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Social identity and the attitude-behaviour relationship: Effects of anonymity and  
accountability

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### Abstract

Two experiments were conducted to examine the impact on anonymity and accountability on the expression of group-mediated attitude-behaviour consistency. In Study 1, low and high identifiers ( $N = 106$ ) were exposed to an attitude-congruent norm and provided information on intentions under anonymous and in-group accountable conditions. In Study 2, salience of identity was manipulated, participants ( $N = 185$ ) were exposed to either an attitude-congruent or an attitude-incongruent norm, and provided information on intentions and behaviour under anonymous and in-group accountable conditions. In both studies, accountability elicited group-normative attitudes and behaviour among individuals for whom the group was not a salient basis for self-definition. For individuals for whom the group was a salient basis for self-definition, the expression of attitude-consistent intentions and behaviour was greater in anonymous conditions. It is suggested that strategic concerns, such as those elicited by in-group accountability, influence displays of group-normative attitude-behaviour consistency.

The study of social influence and, in particular, the impact of social norms upon behaviour has been a central theme in social psychology. In the context of the relationship between people's attitudes and their behaviour, 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). 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 the specific behaviour. However, research shows that subjective norms actually have surprisingly little influence on the attitude-behaviour relationship and on people's intentions to behave in a particular way (see Armitage & Conner, 2001, for a recent review). This finding has prompted a number of reactions, 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 intentions to behave, or actually behave, in a particular way. However, an alternative conclusion is that norms are important, but that they need to be conceptualized in a different manner to that embodied by the subjective norm construct. From both the reasoned action and planned behaviour perspectives, norms are viewed as being 'out there'—they are a source of external pressure that invites compliance by acting on the individual to behave in a certain way. This conceptualization is, however, 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 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; Trafimow & Finlay, 1996). In particular, the social identity approach to attitude-behaviour

relations (Terry & Hogg, 1996), an approach that has situated norms within a more elaborated social context, has argued that norms may have a stronger impact upon the attitude-behaviour relationship if the norms define group memberships that are contextually salient and subjectively important as self-definitions in the immediate social context.

*The Social Identity Approach to Attitude-Behaviour Relations*

Drawing on the social identity approach (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987; see also Hogg, 2003, in press) to understand the lack of support found for the role of norms in attitude-behaviour relations, Terry and Hogg (1996) argued that norms will impact the attitude-behaviour relationship more powerfully provided that the norm emanates from a behaviourally relevant reference group and the group is a salient basis for self-definition.

Previous research has supported the social identity analysis of the role of norms in attitude-behaviour relations (e.g., Smith & Terry, 2003; Terry & Hogg, 1996; Terry, Hogg, & White, 1999; Terry, Hogg, & McKimmie, 2000; Wellen, Hogg, & Terry, 1998). In both field and laboratory research, normative support from a relevant and specific reference group, or exposure to a supportive group norm, has been found to increase the expression of attitude-consistent intentions and behaviour, while low levels of normative support, or exposure to an attitude-incongruent group norm, decreases the expression of attitude-consistent intentions and behaviour, but only for individuals who identify strongly with the group (i.e., high identifiers). For those who do not identify strongly with the group (i.e., low identifiers), personal factors such as attitude have been found to be the primary determinants of intentions and behaviour (e.g., Terry & Hogg, 1996).

Thus, this evidence suggests that group norms have most impact on individuals for whom the group is an important basis for self-definition (see Terry, Hogg, & White, 2000, for a review). However, the behaviour of people who are not as strongly attached to the

group is not as well understood or explained. Although Terry and Hogg (1996) find that these low identifying individuals are influenced more by personal factors, it may be premature to conclude that they are *never* influenced by group factors. Indeed, recent research has suggested that in certain contexts—that is, in the presence of an in-group audience—low identifiers can engage in group behaviour (e.g., Barreto & Ellemers, 2000, 2002). Clearly, strength of identification is not the only factor that influences the extent to which a person will display group-mediated attitude-behaviour consistency. Perhaps group members, irrespective of strength of identification, might use displays of attitude-consistent behaviour strategically—that is, select if and when to adopt and enact the norms of the group in order to achieve desired goals within a given context.

