people's in-group within the in-category may have special significance and that this might result in a Deviant Ingroup Protection (DIP) effect. We define a DIP effect as a pattern of evaluations arising when people depart from

straightforward differential evaluation by privileging a deviant in-group. In particular, the DIP effect would reduce differential evaluation such that the usual intolerance shown to an in-group attenuator deviant would be eliminated.

Based on the above goals and ideas, we made three general predictions: 1) People should engage in group-level differential evaluation; 2) Greater inter-category bias should be associated with greater group-level differential evaluation; and 3) Greater group-level differential evaluation should be associated with higher subjective validity of the in-category norm.

In line with our predictions, across Experiments 1, 3, 4, 5 and 6 and in the In-Category Valid condition of Experiment 2, participants showed significant inter-category bias, and in all experiments this bias was positively associated with differential evaluation among the groups. This finding is consistent with SGD theory which holds that intergroup and intragroup differentiation can operate in a functionally complementary manner, such that evaluative differentiation between normative and deviant in-group members allows individuals to find the necessary legitimacy for the evaluative differentiation between in-group and out-group as wholes (Marques, Páez & Abrams, 1998).

Abrams et al. (2000, 2003) showed that, when groups hold opposing norms, evaluative differentiation can result in out-group favoritism because attenuator deviants from an out-group are evaluated more positively than attenuator deviants from an in-group. The present research shows that effect scales up to the situation of groups within categories. The scaling up of this effect suggests that the “functional antagonism” principle of self-categorization theory does not always apply (see also Devos et al., 1996). This principle assumes that, as people perceive larger differences between categories (or groups) they attenuate differences within them (see Tajfel & Wilkes, 1963, Turner et al., 1987). However, evidence from SGD studies suggests that people act strategically to show how they value differences between groups and to legitimize those differences. At the individual-group level,

derogating attenuative in-group deviants relative to other in-group members and positively evaluating attenuative out-group deviants relative to other out-group members reinforces the in-group norm relative to the out-group norm, thereby increasing its subjective validity and enhancing social identity (Abrams et al, 2000). At the group-category level the present evidence shows that a similar process can arise. People differentiate amongst groups in a manner that reinforces the in-category norm and defends its subjective validity.

Eidelman and Biernat (2003; Eidelman et al., 2006) posit that derogation of deviants is due to an individual protection strategy. They suggest that the self (subordinate) is primary to the group (superordinate). Our data may lend some support to that idea, in that the group as the subordinate identity can be primary to the category as the superordinate identity. However, our findings also indicate that differential evaluation is ancillary to individuals' commitment to their in-group identity rather than an attempt to dissociate the self from the group or the group from the category.

In Experiments 1 and 2 participants judged anonymized groups within each category. In this situation their judgments closely matched the findings from Study 2 in Abrams et al (2000), in which participants judged anonymous individuals within an in-group and out-group. Both experiments showed clearly that people will defend in-category norms by derogating a deviant in-category attenuator group relative to other in-category groups and relative to a comparable attenuator group from the out-category. Moreover, greater differential evaluation of these attenuator deviant groups relative to other groups was significantly associated with higher subjective validity of the in-category norms. Interestingly, Experiments 1 and 2, as well as Experiments 4 and 6 also showed that, in principle, an in-category accentuator group may well be tolerated or even favored more than other in-category groups. Only in Experiment 3 (when the in-group was a consolidator) and Experiments 5 and 6 (when the in-group was an attenuator) was there any lowering of evaluations of the in-category accentuator group. We are unsure why the effect in Experiment

3 did not repeat fully in Experiment 6 but, overall the pattern suggests that accentuator in-groups are not viewed as a threat to in-category validity. Only when the in-group was an attenuator were in-category accentuator groups evaluated less positively than an out-category group (Experiments 5 and 6). This suggests that if the in-group is either a consolidator or accentuator, accentuating in-groups are not perceived as undermining the in-category norm relative to the out-category norm.

A further important contribution of Experiment 2 was to confirm a proposed boundary condition for these effects. Specifically, they only occurred when participants believed that the in-category norm was valid. Participants who did not perceive the in-category norm to be valid did not differentiate between different groups within either the in-category or the out-category.

