RUNNING HEAD: Group norms and attitude-behaviour relations

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Abstract

Despite popular opinion to the contrary, early scientific evidence pointed to a lack of support for the view that people's actions are guided by their attitudes. One response to the lack of correspondence between attitudes and behaviour has been to consider the role of other factors. One factor that has received attention is norms – the unwritten and often unspoken rules for how we should behave. We present an overview of the social identity approach to attitude-behaviour relations (Terry & Hogg, 1996), which argues that norms play a significant role in the attitude-behaviour relationship if and only if the norms come from salient and important reference groups. We will then discuss a program of research that supports this analysis and examines the motivations that underpin group-mediated attitude-behaviour consistency. Finally, we will discuss research that investigates the distinction between descriptive group norms (what group members do) and injunctive group norms (what group members approve of). We focus on how the interactions between these types of norms can inform behaviour change campaigns.

Why do people fail to practicewhat they preach? If we look around it is easy to identify inconsistencies between attitudes and action. For example, one might ask whetherchanges in social attitudes towards men's housework have been accompanied by an equivalent change in the division of household labour. Or, to take a more recent and pressing example, why haven't people's pro-environmental attitudes translated into high levels of pro-environmental action? The question of why attitudes are not always translated into behaviour has been a critical question for social psychologists. If you cannot predict behaviour from attitudes, then attempts to change people's health-related, consumer, or environmental attitudes via public education, propaganda, and advertising will fail to produce behaviour change.

One response to the sometimes poor correspondence betweenattitudes and action is to argue that attitudes are not always the only predictor of behaviour. Rather, in some circumstances, such as when attitudes are not strong, accessible, and active, other factors, such as social norms – the unwritten, unspoken rules that guide our behaviour (e.g., Turner, 1991) – can play a significant role in translating attitudes into action. In this article, we first review research on social influence in the attitude-behaviour relationship before turning our attention to the social identity approach on attitude-behaviour relations. We then explore the social identity approach further, focusing on the way in which social identity factors interplay with social cognitive factors such as the accessibility of one's attitudes, and highlighting the different motivations that underpin conformity to group norms in the attitude-behaviour relationship. Finally, we discuss recent research that has investigated the distinction between descriptive group norms (what group members do) and injunctive group norms (what group members approve of) and how these two aspects ofgroup norms play a role in behaviour change campaigns.

Social Influence and the Attitude-Behaviour Relationship

In the attitude-behaviour field, the study of social influence has traditionally been conducted using the theories of reasoned action (Fishbein & Ajzen, 1975) and planned

behaviour (Ajzen, 1985). In these models, social influence is represented by the concept of *subjective norm*, which describes the amount of pressure that people perceive they are under from significant others to perform a specific behaviour. Subjective norm is seen as a key predictor of behavioural intentions, along with attitudes and perceptions of control over performance of the behaviour. Intentions, in turn, predict behaviour

Norms do play a role in the attitude-behaviour relationship. However, the effect of norms is surprisingly small. A number of reviews have indicated that subjective norms have little influence on people's intentions to behave in a particular way and are the weakest predictor of intentions (see Armitage & Conner, 2001). The weakness of the norms-behaviour link even led Ajzen (1991) to conclude that personal factors (i.e., attitude and perceptions of control) are the primary determinants of behaviour.

One conclusion is that norms indeed have little influence over behaviour. An alternative conclusion is that norms are important, but need to be conceptualized in a different way. In the theories of reasoned action and planned behaviour, norms are separated from attitudes – attitudes are "in here" (private, internalised cognitive constructs), whereas norms are "out there" (public external pressures). This idea of norms is quite different to that used by much of contemporary social psychology (e.g., Brown, 2000) and the social identity approach (e.g., Turner, 1991).

The Social Identity Approach to the Attitude-Behaviour Relationship

The basic premise of the social identity approach is that belonging to a social group, such as a nationality or a sporting team, provides members with a definition of who one is and a description and prescription of what being a group member involves. Social identities are associated with distinctive group behaviours – behaviours that are regulated by context-specific group norms (see e.g., Abrams & Hogg, 2001). When individuals see themselves as belonging to a group and feel that being a group member is important to them, they will bring their behaviour into line with the perceived norms and standards of the group. People are influenced by

perceived group norms because they prescribe the context-specific attitudes and behaviours appropriate for group members.

