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Do As We Say *and* As We Do: The Interplay of Descriptive and Injunctive Group Norms in
the Attitude-Behaviour Relationship

Joanne R. Smith

University of Exeter

Winnifred R. Louis

University of Queensland

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Joanne Smith
School of Psychology
University of Exeter
Exeter, EX4 4QJ
United Kingdom
Email: J.R.Smith@exeter.ac.uk

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Author Notes

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Correspondence concerning this article should be addressed to Joanne Smith, School of Psychology, University of Exeter, Exeter, UK (J.R.Smith@exeter.ac.uk) or Winnifred Louis, School of Psychology, University of Queensland, Brisbane, QLD 4072, Australia (w.louis@psy.uq.edu.au).

Abstract

Past research on the social identity approach to attitude-behaviour relations (e.g., Terry & Hogg, 1996) has operationalised group norms as a mixture of both descriptive information (i.e., what most people do themselves) and injunctive information (i.e., what most people approve of). Two experiments (Study 1 = 185 participants; Study 2 = 238 participants) were conducted to tease apart the relative effects of descriptive and injunctive group norms. In both studies, university students' attitudes towards current campus issues were obtained, descriptive and injunctive group norms were manipulated, and participants' post-manipulation attitudes, behavioural willingness, and behaviour were assessed. Study 2 also examined the role of norm source (i.e., ingroup vs. outgroup injunctive and descriptive norms). In both studies, injunctive and descriptive ingroup norms interacted significantly to influence attitudes, behavioural willingness, and behaviour. Study 2 revealed that outgroup norms were largely ineffective. The research illustrates that ingroups interactively influence decisions, not only by what they say but also by what they do, and asserts the value of considering the interaction of descriptive and injunctive norms in accounts of normative influence.

Why do people fail to practice what they preach? It is easy to identify inconsistencies between attitudes and action. For instance, one might ask whether changes 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 example, given the extent of opposition to the recent military interventions in Afghanistan and Iraq, why did only a relative minority of people engage in peace protests or other oppositional political behaviours? This paper reports the results of two experiments designed to address this fundamental question by focusing on the role of social influence in the attitude-behaviour relationship.

Social Influence and the Attitude-Behaviour Relationship

In the attitude-behaviour field, the study of social influence has been conducted predominantly within the frameworks of the theories of reasoned action (Fishbein & Ajzen, 1975) and planned behaviour (Ajzen, 1985). Within 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, along with attitudes and perceived control, of behavioural intentions. Intentions, along with perceived control, in turn, predict behaviour.

Research shows, however, that subjective norms actually have surprisingly little influence on people's intentions to behave in a particular way (see Armitage & Conner, 2001). The weak effects of norms has prompted a number of interpretations, from Ajzen's (1991) conclusion that personal factors (i.e., attitude and perceptions of control) are the primary determinants of behavioural intentions, to the deliberate removal of norms from attitude-behaviour analyses (e.g., Sparks, Shepherd, Wieringa, & Zimmermanns, 1995).

One conclusion is that norms may indeed have little influence over one's behaviour. An alternative conclusion is that norms are important, but that they need to be

conceptualized in a different manner. In recent years, a number of researchers have begun to re-examine the role of social factors in the attitude-behaviour relationship (e.g., Cialdini, Kallgren, & Reno, 1991; Terry & Hogg, 1996; Trafimow & Finlay, 1996). These alternative approaches argue that for norms to play a role in the theory of planned behaviour, they need to be conceptualized in a different manner to that embodied by the subjective norm construct. In the present paper, we will consider two of these approaches: the social identity approach to attitude-behaviour relations (Terry & Hogg, 1996) and the norm focus approach (Cialdini et al., 1991).

The Social Identity Approach to Normative Influence

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 depersonalized and 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 norms and standards of the group. Thus, people are influenced by norms because they prescribe the context-specific attitudes and behaviours appropriate for group members.

Applying this reasoning to the question of why norms do not appear to influence the attitude-behaviour relationship, Terry and colleagues (see e.g., Terry & Hogg, 1996; Terry, Hogg, & White, 2000) argued that the lack of strong support for the role of norms in attitude-behaviour studies reflects problems with the conceptualization of norms within the theories of reasoned action and planned behaviour. In these models, norms are seen as external prescriptions that influence behaviour. This conceptualization 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). In addition, social pressure is seen to be additive across all referents and reference groups viewed as important to the individual. As such, the model fails to reflect that certain sources of normative influence will be more important for certain individuals. In contrast, the social identity approach does consider the role of group membership on behaviour. According to the approach, norms will have a stronger impact upon intentions and behaviour if the norms define group memberships that are contextually salient and self-defining in the immediate social context. Thus, the social identity approach is clear as to which groups will have influence over an individual's attitudes and actions: Groups that individuals belong to (i.e., ingroups) will have more influence than groups that individuals do not belong to (i.e., outgroups).

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. Moreover, the group membership of the source of the normative information – whether the norm emanates from an ingroup or an outgroup – becomes a critical variable. Ingroup norms are a more powerful determinant of behaviour than outgroup norms (e.g., Jetten, Spears, & Manstead, 1996; Wilder, 1990). 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 ingroup norm (Terry & Hogg, 1996). Thus, 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 ingroup, but will be weakened when people perceive that the group does not support the behaviour. Previous research has supported the social identity approach in field and laboratory research (e.g., Smith & Terry, 2003; Smith, Terry, & Hogg, 2006, 2007; Terry,

Hogg, & McKimmie, 2000; Terry, Hogg, & White, 1999; Wellen, Hogg, & Terry, 1998; White, Hogg, & Terry, 2002).