*Strategic Group Behaviour: The Role of Accountability and Audience Constraints*

Researchers have begun to reconsider the strategic nature of group-mediated behaviour by incorporating into the social identity approach insights from the self-presentation perspective—specifically, the fact that individuals are aware of, and modify their behaviour for, their current audience (see e.g., Leary, 1995). This research, based on the Social Identity model of Deindividuation Effects (SIDE—Reicher, Spears, & Postmes, 1995), has investigated the effects of anonymity and accountability on the expression of group-normative behaviour. In a series of studies, Barreto and Ellemers (2000, 2002) examined the interplay between level of identification and accountability on strategic displays of willingness to work for a low status group. They found that whereas high identifiers exerted themselves on behalf of group goals irrespective of level of anonymity, low identifiers were responsive to manipulations of anonymity and accountability. More specifically, low identifiers were more willing to work for the group under conditions of accountability than under conditions of anonymity, suggesting that their responses were the result of self-presentational or strategic concerns. Both low and high identifiers can display group behaviour, but under different conditions and for different reasons.

Anonymity and accountability, and resultant strategic concerns, clearly influence group behaviour. However, the impact of strategic concerns on the interplay among attitudes, norms, and action has not been examined, despite the fact that strategic concerns have been found to interact with identification (e.g., Barreto & Ellemers, 2000), and that identification has been found to be a critical determinant of willingness to express group-normative behaviour (e.g., Terry & Hogg, 1996). An examination of the impact of anonymity and accountability in the attitude-behaviour context makes a number of important advances. First, the manipulation of specific and relevant group norms, the hallmark of the novel experimental attitude-behaviour paradigms used by social identity researchers, facilitates a more systematic examination of the effects of identification, accountability, and *specific* group norms on the expression of group-*normative* behaviour. Second, the use of previously established and important attitudes and behaviours enables an examination of strategic effects in relation to meaningful group memberships, contexts, and outcome behaviours (cf. ad hoc groups—e.g., Barreto & Ellemers, 2000). The aim of the experiments reported here was to examine how differences in the importance of a group membership, both chronically (i.e., level of identification—Study 1) and contextually (i.e., salience of identity—Study 2), influenced responses to anonymity and accountability in the attitude-behaviour relationship.

### Study 1

In Study 1 we examined whether displays of group-mediated attitude-behaviour consistency vary as a function of audience accountability and level of identification with the group. Intentions to behave in an attitude-consistent manner and expressed attitudes were examined for low and high identifiers in anonymous and accountable contexts. Participants gave their attitude towards a current issue, were exposed to information that suggested that the group norm was congruent with their attitude, and were led to expect

that their responses would remain anonymous to fellow group members or that they would be required to disclose and justify their responses.

According to the social identity approach to attitude-behaviour relations (e.g., Terry & Hogg, 1996), exposure to an attitude-congruent norm should strengthen the attitude-behaviour relationship, but only for high identifiers. However, in light of recent research on the strategic nature of group behaviour (e.g., Barreto & Ellemers, 2000, 2002), it was expected that response context (i.e., anonymity or accountability) would moderate the effect of normative support on displays of group behaviour. Specifically, it was expected that low identifiers would report greater willingness to express in-group norm-consistent attitudes and behaviour when accountable for their responses to an in-group audience but not when responses would remain anonymous (H1). In contrast, it was expected that high identifiers would display equivalent levels of group-normative behaviour in anonymous and accountable response conditions (H2).

### *Method*

#### *Participants and Design*

Participants were 71 female and 35 male ( $N = 106$ ) introductory psychology students enrolled at a large Australian university, who participated in the study for course credit. The study employed a 2 (low identification, high identification)  $\times$  2 (anonymous, accountable) between-subjects design. The introduction of voluntary student unionism (VSU) served as the focal issue.<sup>1</sup> All participants were exposed to normative information that was congruent with their initial attitude towards the focal issue. At all stages of the study, participants were visible to each other.

#### *Procedure*

Participants were led to believe that there were two separate phases to the study, each relating to an entirely separate experiment. This was done to create a clear discontinuity between the two manipulations. The first phase, which assessed attitudes and

identification, was introduced as a study of students' attitudes towards current issues. The second phase was described as a visual and verbal comprehension task. In order to maintain this cover story, the two phases of the study were conducted in different rooms and the different tasks were printed using a variety of fonts and coloured paper.