Drawing on a social identity analysis, Terry and Hogg (1996) argue that the lack of strong support for the role of norms in attitude-behaviour studies reflects problems with the way norms are typically conceptualized. Norms are seen as external prescriptions that influence behaviour, but this is inconsistent with the more widely accepted definition of norms as the accepted or implied rules of how group members should and do behave (e.g., Turner, 1991). From a social identity approach, subjective norms should have little influence on intentions. *Group norms*, on the other hand, should have a significant impact on intentions. For example, academics attend departmental seminars and meetings because their referent group – fellow academics – engage in and approve of the behaviour. As people adopt the academic identity they learn to conform to the group's norms.

In addition, within individualist models, social pressure is seen to be additive across all referents viewed as important to the individual. The fact that certain sources of normative influence will be more important for individuals in certain contexts is not considered. In contrast, from a social identity perspective, an individual does not average the views of family and colleagues to decide behaviour at home and in the office. Instead, one conforms to work norms regarding appropriate behaviour at work (pontificating is good, as a lecturer), and family norms regarding appropriate behaviour at home (pontificating is bad, as a partner). Moreover, whether the perceived norm emanates from a relevant ingroup or an outgroup becomes a critical variable. Research confirms that ingroup norms are usually a more powerful determinant of behaviour than outgroup norms (e.g., Jetten, Spears, & Manstead, 1996; Wilder, 1990; but see Louis, Taylor, & Douglas, 2005 for evidence of the impact of outgroup norms).

The norms of salient social ingroups influence willingness to engage in attitude-consistent behaviour because the process of psychologically belonging to a group means that self-perceptions, beliefs, attitudes, and behaviour are brought into line with the position

advocated by the perceived ingroup norm. Attitudes are more likely to be expressed in behaviour if the attitude (and associated behaviour) is normative for a social group with which people identify in that context. If people have positive attitudes to a behaviour, the attitude-behaviour relationship will be strengthened when people perceive that the behaviour is supported by the in-group, but will be weakened when people perceive that the group does not support the behaviour. For example, an academic might decide to act out her positive attitudes to skipping committee meetings if she perceives her peers approve of the behaviour. However, she will inhibit, and even change, her attitudes if she perceives a norm that opposes skipping behaviour.

Research has provided support for the social identity approach to attitude-behaviour relations. In two longitudinal tests of the theory of planned behaviour in the domains of exercise behaviour and sun-protection behaviour, Terry and Hogg (1996) found that the perceived norms of a specific and behaviourally relevant reference group (friends and peers at university) were positively related to students' intentions to engage in health-related behaviours. Consistent with a social identity analysis, these intentions were significantly stronger among individuals who identified strongly with the reference group. For individuals who did not identify strongly with the reference group, personal factors were the strongest predictors of behavioural intention.

Other field research has replicated this effect in studies of community recycling behaviour (Terry, Hogg, & White, 1999; White, Smith, Terry, Greenslade, & McKimmie, in press), smoking (Schofield, Pattison, Hill, & Borland, 2001), binge drinking (Johnston & White, 2003), healthy eating (Astrom & Rise, 2001; Louis, Davies, Smith, & Terry, 2007), and sustainable land use (Fielding, Terry, Masser, & Hogg, 2008). When social identity is an important basis for self-definition, group norms shape and guide attitude-related behaviour. However, when social identity is not an important basis for self-definition, personal beliefs will determine behaviour.

Subsequent experiments haveexplored moderators and boundary conditions (see Hogg & Smith, 2007, for a review). These studies have used a paradigm somewhat unique to the attitude-behaviour field. In the basic version, attitudes towards an issue are assessed first. Chronic identification with the target group is assessed or contextual salience of identity is manipulated. Next, normative support from a self-relevant ingroup is manipulated, for example by showing participants bar-graphs portraying the percent of support from the in-group. In some studies, participants are also exposed to a series of opinion statements indicating the level of ingroup support or opposition to the target issue. Participants are classified as having received either attitude-congruent normative information (if their attitude and the normative information concur) or attitude-incongruent normative information. Finally, participants' willingness to engage in attitude-related behaviours (e.g., signing petitions, attending rallies) and actual behaviour (e.g., voting behaviour) is assessed. In addition, participants' attitudes are often re-assessed to determine whether exposure to group norms changes attitudes, as well as immediate behaviour.