The Norm Focus Approach to Normative Influence

Another response to the role of norms in the attitude-behaviour context has been the consideration of 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 engaging or not engaging in the desired behaviour. The subjective norm of the theory of planned behaviour can be considered to be an injunctive social norm because it is concerned with perceived social pressure. Descriptive norms reflect the perception of whether other people actually perform the behaviour. They motivate action by informing people about what is considered to be effective or adaptive in a particular context and provide a decisional short-cut when an individual is choosing how to behave in a particular situation (i.e., "If everybody else is doing it, then it must be a good/sensible thing to do").

It has been shown that the predictive utility of norms as determinants of behaviour can be improved by taking into account the distinction between descriptive and injunctive norms (e.g., Cialdini & Trost, 1998; Donald & Cooper, 2001; see Ravis & Sheeran, 2003a). In correlational research, there is evidence that descriptive and injunctive norms have independent effects on intentions and behaviour across a wide range of behaviours including drug use (McMillan & Conner, 2003), volunteering behaviour (Warburton & Terry, 2000), safe sex behaviour (White, Terry, & Hogg, 1994), physical exercise (Rhodes & Courneya, 2003), and aggressive behaviour (Henry et al., 2000; Norman, Clark, & Walker, 2006).

In considering the process of normative influence, Cialdini et al. (1990, 1991) also drew attention to the role of norm salience. Norms are only likely to influence behaviour when focal in attention and, therefore, salient in consciousness. Indeed, Cialdini and his colleagues have demonstrated experimentally that the different types of norms exert an influence on behaviour, but only when made salient in a particular context (e.g., Kallgren, Reno, & Cialdini, 2000; Reno, Cialdini, & Kallgren, 1993). For example, Cialdini et al. (1990, Study 1) found that participants were less likely to litter in a clean environment (i.e., an anti-littering descriptive norm) than a littered environment (i.e., a pro-littering descriptive norm), an effect that was heightened when the descriptive norm against littering was made salient. Similarly, injunctive norms against littering have been found to be more effective when made salient (Cialdini et al., 1990, Study 5; Kallgren et al., 2000). Cialdini and colleagues have argued that the effects of injunctive norms on behaviour are stronger and more pervasive than the effects of descriptive norms (e.g., Cialdini et al., 1990, Study 4; Reno et al., 1993). This may be because the effects of injunctive norms are more likely to transcend situational boundaries, whereas descriptive norms are more likely to exert influence only in the specific context in which the behaviour occurs.

Injunctive and Descriptive Group Norms

Despite the clear contribution of both the social identity approach and the norm focus approach to the question of normative influence, there have been few attempts to integrate these approaches. The social identity approach has conceptualised group norms as possessing both descriptive and injunctive properties – norms describe the prototypical features of the group and also prescribe the appropriate attitudes and actions for group members. In its empirical treatment of norms, however, social identity research has failed to distinguish the descriptive and injunctive aspects of group norms. A number of studies have manipulated “group norms” in the form of numerical data reporting on the expressed

attitudes or past behaviour of group members (i.e., only the descriptive component was manipulated – see e.g., White et al., 2002). In other research, only injunctive components of the group norms were manipulated – for example, when people are exposed to information about group members approve or disapprove of in a particular situation (i.e., the group attitude – see e.g., Terry, Hogg, & McKimmie, 2000). 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 et al., 2006).

With respect to the norm focus approach, research has also 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 not been manipulated orthogonally. Adding to the confusion, previous research on the norm focus approach has typically manipulated descriptive norms in the immediate social context (e.g., littering in a particular environment; see Cialdini et al., 1991). In contrast, the injunctive norm is manipulated to be broader and more general (i.e., a broader societal norm against littering). This lack of specificity in the level of analysis may be one reason that the descriptive norm has emerged as less powerful than the injunctive norm in norm focus studies (see e.g. Fishbein & Ajzen, 1974). Within theory of planned behaviour research, when researchers have incorporated the distinction between injunctive and descriptive norms, the focus has been on identifying unique effects for these two types of norms. Studies report the independent contribution of each type of norm, “partialling out” the over-lapping variance.

The Present Research

We argue here that in past research on normative influence, the relationships and connections among descriptive and injunctive norms have been neglected, along with the possibility that the two types of norms will have interactive effects on behaviour, have been

somewhat neglected (but see Rimal & Real, 2003). Although what is usually done and what is usually approved are frequently the same, this is not always the case. On the basis of past research, it is difficult to predict which norms will influence behaviour when incompatible descriptive and injunctive norms apply in a given situation (Cialdini & Trost, 1998). To address this important research question, we conducted two experiments that tested the relative impact of descriptive and injunctive group norms on attitudes, intentions, and behaviour.

Importantly, in the present research we also sought to manipulate descriptive and injunctive norms at the same level of specificity. Descriptive norms reflected the number of people who, *as a rule*, do or do not engage in the target behaviour. Similarly, injunctive norms reflected the number of people who, *as a rule*, approve or disapprove of engaging in the target behaviour. In this way, injunctive and descriptive norms were equivalent, allowing us to test the relative importance of the two types of norms and their interacting influence in a realistic setting.

First, the present research tests the hypothesis advanced by Cialdini et al. (1991) that an injunctive group norm is more important than a descriptive group norm in contrast to the view that both norms are equally important in the prediction of attitudes and action when the confound of measurement specificity is controlled. Second, the research tests the forms of the possible interactions between injunctive and descriptive norms. For example, if both descriptive and injunctive group norms are supportive, their combined effect may be disproportionately positive and facilitating, leading to increased engagement in the behaviour, even if individuals are predisposed to passivity. If, however, both descriptive and injunctive norms are non-supportive, their combined effect may be disproportionately negative and inhibiting, leading to decreased engagement in the behaviour, even if individuals are predisposed to action. Finally, we were interested in the impact of

incompatible or clashing injunctive and descriptive group norms: Does inconsistency between injunctive and descriptive group norms facilitate or inhibit engagement in the behaviour?