In Experiments 3, 4, and 5 we examined conditions associated with our DIP effect hypothesis. Experiment 3 confirmed that differential evaluation is positively associated with subjective validity, but also revealed that participants favored their consolidator in-group above other in-category groups. Their tolerance of the in-category accentuator group was also significantly diminished. Moreover, evaluation of the in-group was positively related to differential evaluation and to subjective validity. When the in-group is explicitly consolidating the in-category, people may feel even more committed to the normative position (e.g. we would speculate that when a European country holds the presidency of the European Union it may feel obliged and committed to balance between accentuator and attenuator countries). One explanation for this result could be that if the in-group is known to be normative of its category, people readily project its norms onto the superordinate category as a whole (cf. Mummendey & Wenzel, 1999), and therefore are less tolerant of any deviation.

Experiment 4 examined reactions when the participants' own in-group occupied a deviant accentuator position. We observed the expected positive relationships between inter-

category bias and differential evaluation, and between differential evaluation and subjective validity. Importantly, however, a Deviant Ingroup Protection effect emerged. Specifically, within the in-category participants evaluated their own accentuator group more positively than others, and they did not significantly distinguish between the in-category attenuator and in-category consolidator groups. Moreover, evaluation of the in-group was related to subjective validity equally as much as was differential evaluation, so it would appear that subjective validity may have involved assimilation of the in-category toward the in-group. The finding that participants evaluated the accentuator in-group most favorably within the in-category suggests that they do distinguish between the in-group and the in-category, laying the foundation for a DIP effect.

In Experiment 5, we created a direct conflict between the in-group norm and the in-category norm by presenting the in-group as an attenuator. When the in-group was undermining the in-category norm in this way there was a DIP effect, where the attenuator in-group was favored more than were the consolidator and the in-category accentuator groups. This is an important result, as it appears to be the opposite pattern to that expected from a straightforward scaling up of the pattern obtained in traditional subjective group dynamics studies. It suggests that participants were at least as concerned to defend their in-group as they were the in-category. Yet, the correlational evidence suggests that these processes may operate together. Inter-category bias, differential evaluation and subjective validity were positively related. Nonetheless, participants who defended the in-group showed lower differential evaluation and thus weakened their support for the in-category. Indeed, on average, participants favored their attenuator in-group over other in-category groups, so they were prepared to sacrifice in-category validity rather than derogate their in-group. Note that, overall, participants still regarded the in-category more favorably, and as more valid than the out-category. This suggests they were ‘having their cake and eating it’ by evaluating both the

in-category and in-group favorably, even though the in-group was undermining the validity of in-category norms.

In Experiment 6, we also tested the different scenarios of in-group position (attenuator, consolidator, extreme) while including an out-group condition. As well as integrating and replicating the prior experiments, this experiment also retained the possibility to compare evaluations of in-category and out-category groups. The findings matched those of the previous experiments. Specifically, evaluations of the accentuator and attenuator groups were more positive when they were the in-group occupied them than when they were not. Moreover, as in the previous studies, inter-category bias, differential evaluation and subjective validity were all positively related, confirming that intra and inter category differentiation are positively related in a way that bolsters the validity of the category norms.

Experiment 6 also allowed us to assess how differential evaluation and subjective validity related to category identification and group identification. As expected, when the in-group's position was congruent with the category norm (i.e. consolidator or accentuator), differential evaluation and subjective validity were positively related to both types of identification. However, when there was a conflict between the in-category and in-group norms (the in-group was attenuator), the two types of identification became dissociated, and category identification was more strongly associated with both differential evaluation and subjective validity than was group identification. This again seems to reveal a Deviant Ingroup Protection effect because it appears that an attenuator in-group can be psychologically separated from the in-category without sacrificing category identity.

Across all six experiments participants favored the out-category attenuator group, consistent with the differential evaluation predicted by the SGD model. It does not appear that making explicit the name of the groups occupying a position (BAICO) altered this pattern. Knowing which group is which only becomes important if the in-group is directly implicated, as shown by the DIP effect within the in-category conditions.