Across a range of attitude issues (e.g., campus issues, career choice, political issues) and with a range of group memberships (e.g., student identity, national identity), social identity researchers have demonstrated that the attitude-behaviour relationship is strengthened when group members are exposed to an ingroup norm supportive of their initial attitude, and is weakened when group members are exposed to an incongruent ingroup norm. Moreover, in some studies, there is evidence that participants' attitudes have also changed to be in line with ingroup norms. Thus, in line with the social identity approach, group members not only display behaviour consistent with the perceived ingroup norm, but also internalise the content of the ingroup norm into their attitudes. For example, in a study examining university students' littering behaviour, Wellen, Hogg, and Terry (1998) found that exposure to an attitude-congruent ingroup norm increased engagement in attitude-consistent behaviour (in terms of

whether students picked up litter in a courtyard), but only when group membership was contextually salient (see also White, Hogg, & Terry, 2002).

The Interplay of Cognitive and Social Identity Variables

Research in the social identity approach has also investigated the interplay of cognitive and social identity variables in the attitude-behaviour context. A dominant approach in the attitude-behaviour field is Fazio's (1990) MODE model (*M*otivation and *O*pportunity as *DE*terminants of mode of behavioural decision-making), which distinguishes two different processes through which attitudes can guide behaviour: a spontaneous process and a deliberative process. Under conditions of low motivation and opportunity, links between attitudes and behaviour arise as the result of spontaneous processing and are driven by the extent to which the attitude is salient, or accessible, in memory. Under conditions of high motivation and opportunity, attitude-behaviour links result from deliberative processing in which a range of factors, such as norms, are considered.

According to the MODE model, norms should influence behaviour most strongly under deliberative processing conditions and attitude accessibility should be the primary determinant of behaviour under spontaneous processing conditions. In contrast, the social identity approach argues that ingroup norms should influence behaviour in all processing conditions. This is because when group membership is salient, perceived group norms become accessible and relevant guides to behaviour.

Smith and Terry (2003) conducted two experiments that investigated the impact of both cognitive (attitude accessibility, mode of behavioural decision-making) and social identity (ingroup norms, identification) factors on attitude-behaviour consistency. In both studies, attitude accessibility was manipulated using a computerised version of the repeated expression technique (Powell & Fazio, 1984), in which repeated expression of one's attitude towards an issue heightens the accessibility of the attitude relative to a no-expression condition. Mode of behavioural decision-making was manipulated by inducing either a positive or neutral mood

(reasoned to correspond to spontaneous and deliberative processing respectively; see Bless, Bohner, Schwarz, & Strack, 1990) or by placing people under high time pressure or low time pressure (reasoned to correspond to spontaneous and deliberative processing respectively; see Sanbonmatsu & Fazio, 1990). Ingroup normative support was manipulated with the bargraphs and opinions statements described previously and identification was assessed with a standard scale (Hogg, Cooper-Shaw, & Holzworth, 1993). At the conclusion of the studies, participants expressed their willingness to engage in attitude-consistent actions (e.g., signing petitions) and were give the opportunity to engage in attitude-consistent behaviour (e.g., volunteering time to an action group on the issue).

Across both studies, and contrary to the MODE model, higher levels of attitude accessibility were not associated with greater attitude-behaviour consistency and the effects of attitude accessibility did not vary under spontaneous and deliberative conditions. Rather, ingroup norms influenced attitude-behaviour consistency in both spontaneous and deliberative decision-making modes. What is more, the effect of ingroup norms was stronger for high identifiers than low identifiers under deliberative decision-making conditions, consistent with a social identity analysis. Individuals for whom the group is an important basis for self-definition should be motivated to consider group norms carefully (see also Forgas & Fiedler, 1996), but they may only have the ability to do so when conditions favour deliberative processing. Thus, social factors, such as the salience and importance of a social identity and its norms, may have more impact on the attitude-behaviour relationship than purely cognitive factors.

Motivational Considerations – Uncertainty Reduction

Social identity research has also paid attention to the motivations underlying group-mediated behaviour in the attitude-behaviour context. One motivation that has been proposed is uncertainty reduction. According to this model Hogg (2000, 2007), uncertainty about our attitudes, beliefs, feelings, and perceptions, as well as about our selves and our social world, is aversive. As a result, uncertainty often motivates behaviour aimed at creating certainty,

including identification with relevant reference groups. In the attitude-behaviour context, uncertainty is proposed to create a predisposition to be influenced because one way to reduce uncertainty is to conform to the perceived norms of a relevant reference group and that define one's attitudes and behaviours.