We expected the answer to this question to depend on the nature of the issue under investigation and, more specifically, the personal importance or salience of the issue (see also Martin & Hewstone, 2003; Petty & Cacioppo, 1990, for discussions of this issue in the minority influence and persuasion literatures). When an issue is salient, relevant, and important to individuals we expected that a supportive injunctive norm would continue to influence behaviour even in the presence of a non-supportive descriptive norm. When people feel that a behaviour is important and appropriate, the message that others are not engaging in the behaviour may be particularly motivating, spurring people into action. Indeed, recent social identity research has demonstrated that when people are invested in an issue, information that they hold a minority opinion leads to greater engagement in actions that express their opinion. Hornsey and his colleagues (Hornsey, Majkut, Terry, & McKimmie, 2003; Hornsey, Smith, & Begg, in press) assessed the extent to which people's attitudes had a strong moral basis (i.e., were grounded in issues of principle and morality), presented participants with information suggesting that they were either in a minority or a majority on a range of social issues, and then assessed their willingness to engage in attitude-consistent actions. Results revealed that people with a strong moral basis for their attitude reported stronger intentions to publicly act in line with their attitude when they believed that their attitude was the minority position. However, people who did not have a strong moral basis for their attitude conformed to the majority position. This argument is also consistent with Sherif and Hovland's (1961) social judgement theory, which proposes that people who are highly involved in an issue are positively influenced by fewer people than those who are uninvolved in an issue (see also Sherif & Cantril, 1947).

In contrast, when an issue is not salient, relevant, and important to people, inconsistency is unlikely to be particularly motivating. Information that the group is not consistent will undermine the impact of the normative message because it may create a ‘meta-norm’ that is acceptable for group members not to translate their attitudes into action (i.e., a norm for inconsistency – see McKimmie et al., 2003) or because it raises questions about the entitativity or ‘groupiness’ of the group (see e.g., Hogg, Sherman, Dierselhuis, Maitner, & Moffitt, 2007). In such contexts of low involvement and group heterogeneity, in which individuals may be predisposed to passivity and little engagement in the issue, consistent support at both the descriptive and injunctive level may be needed to motivate behaviour.

STUDY 1

In Study 1, we focused on the relative impact of descriptive and injunctive ingroup norms. Participants were exposed to information about the percentage of fellow ingroup members (students at the university) who approved or disapproved of engaging in the target behaviour – signing petitions or form letters as a form of political action – and the percentage of fellow ingroup members who actually engaged or did not engage in the target behaviour. In Study 1, the focal issue was the introduction of full fee places for Australian undergraduate students.¹ This issue was highly salient and important to students at the time the research was conducted. Indeed, this issue prompted high levels of activism, including national days of actions, numerous protest rallies, blockades of university meetings, occupation of university buildings, and, at the university in question, demonstrators clashed with police during a blockade (ABC News, 2004; Munckton, Ashcroft, & Cahill, 2004).

Study 1 extends the social identity approach by examining descriptive and injunctive group norms independently. In addition, by focusing on political attitudes and

actions, Study 1 extends past research on the norm focus approach, which has focused typically on anti-social behaviours such as littering or aggression (e.g., Cialdini et al., 1991; Henry et al., 2000) or risky health behaviours (see Rivas & Sheeran, 2003a, for a review). Political behaviour is a context in which incompatible descriptive and injunctive group norms may be common, allowing for a test of the relative impact of descriptive and injunctive group norms and an examination of the impact of consistent versus inconsistent group norms on attitude-related outcomes.

It was predicted that exposure to supportive descriptive and injunctive group norms for engaging in the target behaviour would be associated with greater levels of engagement than exposure to non-supportive descriptive and injunctive group norms. However, given the salient political context in which the research was conducted, it was further predicted that levels of engagement in the target behaviour would be higher when participants were exposed to a supportive injunctive norm but a non-supportive descriptive norm than when participants were exposed to a non-supportive injunctive norm but a supportive descriptive norm.

Method

Participants and Design

Participants were 185 introductory psychology students enrolled at a large Australian university, who participated in the study for course credit. The study employed a 2 (descriptive norm: support vs. oppose) X 2 (injunctive norm: support vs. oppose) between-subjects design. The introduction of full-fee places for domestic undergraduate students served as the focal issue. Participants who suspected the manipulations were false, and/or who answered the manipulation checks incorrectly, were excluded from the sample. The final sample included 85 female and 53 male participants. The age of the participants ranged from 17 to 44 years ($Md = 19$ years).

Procedure

Upon entering the laboratory, participants read an information sheet describing the study and then completed four questionnaires. Participants were led to believe that the experimental session would involve participation in a series of short studies for different researchers within the School of Psychology. This was done to create a discontinuity between the different phases of the experiment. In order to maintain this cover story, the different experimental manipulations and questionnaire instruments were printed using a variety of fonts.

The first questionnaire was introduced as a study of social attitudes and, in addition to obtaining demographic information, assessed participants' initial attitudes to a range of political issues and behaviours. Participants indicated their attitude towards the target behaviour (signing a petition/form letter), which was embedded in a list of twenty ways of expressing political views. Each of the behaviours was rated on 7-point scales (-3 *strongly disapprove*, +3 *strongly approve*). Two items embedded in a list of twenty current political issues assessed participants' level of support for full-fee places and their support for a ban on full-fee places (-4 *oppose*, +4 *support*). The first item was reverse scored, and the two were averaged to create an index of hostility to full-fee places ($r = .31, p < .001$).