*Pre-experimental measures.* In the first phase, participants completed an initial questionnaire that, in addition to obtaining demographic details, assessed participants' attitudes to the introduction of voluntary student unionism and level of identification with the university student group. Attitude was measured with two items: a binary measure that required participants to indicate whether they supported or opposed the introduction of VSU (1 *support*, 2 *oppose*), and a second item in which participants indicated the extent of their support or opposition for the target issue (1 *strongly support*, 6 *strongly oppose*).

Level of identification as a university student was assessed via a 10-item scale adapted from Hogg, Hains, and Mason (1998). Items asked participants how much they felt they belonged to the group, how much they identified with the group, how similar they felt to the group in terms of attitudes and beliefs, how important they felt the group was to them, how happy they were to be a member of the group, how well they fitted into the group, how much they liked other group members, how important the group was to their sense of self, how much they felt strong ties to other group members, and how committed they felt to the group (1 *not at all*, 9 *very much*). The 10 identification items formed a reliable scale ( $\alpha = .94$ ) and responses to the scale were averaged to form a measure of group identification.

*Experimental manipulations.* After completing the initial questionnaire, participants moved to the second room for the next phase of the study. The first task involved the presentation of the normative support information, which was introduced in two different ways. First, participants studied a series of bar graphs, ostensibly the results of three recent studies on student opinion, showing the percentage of support and



opposition to three issues (including the target issue). For all participants, the bar graphs indicated that students from their university held the same attitude as them towards the target issue of introducing VSU. The bar graphs indicated relatively equal levels of support and opposition for the two non-target issues. Participants were asked to examine the graphs and answer questions related to the graphed information. Specifically, they had to indicate whether student opinion was in support or opposition to the introduction of voluntary student unionism. Responses were recoded to determine whether participants identified the norm correctly (coded as 1) or incorrectly (coded as 2).

To further strengthen perceptions of normative support, participants summarised a series of representative statements, ostensibly from first year students who had participated in similar research in previous semesters, which indicated that their in-group either strongly supported or strongly opposed the introduction of VSU. They read four statements that suggested that the group supported their position on the target issue and one statement that opposed their position. After reading the statements, participants integrated and summarised the opinions presented.

To measure behaviour related to the target attitude, participants then completed a questionnaire measuring their willingness to engage in attitude-consistent behaviour. In order to imbue these measures with a sense of accountability (i.e., the perception that one would have to make one's responses public to fellow in-group members), participants in the accountable condition were told that at the end of the study they would participate in a short discussion on each of the major issues highlighted in the final questionnaire. In this discussion, participants were told that they would be required to disclose and justify their responses to the questions relating to each of the major issues. Participants in the anonymous condition were told they would be participating in a short discussion on reasons for studying introductory psychology.

After these instructions, participants completed the final questionnaire designed to measure willingness to engage in attitude-consistent behaviour. Participants completed three questions relating how willing they would be to: (1) accept a flier from a group that supported the introduction of VSU, (2) vote to support the introduction of VSU if there was a university referendum on the issue, and (3) sign a petition supporting the introduction of VSU (1 *not at all willing*, 9 *extremely willing*). Each willingness item was recoded to reflect the extent of attitude-behaviour consistency ranging from 1 (*weak attitude-behaviour consistency*) to 9 (*strong attitude-behaviour consistency*), such that higher scores indicated that participants' responses were more consistent with their initial attitude position. Responses were combined to form an index of willingness to engage in attitude-consistent behaviour ( $\alpha = .85$ ).<sup>2</sup>

Participants were also required to indicate their attitude to the introduction of voluntary student unionism again on the 6-point scale used in the initial questionnaire. Responses to this item were recoded to reflect the extent to which participants reported an attitude that was consistent or inconsistent with their initial attitude (i.e., high scores indicate greater consistency).

Finally, as a check on the effectiveness of the accountability manipulation, participants responded to a single item that assessed their perceptions of how much information about their responses they expected to disclose in the discussion (1 *not very much*, 9 *very much*). Participants were debriefed fully at the conclusion of the study.

## *Results*

### *Manipulation Checks*

All data was analysed with a 2 (low vs. high identification) x 2 (anonymity vs. accountability) between-groups analysis of variance.<sup>3</sup> On the accountability manipulation check, analysis revealed a main effect for response context only,  $F(1, 102) = 5.56, p = .02$ ,

$\eta^2 = .05$ . As expected, participants in the anonymous condition reported lower levels of perceived accountability ( $M = 3.98$ ) than participants in the accountable condition ( $M = 4.77$ ). Participants were classified as low or high identifiers on the basis of a median split ( $Md = 5.99$ ;  $M_{low} = 3.97$  and  $M_{high} = 6.93$ ). A 2 (identification) x 2 (accountability) ANOVA revealed a main effect for identification condition only,  $F(1, 102) = 498.15, p < .001, \eta^2 = .83$ . Analysis of the check on the normative information indicated that all participants identified the norm correctly.