The importance of uncertainty as a motive for behaviour is not a novel idea in social psychology. Uncertainty caused by either stimulus ambiguity (e.g., Asch, 1956; Sherif, 1936) or by disagreement on judgemental and perceptual tasks (e.g., Abrams, Wetherell, Cochrane, Hogg, & Turner, 1990; McGarty, Turner, Oakes, & Haslam, 1993) has been found to produce shifts in attitudes and behaviour in line with perceived norms. However, the analysis of uncertainty has focused on its role in producing conformity out of disagreementover attitudinal or perceptual judgements – attitudinal uncertainty – rather than on the effect of generalised feelings of uncertainty about the self, identity, and the world in general – self-relevant uncertainty.

Smith, Hogg, Martin, and Terry (2007) conducted two studies to examine the impact of self-relevant uncertainty on conformity to group norms in the attitude-behaviour context. In both studies, uncertainty was manipulated using a deliberative mindset manipulation that previous research had found was successful in creating uncertainty (McGregor, Zanna, Holmes, & Spencer, 2001). In this manipulation, people are asked to think about an unresolved dilemma in their own life (high uncertainty) or in the life of a friend (low uncertainty). In Study 1, participants were exposed to either an attitude-congruent or an attitude-incongruent group norm. In Study 2, participants were exposed to either a congruent, incongruent, or ambiguous group norm. The key outcome was whether participants intended to behave in an attitude-consistent manner (i.e., attitude-intention consistency). However, change in attitude certainty was assessed in Study 2 to see whether the effects of self-relevant uncertainty emerged even after changes in attitude certainty (potentially caused by exposure to information that others do not agree with you) had been taken into account.

Across both studies, as predicted, uncertainty and normative support interacted to influence attitude-intention consistency. Individuals who felt uncertain responded to the content of the ingroup norm, reducing displays of attitude-intention consistency when exposed to information that the group disagreed with their position. In contrast, the intentions of those who felt certain were not influenced by the ingroup norm. Moreover, self-relevant uncertainty continued to influence group-mediated conformityeven when changes in attitude certainty were controlled. These results suggest that a desire to resolve uncertainty may underpin group-mediated behaviour in the attitude-behaviour relationship.

Motivational Considerations – Strategic Self-Presentation

In addition to satisfying an uncertainty-related motive, group members may also conform to group norms for strategic self-presentation reasons. In recent years, social identity researchers have begun to examine the strategic nature ofgroup-mediated behaviour by incorporating insights from the self-presentation perspective – specifically, the idea that individuals are aware of, and modify their behaviour for, their current audience. Early formulations of referent informational influence (e.g., Hogg & Turner, 1987) argue that group members will automatically follow group norms whengroup membership is salient. However, we argue that group members may use displays of group behaviour in a strategic way, deciding if and when to adopt and enact the norms of group in order to achieve desired goals, such as positive evaluations from others, in a given context (see also Louis & Taylor, 2002; Louis et al., 2004, 2005).

Drawing on analyses of thestrategic expression of social identity (e.g., Reicher, Spears, & Postmes, 1995), Smith and colleagues (Smith, Terry, & Hogg, 2006, 2007) have shown that strategic concerns, such as those associated with accountability to particular audiences, influence conformity to group normsin the attitude-behaviour relationship. In two experiments, Smith et al. (2007) examined levels of group-mediatedattitude-behaviour consistency in unaccountable and accountable conditions. Response context was manipulated prior to the

assessment of the attitude-related outcomes. In the ingroup accountable condition, participants were led to expect a group discussion in which they would be expected to disclose and justify their behavioural decisions. In the anonymous (or not accountable) condition, participants expected a group discussion on reasons for studying psychology.