Participants then completed a distractor task that asked them about their emotional reactions to work experience. This task was included to bolster the perception that the testing session included questionnaires from multiple experimenters.

The next task presented the norm manipulations, which, in line with past research (see e.g., Smith & Terry, 2003; White et al., 2002), were introduced as a comprehension and coding exercise. First, participants studied a series of bar graphs, ostensibly the results of three recent studies on student opinion. These graphs depicted students' support for three behaviours, including the target issue of signing a petition/form letter. Two aspects of

support were conveyed as between-subject variables: The proportion of students who approved of the behaviour (injunctive norm manipulation: high [73% approval] or low [29% approval]) and the proportion who performed the behaviour themselves (descriptive norm manipulation: high [73% performance] or low [29% performance]). Two non-target issues were also included: the graphs indicated relatively equal levels of support and performance for these issues. Participants were asked to examine the graphs and answer a series of 'comprehension questions'. As a manipulation check, participants were required to indicate the average level of approval and behaviour for signing a petition / form letter depicted in the graphs.²

To strengthen the norm manipulations further, participants summarized a series of opinion statements about the target issue of signing a petition / form letter, ostensibly from students who had participated in similar research in previous semesters. These statements indicated that the majority of students either approved or disapproved of signing petitions/form letters and either had performed or had not performed this type of political action in the past. After reading the statements, participants integrated and summarized the opinions presented.

Participants then completed a final questionnaire, which assessed attitude-related responses. Participants were assigned, ostensibly at random, to complete a questionnaire focusing more deeply on one of three behaviours. In fact, all participants completed a questionnaire about signing a petition/form letter. This booklet included post-measures of attitudes to the behaviour, willingness to act, plus a concrete measure of action. *Attitudes* towards signing a petition/form letter were assessed with five semantic differential items measured on 9-point scales (e.g., "Do you believe that signing a petition/form letter on this issue is: 1 *bad*, 9 *good*). The items were averaged to form the scale ($\alpha = .87$). *Behavioural willingness* was measured with three items on 7-point scales (e.g., "Would you say that you

are [1 *very unwilling*, 7 *very willing*] to sign a petition/form letter?"), and the items were averaged ($\alpha = .93$). Finally, participants were given a chance to sign a postcard to the university senate containing a statement for or against the issue and drop it in a box. Participant numbers written in invisible ink on the postcards allowed us to identify which participants had acted. These were coded 1 (completed) or 0 (not completed).

Participants were then asked to guess the hypotheses underlying the study. Fifteen participants who indicated they did not believe the graphs depicted real data were excluded from the main analyses. Finally, participants were debriefed verbally and in writing. The deception concerning norms was flagged to participants, and the rationale was explained, along with an apology and thanks for their participation. Participants discussed their reactions, and were given the opportunity to withdraw their data (although none did so).

Results

Overview of analyses

A 2 x 2 MANCOVA was applied to the three dependent measures, namely attitudes, willingness, and behaviour, examining the role of descriptive norm and injunctive norm as between-subjects variables, and covarying out pre-measured attitude strength for the issue and towards signing petitions / form letters. At the multivariate level there was a main effect for injunctive norm, $F(3, 130) = 8.17, p < .001, \eta^2_p = .159$, but not for descriptive norm, $F(3, 130) = 1.94, p = .13, \eta^2_p = .043$. Supportive injunctive norms were associated with more positive post-test attitudes about signing petitions/form letters, $F(1, 132) = 15.85, p < .001, \eta^2_p = .107$, and greater willingness to engage in the target behaviour, $F(1, 132) = 23.63, p < .001, \eta^2_p = .152$. However, injunctive norms had no significant effect on actual signing behaviour, $F(1, 132) = 1.78, p = .18, \eta^2_p = .01$.

The multivariate effect for injunctive norm was, however, qualified by a significant two-way interaction at the multivariate level, $F(3, 130) = 3.51, p = .017, \eta^2_p = .075$. The

simple univariate effects of injunctive norms were examined at each level of descriptive norms (see Table 1). The pattern across the three measures is that injunctive norms exerted a stronger role when the descriptive norm was non-supportive (fellow students did not act) than when it was supportive (fellow students did act).

 Table 1 about here

When the descriptive norm was supportive, so that fellow students were engaging in the action, supportive injunctive norms resulted in more favourable attitudes towards engagement in the target behaviour, $F(1, 132) = 4.30, p = .040, \eta^2_p = .032$, and more willingness to engage in the target behaviour, $F(1, 132) = 4.17, p = .043, \eta^2 = .031$. However, there were no significant differences between the injunctive norm conditions on actual behaviour, $F(1, 132) = 1.49, p = .224, \eta^2_p = .011$.

In contrast, when the descriptive norm was non-supportive, so that fellow students were not engaging in the action, larger effects were observed in each case. Participants' attitudes to the target behaviour were more positive when the injunctive norm was supportive as opposed to non-supportive, $F(1, 132) = 12.39, p = .001, \eta^2_p = .086$, and they were more willing to engage in the target behaviour, $F(1, 132) = 22.82, p < .001, \eta^2_p = .147$. In addition, participants were more likely to actually engage in the target behaviour if the injunctive norm was supportive than non-supportive, $F(1, 132) = 9.34, p = .003, \eta^2_p = .066$.

Discussion

In the present study, the independent manipulation of descriptive and injunctive group norms represents an advance on both social identity research and the norm focus approach. The social identity approach has tended to focus on either descriptive or

injunctive group norms (e.g., White et al., 2002) or has failed to differentiate between these types of norms (e.g., Terry et al., 1999). In contrast, the norm focus approach has typically not manipulated descriptive and injunctive norms at the same level of specificity, nor activated and made salient both types of norms simultaneously (cf. Cialdini et al., 1990; Reno et al., 1993). The present research represents the first demonstration, to our knowledge, of interacting descriptive and injunctive group norms considered at the same level of specificity.