### *Main Analyses*

On the measure of willingness to engage in attitude-consistent behaviour, analysis revealed a significant Identification x Accountability interaction only,  $F(1, 101) = 9.77, p = .002, \eta^2 = .09$  (see Figure 1). Simple main effects analysis revealed the effect of accountability on willingness to display attitude-consistent behaviour to be significant for both the high identifiers,  $F(1, 101) = 5.73, p = .019$ , and the low identifiers,  $F(1, 101) = 4.29, p = .041$ . High identifiers were more willing to display attitude-consistent behaviour in anonymous response conditions ( $M = 7.66$ ) than in accountable response conditions ( $M = 6.54$ ). Consistent with predictions, this pattern was reversed for the low identifiers, such that low identifiers reported greater willingness to behave in an attitude-consistent manner when accountable to the in-group than when anonymous to the in-group ( $M_s = 7.35$  and  $6.20$ , respectively).

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 Insert Figure 1 around here  
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A 2 (identification) x 2 (response context) ANOVA on participants' expressed attitudes revealed a significant interaction between identification and accountability only,  $F(1, 102) = 11.48, p = .001, \eta^2 = .10$  (see Figure 2). Analysis of simple main effects

revealed a significant main effect for accountability for both the high identifiers,  $F(1, 102) = 6.33, p = .013$ , and the low identifiers,  $F(1, 102) = 5.35, p = .023$ . More specifically, the expressed attitudes of high identifiers were more stable in anonymous conditions ( $M = 5.35$ ) than in accountable response conditions ( $M = 4.69$ ). For low identifiers, greater stability was observed in accountable ( $M = 5.12$ ) than in anonymous response conditions ( $M = 4.39$ ).

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### *Discussion*

In Study 1, we examined the interactive effect of identification and accountability on attitude-behaviour correspondence. We found that the amount of willingness to engage in group-normative behaviour displayed by *both* high and low identifiers differed as a function of accountability to the in-group audience. Low identifiers reported greater willingness to behave in line with their attitudes under accountable than anonymous conditions (see H1). High identifiers did the opposite—they reported greater willingness under anonymous, rather than accountable, conditions (cf. H2).

The interaction between in-group accountability and identification shows that the nature of the response context does influence the attitude-behaviour relationship. Contrary to the position of self-categorization theory that as long as group membership is salient, people will act in the best interest of their group and, consequently, their responses will not be affected by the presence of an audience of fellow group members (e.g., Abrams & Hogg, 1990; Turner et al., 1987), the present results underline the importance of accountability for *both* low and high identifiers.

Consistent with predictions and past research (Barreto & Ellemers, 2000, 2002), low identifiers responded strategically to variations in the degree of anonymity, displaying

greater group-mediated consistency when accountable to the in-group than when they were anonymous. Low identifiers may, therefore, be driven by self-presentational concerns such as the desire for positive evaluation. It should be noted that although this finding is consistent with past research on strategic behaviour, it does represent a significant advance on past research in the attitude-behaviour correspondence (e.g., Terry & Hogg, 1996). As discussed earlier, the social identity approach to attitude-behaviour relations has been largely silent on the behaviour of low identifiers, assuming that these low identifiers are unresponsive to group concerns. The present results indicate that low identifiers will respond positively to group norms under conditions of in-group accountability, showing that the influence of group factors on the attitude-behaviour relationship is more widespread than originally thought.

An unexpected finding was that high identifiers under anonymous conditions expressed strengthened willingness, relative to accountable conditions, to engage in group-normative behaviour. This finding could be interpreted in terms of the SIDE model (Reicher et al., 1995). According to the cognitive dimension of the model, conditions of visual or nominal anonymity are associated with the highest levels of social influence when a social identity is already salient (e.g., Spears, Lea, Corneliusen, Postmes, & Ter Haar, 2002). However, this is unlikely to explain our findings fully because, in the anonymous condition, although responses were anonymous the participants (and their individuating characteristics) were visible to each other throughout the experiment.