Across both experiments, individuals for whom the group was not important (either contextually or chronically) were more inclined to follow ingroup norms when they were accountable to the ingroup than when they were not accountable. These individuals may have been driven by more extrinsic, self-presentational concerns, such as a desire for positive evaluation (see also Barreto & Ellemers, 2000). In contrast, individuals for whom the group was important were more likely to follow ingroup norms when they were not accountable than when they were accountable, suggesting that accountability does not increase group behaviour when individuals are intrinsically motivated to engage in group behaviour. That is, in line with self-determination theory (Deci & Ryan, 2000), individuals who are intrinsically (or internally) motivated to engage in particular courses of action, such as high identifiers engaging in group behaviour, are more likely to display such behaviour when not accountable because these displays cannot be attributed to external constraints (such as self-presentation concerns associated with accountability) and, as a result, are more diagnostic of group loyalty. These results extend past research on the social identity approach to attitude-behaviour relations by highlighting the power of group norms to influence the behaviour of *all* group members, albeit under different circumstances and perhaps for different reasons.

The Interplay of Descriptive and Injunctive Group Norms

An alternative approach to the role of norms in the attitude-behaviour context has been to consider additional sources of social influence. Rather than seeing norms as a unitary construct, Cialdini and his colleagues (1990, 1991) have argued that the common definition of norms reflects two components: conceptions of what people *should do* and of what people *actually do*. Injunctive norms reflect perceptions of what most others approve or disapprove of,

and motivate action because of the social rewards and punishments associated with performance of the behaviour. Descriptive norms reflect the perception of whether or not other people actually perform the behaviour, and motivate action by providing information about what behaviours are effective or adaptive in a particular context.

The utility of the distinction between descriptive and injunctive norms has received extensive support from both correlational (see Rivis & Sheeran, 2003, for a review) and experimental research (see Cialdini, 2003, for a review). Both descriptive and injunctive norms independently influence behaviour, and the impact of norms appears strongest when these norms are consistent with each other (e.g., Schultz, Nolan, Cialdini, Goldstein, & Griskevicius, 2007).

Despite the contributions of both approaches, there have been few attempts to integrate the social identity and norm focus perspectives. In the social identity approach, norms are seen to have both descriptive and injunctive properties – group norms provide information about how group members *should* and *do* behave. In its empirical treatment of norms, however, social identity research has failed to distinguish the descriptive and injunctive aspects of group norms. In correlational research, the two aspects are not always empirically distinct and are usually collapsed into a single averaged measure (e.g., Terry et al., 1999; but see Norman, Clark, & Walker, 2006). In experimental research, studies have typically manipulated either the descriptive component (e.g., White et al., 2002) or the injunctive component (e.g., Terry et al., 2000).

Research on the norm focus approach has typically manipulated the salience of *either* injunctive or descriptive norms (see Cialdini et al., 1991), or has held the salience of the descriptive norm constant while the salience of the injunctive norm has been varied. The two types of norm have rarely been manipulated orthogonally. Although what is usually done and what is usually approved are frequently the same, this is not always the case. Sometimes a department may have an injunctive norm in favour of attending committee meetings, but the

descriptive norm is that a majority of people skip the meetings. Similarly, a widespread descriptive norm of energy wastage may belie a population's increasingly intense injunctive norm in favour of conservation. The relationships and connections among the two types of norms, and the possibility that these norms will interact to influence behaviour, have been neglected. It is of theoretical as well as applied concern that it is difficult to predict which norms will influence behaviour when incompatible descriptive and injunctive norms apply in a given situation.

To address this research question, Smith and Louis (in press) conducted two experiments that tested the relative impact of descriptive and injunctive group norms on attitudes, intentions, and behaviour. It is important to note that descriptive and injunctive norms were manipulated to be equivalent in these studies. In past research, sometimes injunctive norms are presented as more abstract (environmental concerns in general) and descriptive norms more concrete (littering behaviour in the parking lot). In addition, sometimes one type of norm is presented from one group (the authorities have put up a sign banning littering) whereas the other norm is presented from a different group (students at your campus have apparently littered). These inconsistencies make it hard to interpret differences in the effects of injunctive and descriptive norms in past research. In our study, descriptive norms reflected the number of people in an ingroup (university students) who, *as a rule*, do or do not engage in the target behaviour. Similarly, injunctive norms reflected the number of ingroup members who, *as a rule*, approve or disapprove of engaging in the target behaviour (cf. Cialdini et al., 1990).