The scaling up process may arise in general but it is qualified by a DIP effect when the in-group is deviant. There are likely to be other limits to scaling up. A person is a relatively irreducible unit of analysis whereas, a group is not, and there could be aspects of groups that can vary in a way that individuals cannot. These include the size of groups, their geographical and physical presence, their variability and homogeneity, and so on. Such variables are known to affect intergroup perceptions and relationships, and future research will be needed to explore their effects on inter-category comparisons.

Groups within an in-category also offer scope for alternative self-definitions and identity. Therefore, they offer potential distinctiveness and status opportunities (cf. Brewer, 1991; Jetten et al., 2002). It is on this basis that we predicted a DIP effect. Finally, groups within an in-category may actually be greater rivals than the in-category and out-category, given that high levels of intergroup similarity can be threatening and evoke counteractions, particularly when the self-concept is salient (Abrams & Brown, 1989). Sometimes people could feel more threatened by other in-category consolidator groups than by deviant ones. For example, in countries that use proportional representation voting, center-right and center-left political groups may fight among themselves over the center ground but may be rather indifferent to less centrist rivals.

More generally, the presence of a DIP effect is consonant with anecdotal evidence from organizations such as the United Nations, where countries that are “normative” appear to be fiercely critical of dissenting groups, whereas those that are dissenting may even appear to wear their rejection of UN resolutions or positions as a badge of honor. This example also highlights that such positions are sometimes adopted for different reasons. Conformity to in-category norms might reflect economic or social pressure from the other in-groups, whereas resistance or opposition to such norms may reflect internal economic or social pressures within the in-group. These are interesting issues for future research both using experimental analogs and using evidence from real groups and with observational and unobtrusive data

collection (e.g. through archival methods). Future research needs to consider what gives rise to group-level deviance (cf. Packer, 2008), and what perpetuates and sustains it in the face of powerful category norms.

Limitations

Most of the present set of studies involved the same general scenario and the same population of participants. This lends the studies higher internal validity whilst using a scenario with high face validity and ecological validity (asylum seeking and immigration continues to be a highly salient topic in UK politics). Experiment 2 helps to address the wider external validity by demonstrating consonant findings using a very different participant population and different categories and groups. Moreover, we know that the processes of differential evaluation and responses to attenuator (anti-norm) and accentuator (pro-norm) deviants can be found across multiple scenarios and types of intergroup context (e.g. see Abrams et al, 2018). These factors provide some confidence regarding the generalizability of the evidence from this set of studies, and we hope that future research will now explore other types of inter-category contexts and possible boundary conditions.

A further limitation is that we had relatively small N 's in some experiments. Notice, however, that these N s were sufficient to allow detection of the medium to large effect sizes we had expected based on prior research. The cumulative evidence across the 6 experiments also provides reassurance that the effects are stable.

An important avenue for future research will be to consider whether the particular qualities and characteristics of the in-category groups, particularly the in-group, may moderate either the scaling up effect or the DIP effect. In particular, groups may vary in relative size, and it is conceivable that people may engage in DIP more or less strongly depending on how optimally distinctive their in-group is (cf Pickett & Brewer, 2001). A further avenue for research is the entitativity and homogeneity of the groups. Prior subjective group dynamics research (Marques et al, 2001) indicates that people differentiate deviant

individuals from their in-group more strongly if the group is relatively more heterogeneous. This raises the question of whether the scaling up effects might also be larger if the in-category is more heterogeneous, and whether the internal heterogeneity of the in-group might affect the DIP effect.

Conclusions

We began with the previously unexplored question of whether previous evidence of differential evaluation of individual group members, and its positive relationships with intergroup bias, scales up to the situation of groups within superordinate categories. The answer appears to be yes. Consistent with subjective group dynamics theory, when their in-group is implicitly or explicitly normative, people's primary motivation appears to be to bolster the subjective validity of the in-category norm. With our present experiments, we demonstrated that, in addition, when their in-group adopts a deviant position, people show a *Deviant Ingroup Protection effect*, favoring their group over other in-category groups. This strongly suggests that the relationship between superordinate and group identities is a complex and variable one, which depends not only on the position of the individual within their group, but also on the position of the in-group within the in-category. These findings have implications for international relations as well as for the way many groups work within organisations (e.g. teams within organisations that are competing with rival organizations), and conversely, insights from such contexts may stimulate further hypotheses and studies.

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