An alternative explanation is that high identifiers were *motivated* particularly to display group-normative behaviour in anonymous conditions. Behaviour displayed publicly where people are not anonymous is not very informative about the person engaging in the behaviour—it is more likely to reflect external demands such as situational norms and rules, or self-presentational concerns. However, private or anonymous behaviour is far more informative about the person—it is more diagnostic of inner tendencies. In the

context of the present research we could therefore speculate that because high identifiers are driven by internal motivations to act and perceive themselves as worthy group members, private validation of identity might be more important than public validation. This argument is in line with self-determination theory (e.g., Deci & Ryan, 2000, 2003), which argues that individuals who are intrinsically motivated to engage in particular courses of action, such as high identifiers and group-normative behaviour, react to external pressures such as surveillance by reduced engagement in the behaviour. Thus, high identifiers' need to feel autonomous in their displays of group behaviour may have amplified the expression of group behaviour in anonymous response conditions and attenuated it under accountable response conditions. Given the unexpected nature of this effect, we felt that it was important to try and replicate it in a further study—this was one aim of Study 2.

### Study 2

Three main refinements were made in Study 2. First, in Study 1, all participants were exposed to an attitude-congruent norm and it is possible that low identifiers were willing to display group-normative behaviour more in accountable conditions because it did not actually involve changing their behaviour. So, in Study 2 included both attitude-congruent and attitude-incongruent norms. Both levels of normative support were included in Study 2 to examine whether individuals for whom the group is not a salient basis for self-definition would go against a previously held attitude to conform to the norms of the ingroup audience.

Second, instead of measuring identification, salience of social identity was manipulated in order to examine whether an alternative operationalisation of the importance of group membership would be associated with comparable effects on displays of group-mediated behaviour. The distinction between salience of an identity and level of identification has been the subject of recent theoretical debate within the social identity

field (see Turner, 1999). Although salience and identification should be related, high contextual salience of an identity does not necessarily imply more commitment to the group and high levels of chronic identification do not necessarily imply that an identity is psychologically salient in a particular context. Thus, it is important to examine whether the two, enduring identification and situational salience, are associated with similar effects on displays of group behaviour (see e.g., Smith & Terry, 2003 and Wellen et al., 1998, for evidence of comparable effects in the attitude-behaviour context).

The third refinement was the inclusion of behavioural measures in Study 2. Study 1 was limited in providing an explanation of attitude-*behaviour* relations because intentions to behave were assessed, not actual behaviour. Behavioural measures were included in Study 2 to examine the effect of accountability to an in-group audience on actual behaviour, as well as behavioural intentions.

Based on past social identity research on attitude-behaviour relations, it was expected that participants exposed to a norm that was congruent with their initial attitude would display greater attitude-behaviour consistency than participants exposed to a norm that was incongruent with their initial attitude (H1). However, this effect should be moderated by the contextual salience of social identity and the extent of accountability to the in-group audience. Specifically, it was expected that low salience participants would display more group-mediated consistency in accountable, as opposed to anonymous, conditions (H2), whereas high salience participants would do the opposite—displaying more group-mediated consistency in anonymous than accountable conditions (H3).

### *Method*

#### *Participants and Design*

One hundred and eighty-five female introductory psychology students who had not participated in the first study completed the second study in return for partial course credit. The study employed a 2 (salience: low/high) x 2 (in-group norm: attitude-

congruent/attitude-incongruent) x 2 (response context: anonymous/accountable) between-groups design. Once again, the introduction of voluntary student unionism (VSU) served as the focal issue.

### *Procedure*

As in Study 1, each of the experimental manipulations was introduced as a separate study and materials from the different phases of the study were printed using different type fonts and layout.

*Pre-experimental measures.* The first phase of the study was introduced as a study on students' attitudes towards three current issues. Participants completed an initial questionnaire that, in addition to obtaining demographic details, assessed participants' attitudes to the target issue of introducing voluntary student unionism (VSU). Attitude was assessed using the two items described in Study 1.

*Experimental manipulations.* After completing the initial questionnaire, contextual salience of social identity as a university student was manipulated. Introduced as a study of how people evaluate promotional material, participants in the high salience condition were given and asked to peruse university promotional material describing the features of the university and its unique characteristics. Participants in the low salience condition were given material promoting public transport options from the local city council. To maintain the cover story, participants were asked to rate the material and answer a number of questions. This manipulation has been shown to be effective in previous research (Masel, 2000). Items designed as manipulation checks were embedded in the final questionnaire.