In Study 1, a supportive injunctive group norm was associated with more positive post-test attitudes towards the target behaviour and greater willingness to engage in the target behaviour. Descriptive norms, however, did not exert an independent influence on the outcome measures. It appears that injunctive group norms may be more powerful than descriptive group norms, an argument consistent with research and theorising in the norm focus approach (see e.g., Cialdini et al., 1991; Kallgren et al., 2000). However, in the present research the confounding effects of measurement specificity were controlled for the first time.

Of greater theoretical importance, the present study revealed interacting effects of descriptive and injunctive norms. In line with expectations, participants exposed to non-supportive injunctive *and* descriptive group norms displayed the lowest level of attitude-consistent responding. Moreover, exposure to a supportive injunctive *and* a supportive descriptive group norm was associated with high levels of attitude-consistent responding. However, a relatively high level of attitude-consistent responding was observed for participants who were exposed to a supportive injunctive norm but a non-supportive descriptive norm. It appears that when people believed that the group approved of the behaviour, but did not actually engage in the behaviour – when the group did not practice

what it preached— they were more likely to engage in attitude-consistent behaviour themselves.

One explanation of this effect is that our participants were responding to the apathy of their fellow group members in the political context. If one is a member of a group that approves of a particular course of action on a salient and important group-relevant issue (i.e., the introduction of full-fee places for Australian undergraduates), but one knows that other group members are not taking this course of action, the individual group member may feel an obligation or a stronger motivation to engage in the course of action (i.e., “If nobody else is doing it, but we all think it’s a good idea, then *I’ll* have to do it”). This is consistent with recent research within the social identity approach demonstrating that when individuals have an investment in an issue, minority support, rather than majority support, for their position leads to greater engagement in issue-related behaviours, such as signing petitions or speaking out on the issue (Hornsey et al., 2003, in press).

STUDY 2

In Study 1, in which the political issue was salient, relevant, and important to participants, we found, in line with expectations, that exposure to consistent injunctive and descriptive group norms (i.e., both supportive or both non-supportive) produced behaviour that was in line with the combined normative message (i.e., high levels or low levels of engagement, respectively). When the injunctive group norm was supportive but the descriptive norm was not supportive, positive attitudes towards the target behaviour and high levels of engagement in the target behaviour were observed, a finding that is consistent with recent social identity research (Hornsey et al., 2003, in press).

However, not all political issues are involving, salient, relevant, and important to people. Moreover, in other contexts such as health behaviour or consumer behaviour, people may not have considered the issues prior to exposure to the normative message. If

people are uncertain and hesitant rather than certain and committed, the inaction of others is more likely to be inhibiting rather than facilitating. This question was tested in Study 2 in which a different campus issue – the introduction of comprehensive examinations at Australian universities – was used. At the time Study 2 was conducted, there was no real proposal to introduce comprehensive examinations, so the issue could not be particularly salient or involving to participants.

Second, and of greater importance, the role of the source of the norms – whether the norms emanated from the ingroup (i.e., groups that an individual belongs to) or an outgroup (i.e., groups that an individual does not belong to) – was examined in Study 2, in order to determine whether individuals respond differently to injunctive and descriptive norms as a function of whether the norms are ingroup versus outgroup norms. One limitation of the norm focus approach is that norms are divorced from the social groups from which they originate; there is little or no acknowledgement that certain norms are more powerful than others due to their association with valued reference groups. In contrast, the social identity approach states that ingroups have more influence than outgroups. Norms that extend from a salient ingroup provide information that is more personally relevant and informative than outgroup norms. Indeed, research has shown that when people are exposed to normative information from the ingroup and an outgroup, ingroup norms have a stronger effect on behaviour than outgroup norms (Jetten et al., 1996; White, Terry, & Hogg, 1999; but see Louis & Taylor, 2002; Louis, Taylor, & Douglas, 2005; Louis, Taylor, & Neil, 2004, for evidence of the impact of outgroup norms). Thus, if it is found that ingroup norms, but not outgroup norms, influence behaviour, this would provide further evidence, in line with the social identity approach, for the need to consider the role of specific, valued, and relevant group memberships and social identities in the attitude-behaviour relationship. Furthermore, such an effect would

demonstrate the need to consider the group-level aspects of descriptive and injunctive norms, an avenue that has not been considered to date within the norm focus approach.

We expected that injunctive and descriptive norms would interact to influence attitudes, behavioural willingness, and action only when the norms emanated from an ingroup. When the norms originated from an outgroup, no effects on attitudes, behavioural willingness, and actions were expected. When the norms originated from the ingroup, in contrast, it was expected that exposure to supportive descriptive and injunctive group norms for engaging in the target behaviour would be associated with greater levels of engagement than exposure to non-supportive descriptive and injunctive group norms. However, given that the political context used in Study 2 was not salient and involving, it was expected that low levels of engagement in attitude-related outcomes would be observed when the descriptive and injunctive group norms were not consistent (i.e., when one norm was supportive and the other norm was not supportive).

Method

Participants and Design

Participants were 238 psychology students who either participated in the study for course credit or for a small monetary payment. The study employed a 2 (descriptive norm: support vs. oppose) X 2 (injunctive norm: support vs. oppose) X 2 (norm source: ingroup vs. outgroup) between-subjects design. The introduction of comprehensive examinations at Australian universities served as the focal issue. Participants who suspected the manipulations were false, and/or who answered the manipulation checks incorrectly were excluded from the sample. The final sample included 138 female and 61 male participants. The age of the participants ranged from 17 to 48 years ($Md = 19$ years).