By considering the injunctive and descriptive norms at the same level of abstraction and from the same source, we can hope to identify their unique and interactive effects, so that in future research the impact of differing sources and levels of abstraction can be explored without confounds. Specifically, an aim of the research was to test the forms of the possible interactions between injunctive and descriptive norms. Is the combination of supportive descriptive and injunctive norms disproportionately positive and facilitating, leading to increased engagement

in the behaviour, while the combination of non-supportive descriptive and injunctive norms is disproportionately negative and inhibiting, leading to decreased engagement in the behaviour? And what is the impact of incompatible or clashing descriptive and injunctive group norms: Does such inconsistency facilitate or inhibit engagement in the behaviour?

In both studies, university students' attitudes towards campus issues were obtained, the descriptive and injunctive group norms were manipulated, and participants' post-manipulation attitudes, behavioural willingness, and behaviour were assessed. In Study 1, the issue was the introduction of full-fee places for undergraduates. This was a contentious initiative at the time and an issue on which students were particularly engaged and active, as evidenced by large student protests on the campus where the research was conducted. In Study 2, the issue was the introduction of comprehensive examinations, an issue that was not under serious consideration and would not have been particularly salient for students.

Descriptive and injunctive group norms did interact to influence group members' attitudes, behavioural willingness, and behaviour. Exposure to supportive injunctive and descriptive group norms was associated with high levels of attitude-consistent responding whereas exposure to non-supportive injunctive and descriptive group norms was associated with low levels of attitude-consistent responding. But what happened when the descriptive and injunctive norms clashed? The pattern of this interaction varied across the two experiments. In Study 1, where the issue was very salient and involving, a high level of attitude-consistent responding was observed for participants who were exposed to a supportive injunctive norm but a non-supportive descriptive norm. Thus, when the group does not appear to practise what it preaches, this discrepancy can be motivating, leading group members to act, and to reduce the discrepancy for their group. In Study 2, however, where the issue was not salient and involving, any inconsistency between the injunctive and descriptive norm was associated with low levels of attitude-consistent responding. Indeed, exposure to inconsistency between the injunctive and descriptive norm was equivalent to exposure to non-supportive descriptive and injunctive group

norms. Thus, when the issue is not important and relevant and people are predisposed to passivity, supportive injunctive and descriptive norms may be needed to stimulate action; any inconsistency may promote inaction.

These experiments represent the first attempt to integrate the social identity approach and the norm focus approach to the role of norms in the attitude-behaviour relationship. This research highlights the importance of considering both descriptive and injunctive group norms and the need to attend to the combined effects of these two types of norms. But, this research raises the important question of whether inconsistency between injunctive and descriptive norms is a motivating or de-motivating force. Is it the case that such inconsistency is perceived as hypocrisy, leading to behaviour aimed at restoring a balance between the group ideal (i.e., the injunctive norm) and current group behaviour (i.e., the descriptive norm)? Or is it the case that such inconsistency leads group members to perceive that practising what one preaches is not an important rule for the group (i.e., a "meta-norm" of inconsistency – see McKimmie et al., 2003). One factor that influences this outcome is the importance of the issue for the group. Future research should examine other factors that might play a role in this process – such as level of identification with the group – and examine how attributions for inconsistency influence the level of group-normative behaviour.

Normative Influence and Behaviour Change

Norms play a key role in the attitude-behaviour relationship. But how can we harness the power of norms to produce positive behaviour change? Everyone is targeted by normative messages from sources such as governments, religious groups, businesses, and friends, about behaviour from deodorant usage to dieting to drinking. Yet people often ignore these normative messages. For example, obesity levels in developed nations continue to grow, despite costly government campaigns to change perceptions of appropriate diet and exercise. More seriously, sometimes campaigns to change peoples' norms even increase the problem that they are trying to solve. For example, college students targeted with campaigns designed to promote positive

norms about alcohol consumption are equally or even more likely to engage in problematic alcohol behaviour than college students not exposed to such campaigns (see e.g., Wechsler et al., 2003). What's going wrong?

Cialdini (2003) has argued that the failure of normative messages to produce change can be attributed to the way in which descriptive norm information is presented. Many behaviour change campaigns attempt to mobilise action against problem behaviour by depicting it as regrettably frequent. However, hidden within the message "please don't engage in this behaviour because many people are doing this undesirable action" is the message "many people *are* doing this undesirable action". If these messages lead people to infer a high prevalence of the problem behaviour, campaigns may not only fail, but actually be counterproductive. For example, a sign asking people not to take petrified wood from a U.S. National Park because many past visitors had taken wood actually *increased* the level of environmental theft (Cialdini et al., 2006). However, it is possible to avoid these descriptive norm backlash effects. For example, feedback on the low levels of recycling behaviour within a community subsequently increased levels of recycling behaviour engaged in by members of that community (Schultz, 1998).