The format and layout of the normative support manipulation was similar to that in Study 1. For participants in the attitude-congruent norm condition, bar graphs indicated that students at their university held the same attitude as them towards the target issue of introducing VSU. Participants in the attitude-incongruent norm condition were shown bar



graphs indicating that their fellow students had the opposite attitude to them with respect to the target issue. In both conditions, the bar graphs indicated relatively equal levels of support and opposition for the two non-target issues. To ensure that participants processed the information in the bargraphs properly, they were then asked a number of questions about the graphs. Specifically, they had to indicate whether student opinion was in support of or opposition to the introduction of VSU. Responses were recoded to determine whether participants identified the norm correctly (coded as 1) or incorrectly (coded as 2). Participants who failed to identify the norm correctly ( $n = 25$ ) were excluded from further analysis, leaving a final sample size of 160.

To further manipulate normative support, participants in the attitude-congruent norm condition read four statements that suggested that the group supported their position on the target issue and one statement that opposed their position. The opposite pattern was provided for participants in the attitude-incongruent norm condition. After reading the statements, participants integrated and summarized the opinions presented.

Next, a questionnaire measuring willingness to engage in attitude-consistent behaviour was distributed. As in Study 1, in order to imbue these measures with a sense of accountability, participants in the accountable condition were told that they would participate in a short discussion on each of the major issues highlighted in the final questionnaire. They were told that in the discussions they would be required to disclose and justify their responses to the questions relating to each of the major issues. Participants in the anonymous condition were told they would be participating in a short discussion on reasons for studying introductory psychology.

Following these instructions, participants completed the questionnaire measuring their willingness to engage in behaviours related to the introduction of VSU. They completed three questions about how willing they would be to: (1) accept a flier from a group that supported the introduction of VSU, (2) attend a rally supporting the introduction

of VSU, and (3) vote to support the introduction of VSU if there was a university referendum on the issue (1 *not at all willing*, 9 *extremely willing*). Each willingness item was recoded to reflect the extent of attitude-behaviour consistency ranging from 1 (*weak attitude-behaviour consistency*) to 9 (*strong attitude-behaviour consistency*), depending on whether participants supported or opposed the introduction of VSU at the outset of the study. If participants opposed the introduction of VSU, their responses were reversed, but if participants supported the introduction of VSU, their responses were not reversed. As a result, high scores indicated strong attitude-behaviour consistency for all participants. Responses to the three willingness items were averaged to form a measure of willingness to engage in attitude-consistent behaviour ( $\alpha = .75$ ).

This questionnaire also included items designed as manipulation checks. In order to assess the efficacy of the normative support manipulation, participants rated the extent of similarity between their attitude towards the introduction of VSU and the general attitude among first year students (1 *extremely dissimilar*, 9 *extremely similar*). Four items, all measured on 9-point scales, assessed the effectiveness of the salience manipulation. These items asked participants to indicate how often their thoughts were drawn to their status as a university student, how aware they were of their identity as a university student, to what extent they were responding as a university student, and how often they thought about being a university student during the study (1 *not at all*, 9 *very much*). Responses to the four items were averaged to form a salience of social identity scale ( $\alpha = .91$ ). To check the effectiveness of the accountability manipulation, participants completed four items that assessed their perceptions of how much they felt their responses would be public to other students, how aware they were that their responses might have been made public, how much information about their responses to the final questionnaire they might have to disclose in the group discussion, and how much they felt the prospect of the discussion

affected their responses (1 *no information*, 9 *a lot of information*). Responses were averaged to form an index of perceived accountability ( $\alpha = .62$ ).

Finally, participants were given the opportunity to engage in attitude-related behaviour (based on the “behaviouroid” measures employed by Sivacek & Crano, 1982). Participants were informed that the Student Union was interested in gauging student opinion towards the introduction of voluntary student unionism and had asked the researcher to collect some data for them. Participants in both the anonymous and accountable conditions were given a ballot paper with the proposal written on it and with two response options, labelled support and oppose. *All* participants were told that they would be required to record their response on the ballot paper. However, participants received *different* instructions regarding the way in which they would cast their vote. In the accountable condition, participants were informed that because the student body was interested in general numbers only, a straw poll would be conducted at the end of the study. At this time, participants would simply raise their hands to indicate their response on the ballot paper (i.e., whether they supported or opposed the proposal). They were also told that in order to facilitate the upcoming group discussion, they would be required to select an opinion badge to wear that indicated whether they supported or opposed the current discussion topic. Participants in the anonymous conditions were informed that they would deposit their ballots in a sealed box, and were instructed to fold their ballots to ensure confidentiality.