Procedure

The procedures in Study 2 were similar to those used in Study 1. Participants were led to believe that the experimental session would involve completion of a number of separate studies. This was done to create a discontinuity between the different phases of the experiment. Upon entering the laboratory, participants read an information sheet describing the study and then completed four questionnaires. The first questionnaire was introduced as a study of social attitudes and, in addition to obtaining demographic information, assessed participants' attitudes to a range of political issues and behaviours. As in Study 1, a single-item pre-measure of support for signing a petition/form letter was obtained (-3 *strongly disapprove*, +3 *strongly approve*). This item was embedded in a larger task in which participants rated their approval for twenty political actions. A measure of attitude strength was obtained by taking the absolute value of participants' score. A single-item measure of attitude on the issue was also obtained using a 9 point scale (-4 *oppose*, +4 *support*) on which participants indicated their support for comprehensive exams. Participants then completed a distractor task.

Next, participants were exposed to the norm manipulations. This manipulation was identical to that used in Study 1. However, at this time, the norm source manipulation (i.e., ingroup vs. outgroup) was also presented. Half of the participants were told the graphs depicted data collected at the participants' own university about the views and actions of their peers. The other participants were told that the graphs depicted data collected at another university of comparable size and status in a different state. As in Study 1, participants were also exposed to a series of opinion statements, ostensibly from either the ingroup or the outgroup, about students' attitudes and actions related to signing a petition/form letter. Participants were asked to read the material, respond to a series of 'comprehension questions' in relation to the graphs and integrate and summarize the opinions presented.³

The dependent variables were the same as in Study 1 (attitude scale $\alpha = .86$, willingness scale $\alpha = .87$). These were recoded on the basis of participants' pre-measured attitude to signing petitions/form letters to assess post-measured attitudes and actions that supported initial attitudes.⁴ At the end of the study, participants were asked to guess the hypotheses; eight participants who indicated they did not believe the graphs depicted real data were excluded from the main analyses. Participants were debriefed verbally and in writing as to the deception involved in the study and the rationale of the study. Participants were given the opportunity to withdraw their data (although none did so).

Results

Overview of analyses

Prior to analysis, the norm manipulations were recoded on the basis of participants' pre-measured attitude into measures of injunctive and descriptive norm support (i.e., the group norm was supportive of participants' initial attitudes towards the behaviour) and non-support (i.e., the group norm was non-supportive of participants' initial attitudes). A 2 x 2 x 2 MANCOVA was applied to the three dependent measures, namely attitudes, willingness, and behaviour. Descriptive norm support, injunctive norm support, and group membership were included as between-subjects variables, and pre-measured attitude to the issue and attitude strength towards the behaviour were covariates.

At the multivariate level there was a main effect for injunctive norm, $F(3, 185) = 4.07, p = .008, \eta^2_p = .062$, but not for descriptive norm, $F(3, 185) = 1.20, p = .31, \eta^2_p = .019$. When participants were exposed to a supportive injunctive norm, their attitudes towards the target behaviour became more extreme, $F(1, 187) = 10.93, p = .001, \eta^2_p = .055$. However, injunctive norm had no significant effect on willingness to engage in the target behaviour or actual behaviour, $F_s < 2.42, p_s > .12$.

The multivariate effect for injunctive norm was, however, qualified by a significant three-way interaction, $F(3,185) = 4.08, p = .008, \eta^2_p = .062$. The simple univariate effects of injunctive norms were then examined at each level of descriptive norms and group membership. Further analysis revealed that outgroup norms were globally ineffective, $F_s < 2.38, ps > .124, \eta^2_p < .014$. However, there was a significant two-way interaction between descriptive and injunctive ingroup norms.

When descriptive ingroup norms were supportive of participants' attitudes, supportive injunctive norms resulted in more extreme attitudes, $F(1, 187) = 9.94, p = .002, \eta^2_p = .050$, and behavioural willingness, $F(1, 188) = 11.14, p = .001, \eta^2_p = .056$. In addition, there was a trend towards more polarized behaviour when the descriptive and injunctive group norms were consistent, $F(1, 188) = 3.35, p = .069, \eta^2_p = .018$. In contrast, when the descriptive ingroup norms were non-supportive of participants' pre-measured attitudes, injunctive ingroup norms had no effect, $F_s < 1.17, ps > .280, \eta^2_p < .007$ (see Table 2).

 Table 2 about here

 Discussion

As in Study 1, ingroup injunctive norms were found to have an independent effect on attitudes but not on behaviour. A supportive injunctive ingroup norm was associated with more extreme post-test attitudes towards the target behaviour. Participants became more positive towards the behaviour if their initial attitude was positive and the ingroup supported them, and more negative towards the behaviour if their initial attitude was negative and the ingroup supported them. The effect of injunctive norms on attitudes is not surprising: an injunctive ingroup norm can be thought of as being a group attitude which provides information regarding how positively or negatively the group views a particular

issue or action. Ingroup injunctive norms did not, however, exert an independent effect on behaviour. Moreover, ingroup injunctive norms did not impact independently on behavioural willingness (cf. Study 1).

Of even greater theoretical interest is the evidence that injunctive group norm, descriptive group norm, and norm source interact to influence attitudes, behavioural willingness and actions. Participants responded differently to injunctive and descriptive norms as a function of whether the norms were ingroup or outgroup norms. When the norms originated from an outgroup, normative support had no effect on attitudes, behavioural willingness, and actions. Thus, in line with the social identity approach, the study suggests that it is important to consider the group-level aspects of descriptive and injunctive norms and the role of specific, valued, and relevant group memberships and social identities in the attitude-behaviour relationship.