One solution to this problem might be to focus instead on the injunctive norm (see Blanton, Koblitz, & McCaul, 2008). Indeed, Schultz et al. (2007) found that including information about whether other people approved of a behaviour prevented backlash effects associated with the provision of descriptive norm information. However, injunctive norms may also backfire. Communicating an injunctive norm against an action (e.g., "You shouldn't do drugs") may lead people to infer a descriptive norm in favour of the action ("Many people must be doing drugs otherwise you wouldn't go to the trouble of telling me this"), leading to *more* engagement in the undesired behaviour. The ways in which injunctive norms might backfire, however, have not been investigated. To understand backlash effects, it is critical to examine the

psychological processes that underpin the effects of descriptive and injunctive norms and to examine how these two types of norms interact to influence behaviour.

In our most recent research, we have attempted to examine the inferences people draw from normative messages and how these inferences influence the success of such messages. In one experiment, Louis and Smith (2007) exposed university students to messages that the university was planning to run a campaign on sun protection (half did not receive this message) and/or that the vast majority of their fellow students (i.e., the ingroup) approved of sun protection behaviour (half did not receive this message). We expected that in the absence of information about the ingroup injunctive norm, simply hearing that a campaign targeting the ingroup was planned would lead people to infer that the desired behaviour was uncommon. This perception of a negative descriptive norm would, in turn, lead to decreased engagement in the desired behaviour. This is exactly what was found students told that the university was planning a 'sun-smart' campaign inferred that other students did not strongly approve of, and did not really engage in, sun protection behaviour. Moreover, when students learned about the planned campaign, but were not given information about the ingroup's position, the campaign information had no positive effects, and even tended to produce lower levels of sun-protection intentions and behaviour. This did not occur when people were also given information that the ingroup approved of sun protection behaviour.

These results highlight three key points. First, it is critical to assess how exposure to one type of norm (descriptive or injunctive) influences perceptions of the other type of norm. Previous research has demonstrated the power of norms, but has failed to examine the underlying psychological processes systematically. Second, it is important to consider the interactions between injunctive and descriptive norms. Cialdini (2003) has argued that norms will be most effective when there is consistency between the message of the descriptive and injunctive norm. However, in contexts where one is trying to change behaviour or promote new behaviours, these messages are often not aligned (e.g., "we should use energy efficient light

bulbs because we're not currently using them"). It is therefore vital to examine the way in which people respond to these inconsistencies (see Smith & Louis, in press).

Finally, the source of the normative message should not be overlooked. Behaviour change messages are likely to emanate from sources that people might consider to be outgroups (e.g., governments, international bodies) rather than ingroups. Source effects have not been considered in past research. However, the social identity approach, and the work by Louis and Smith (2007), suggests that norms and messages that emanate from a relevant ingroup will be more effective than those that emanate from a perceived outgroup. In addition, exposure to behaviour change messages in the absence of information about what is valued by the ingroup (as is often the case in behaviour change campaigns) might even increase the salience of the intergroup distinctions between the ingroup and the source, thereby reducing the effectiveness of the message. It is important to investigate source effects and strategies that behaviour change agents can employ to overcome barriers associated with perceived group membership. Attention to the identity politics of campaigns for behaviour change is, we believe, vital. Our current work addresses these issues.

Concluding Comments

The research reviewed in this article highlights the way in which the social identity approach can provide an integrative analysis of the role of norms in the attitude-behaviour context. This research shows that group norms *are* important in the link between attitudes and action, demonstrates *when* group norms will lead to attitude-behaviour correspondence, and also provides insights into *why* people conform to group norms in this context.

A number of challenges do remain. One challenge is to apply the social identity analysis more consistently to issues of social concern, such as health behaviours, environmental behaviours, and prejudice and discrimination and to use the insights gained from this work to inform behaviour change interventions. Some advances are being made in these areas (e.g., Fielding et al., 2008; Terry, Hogg, & Blackwood, 2001), but more research is needed to realise

the social and theoretical impacts of this approach. Continued research attention is vital: these issues lie at the heart of social psychology's quest to understand how the perceived beliefs, feelings, and actions of those around us influence our own thoughts, emotions, and behaviours.

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