This finding does diverge from recent research by Louis and her colleagues (2004, 2005) that has examined the role of ingroup and outgroup norms in political and collective action. This research, conducted in the context of French-English conflict in Québec, has shown that people will strategically conform to or violate outgroup norms in order to obtain benefits for their own group. The model suggests that outgroup norms may have failed to influence behaviour in Study 2 because the target issue – introducing comprehensive examinations – was not associated with intergroup conflict between the ingroup and outgroup universities. It is possible that if a different outgroup had been used, such as university administrators, the norms of this outgroup would have been influential. In situations marked by conflict, descriptive and injunctive outgroup norms may also influence attitudes and actions. Future research should examine this issue further to determine the relative impact of ingroup and outgroup injunctive norms in the attitude-behaviour relationship.

When the norms were derived from an ingroup, descriptive and injunctive norm interacted to influence attitudes, behavioural willingness, and behaviour. As predicted, in Study 2 the impact of injunctive norms was greater when the descriptive norm was supportive. This difference from Study 1, in which injunctive norms increased action even when the descriptive norm was non-supportive, is likely to reflect the different political contexts of the two studies. In Study 1, participants may have been predisposed to act because the issue was topical and highly relevant, and non-support at both the injunctive and descriptive level was required to depress engagement. In Study 2, however, participants may have been predisposed to passivity due to the fictitious issue, and both injunctive and descriptive support for signing the petition was required to stimulate the action. This may be because in a low-involvement context, inconsistencies in the norms of the group raise questions about the entitativity, or 'groupiness' of the group, potentially undermining engagement in group-normative behaviour (e.g., Hogg et al., 2007; McKimmie et al., 2003). These accounts are, however, speculative given the exploratory nature of the research and are an important avenue for further research.

GENERAL DISCUSSION

The present research demonstrates that the descriptive and injunctive aspects of group norms can be disentangled. Although the distinction between these aspects of group norms had been acknowledged in the social identity approach to attitude-behaviour relations, this point had not been followed up in the empirical work to date. In relation to the norm focus approach, the present research highlights the need to consider the group-level of analysis with respect to the relative roles of descriptive and injunctive norms. Indeed, one important contribution of our research was that we were able to manipulate descriptive and injunctive group norms at the same level of specificity, thereby providing a good test of the relative power of descriptive and injunctive group norms. In addition, the

present research examined the relative ability of descriptive and injunctive norms to predict political action. This is a departure from previous research on descriptive norms, which has tended to focus on anti-social behaviours (e.g., littering; Kallgren et al., 2000) or risky health behaviours (see Ravis & Sheeran, 2003a).

We found that injunctive norms exerted a unique influence on political attitudes (Studies 1 and 2) and political intentions (Study 1 only), but not on behaviour (Studies 1 and 2). However, it should be noted that definitive conclusions about the impact (or lack thereof) of injunctive normative influence on political behaviour should not be drawn from the present research. It is possible that the political intentions formed in our studies might translate into behaviour at a later date or in another context. It is also possible that the lack of impact on behaviour might reflect the nature of the behaviour used in our research. Signing a petition or form letter might be seen as a less public form of political action; hence, there is less scope for the self-presentation aspect of the injunctive norm to influence behaviour (see also Smith et al., 2006, 2007). Indeed, the effect of injunctive group norms may be stronger with public behaviours, a hypothesis that could be tested in future research. Nevertheless, the independent effects of injunctive norms support the hypothesis that injunctive group norms are more powerful than descriptive group norms even when measurement specificity is controlled (see also Cialdini et al., 1990; Reno et al., 1993), an effect that might be due to the fact that such norms invoke multiple motivations for group-normative behaviour.

Descriptive group norms were not found to exert a unique influence on attitudes, behavioural willingness, or behaviour. This is somewhat inconsistent with past research that has found unique effects for descriptive norms (see Ravis & Sheeran, 2003a, for a review). However, this may be due to the fact that past research with descriptive and injunctive norms has frequently considered different norm sources for descriptive and

injunctive norms (i.e., “Most people who are important to me...” for injunctive norms vs. “Of the people you know...” for descriptive norms – see e.g., Orbell & Sheeran, 1999; Ravis & Sheeran, 2003b; cf. McMillan & Conner, 2003) and different levels of measurement specificity (i.e., a time element for injunctive norms vs. no time element for descriptive norms – see e.g., Cooke, Sniehotta, & Schuz, 2007). In addition, tests of the role of descriptive norms within the TPB have typically focused on health-related behaviours (see Ravis & Sheeran, 2003a, for a review) rather than on other behaviours such as political behaviours. Future research may be needed to determine the conditions in which a unique effect of descriptive norms will emerge. However, the present research demonstrates the importance of considering the interactive as well as additive effects of descriptive norms. If, as in past research, we had been interested only in a unique effect of descriptive norms, we might have concluded that descriptive group norms were unrelated to political attitudes, willingness, and behaviours. However, this is clearly not the case. Our research demonstrates that descriptive group norms do play a key role in the prediction of attitude-related outcomes even if no direct effect is observed – descriptive group norms moderate the impact of injunctive group norms.

In both studies, descriptive and injunctive interacted to influence group members’ attitudes, behavioural willingness, and behaviours. In Study 1, injunctive norms increased action only when the ingroup was not already acting (i.e., the level of action was lowest in the passive / disapproval condition and high across the other three conditions). In Study 2, injunctive norms increased action only when the ingroup was acting (i.e., the level of action was highest in the active / approval condition and low across the other three conditions). It was argued that this difference reflected the different attitude issues used in the two studies and the different levels of personal involvement or importance associated with these issues. The issue used in Study 1 – the introduction of full-fee places – was a

'live' attitude issue. More specifically, the issue was current and salient at the time, was relevant to students, and was important to students. In contrast, the issue in Study 2 – the introduction of comprehensive examinations – could be thought of as a 'dead' issue. There was not a serious proposal to introduce these exams at the time so the issue was less salient, important, and relevant to students.

It is possible that the reaction to intragroup *inconsistency* that we found in Study 1 occurs only when the issue is highly important to group members and it is more important for them to take action in the face of the apathy of their fellow group members (see also Hornsey et al., 2003; in press). In contrast, when people have less knowledge or investment in an issue, it is possible that their attitudes and actions are more determined by the consistency of support for their attitude position. Thus, in line with other research on attitude processes, the present research highlights the importance of considering issue involvement or importance in social influence (see also Martin & Hewstone, 2003; Petty & Cacioppo, 1990). Clearly future research should examine the role of descriptive and injunctive group norms across a range of issues and within a range of group memberships and intergroup contexts in order to assess the moderating contextual variables, increase the generalizability of the results, and to investigate the underlying processes involved.

Both the social identity approach and the norm focus approach have made important contributions to our understanding of the role of social influence processes in the attitude-behaviour relationship and have generated a great deal of interest and research in the attitude-behaviour field. However, greater efforts must be made to integrate these approaches in order to obtain a full and complete understanding of the way in which the beliefs, feelings, and actions of those around us (i.e., our ingroups and outgroups) influence the beliefs, feelings, and actions of ourselves. The present research represents a first step in

reconciling, integrating, and extending these two key approaches to the issue of social influence in the attitude-behaviour relationship.

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Footnotes

1. Historically, places for domestic undergraduate students at Australian universities have been funded through a combination of government funding and a student contribution. At the time of Study 1, the government had introduced changes that would allow universities to offer a limited number of 'full fee' places to students who did not meet the academic criteria to get government-supported places. By its supporters, this was seen as a start towards a more market-oriented system where students take responsibility for funding their own degree; by its opponents, this was seen as a betrayal of Australian meritocratic values. Participants in Study 1 could act either in support or opposition to the issue.

2. Thirty-two participants were excluded because this manipulation check suggested that they did not understand or remember the graphs (9 did not understand either manipulation, 9 did not understand the injunctive norm manipulation, and 14 did not understand the descriptive norm manipulation). Inspection of the retention rates across the conditions in which the norms were consistent and the conditions in which the norms were inconsistent revealed that the proportion of participants retained was similar (83% and 80% respectively). In addition, there were no substantive differences in the results when all participants were included in the analyses.

3. Thirty-one participants were excluded because this manipulation check suggested that they did not understand or remember the graphs (5 did not understand either manipulation, 12 did not understand the injunctive norm manipulation, and 14 did not understand the descriptive norm manipulation). Inspection of the retention rates across the conditions in which the norms were consistent and the conditions in which the norms were inconsistent revealed that the proportion of participants retained was similar (90% and 84% respectively). In addition, there were no substantive differences in the results when all participants were included in the analyses.

4. Recoding behavioural responses in the way used in the present study allows participants' original attitude position to be reflected in the outcome measures. This recoding method has been used in past experimental research in the attitude-behaviour context where polarised attitudes are observed (see Smith & Terry, 2003; Terry et al., 2000; Wellen et al., 1998). Congruency coding was used in Study 2, as opposed to the direct coding used in Study 1, due to the heterogeneous nature of the initial attitudes of the sample towards the issue (i.e., comprehensive examinations). If the analysis in Study 1 is done using congruency coding the pattern of results is identical to the direct coding results except that the effects are weaker, suggesting the sample is relatively homogeneous in its support for the target action (cf. Study 2 in which there were students who both opposed and supported the target action).

Table 1

Means and standard deviations for Study 1.

	Non-supportive		Supportive	
	descriptive norm		descriptive norm	
	Non-supportive	Supportive	Non-supportive	Supportive
	injunctive norm	injunctive norm	injunctive norm	injunctive norm
Post-test	5.49	6.81	6.41	7.18
attitudes	(1.58)	(1.71)	(1.21)	(1.54)
Behavioural	3.47	5.27	4.40	5.15
willingness	(1.54)	(1.51)	(1.74)	(1.48)
Actual	.31	.67	.72	.60
behaviour	(.47)	(.48)	(.46)	(.50)

Note. Post-test attitudes were measured on 9-point scales, behavioural willingness was measured on 7-point scales, and behaviour was a dichotomous variable. Numbers in parentheses are standard deviations.

Table 2

Means and standard deviations for Study 2

	Ingroup Norms				Outgroup norms			
	Non-supportive descriptive norm		Supportive descriptive norm		Non-supportive descriptive norm		Supportive descriptive norm	
	Non-supportive injunctive norm	Supportive injunctive norm	Non-supportive injunctive norm	Supportive injunctive norm	Non-supportive injunctive norm	Supportive injunctive norm	Non-supportive injunctive norm	Supportive injunctive norm
Post-test	5.62	5.96	5.54	7.02	5.55	6.39	6.11	6.53
attitudes	(1.51)	(1.11)	(1.69)	(1.50)	(1.74)	(1.72)	(1.45)	(1.83)
Behavioural	4.87	4.50	4.56	5.97	5.27	5.17	4.86	5.22
willingness	(1.34)	(1.45)	(1.32)	(1.53)	(1.63)	(1.55)	(1.35)	(1.48)
Actual	.79	.65	.50	.73	.64	.78	.95	.76
behaviour	(.42)	(.49)	(.51)	(.45)	(.49)	(.42)	(.22)	(.44)

Note. Post-test attitudes were measured on 9-point scales, behavioural willingness was measured on 7-point scales, and behaviour was a dichotomous variable. Numbers in parentheses are standard deviations.