Prior to debriefing, participants in the accountable response condition gave their responses in the straw poll. Participants in the anonymous response condition deposited their ballots in the ballot box. The responses of all participants to the ballot were recoded to reflect the extent to which behaviour was consistent with initial attitude (1 *inconsistent behaviour choice*, 2 *consistent behaviour choice*). Finally, participants in the accountable

condition were asked to select and wear an opinion badge—these badge choices were recoded to reflect the extent to which the behaviour was consistent with participants' initial attitude (1 *inconsistent behaviour choice*, 2 *consistent behaviour choice*). No group discussions were ever held.

## *Results*

### *Manipulation Checks*

Three way (salience x normative support x response context) ANOVAs were used to check the efficacy of the manipulations. On the measure of salience of student identity, the analysis revealed a significant main effect for salience,  $F(1, 152) = 8.29, p = .005, \eta^2 = .05$ . Participants in the low salience condition reported lower salience ( $M = 4.68$ ) than participants in the high salience condition ( $M = 5.55$ ). No other effects were significant. On the measure of perceived accountability, analysis revealed that participants in the accountable condition perceived that their responses would be more accountable than participants in the anonymous condition ( $M_s = 4.42$  and  $3.34$ , respectively),  $F(1, 122) = 24.85, p < .001, \eta^2 = .17$ . No other effects were significant.

On the measure of perceived attitude-norm similarity, analysis revealed the expected significant main effect for normative support,  $F(1, 145) = 52.84, p < .001, \eta^2 = .27$ . Participants exposed to an attitude-congruent norm perceived higher levels of similarity ( $M = 6.96$ ) than those exposed to an attitude-incongruent norm ( $M = 4.93$ ).<sup>4</sup>

### *Main Analyses*

Due to the dichotomous nature of participants' responses to the ballot, a hierarchical loglinear analysis was used to analyse responses on the voting index. The results of the tests of significance (partial association chi-square tests) revealed a significant main effect for normative support,  $\chi^2(1, N = 153) = 36.78, p < .001$ . A higher percentage of participants exposed to an attitude-congruent norm voted in an attitude-

consistent manner than participants exposed to an attitude-incongruent norm (84% and 37%, respectively).

This effect was qualified by a significant Normative Support x Salience x Accountability interaction,  $\chi^2(1, N = 153) = 12.07, p < .001$ . Analysis of the Normative Support x Accountability interaction under low and high salience conditions revealed a significant interaction under both low salience,  $\chi^2(1, N = 74) = 6.61, p = .01$ , and high salience conditions,  $\chi^2(1, N = 79) = 5.42, p = .02$ .

Turning first to the low salience condition, the effect of normative support on voting behaviour was significant in accountable response conditions only,  $\chi^2(1, N = 35) = 23.91, p < .001$  (Figure 3, Panel A). Under conditions of accountability, participants exposed to an attitude-congruent norm were significantly more likely to vote in an attitude-consistent manner than participants exposed to an attitude-incongruent norm (92% vs. 13%). Under anonymous conditions, there was no significant difference in attitude-behaviour consistency as a function of normative support (78 vs. 53%). This pattern was reversed in the high salience conditions (Figure 3, Panel B). Specifically, there was a significant main effect for normative support in the anonymous condition only,  $\chi^2(1, N = 42) = 18.29, p < .001$ . When anonymous to the in-group, a higher percentage of high salience participants voted in an attitude-consistent manner when exposed to an attitude-congruent norm than an attitude-incongruent norm (92% vs. 30%). However, there was no significant difference in the levels of consistency displayed in the accountable condition (74% vs. 57%). Thus, for low salience participants, the effects of norms were more marked in accountable conditions, but for high salience participants, the effects of norms were more marked in anonymous response conditions.

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 Insert Figures 3a and 3b around here

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Only accountable participants were required to select an opinion badge to wear during the group discussion; hence, analysis on this measure represents a reduced test of the central hypotheses. Once again, a hierarchical loglinear analysis was used to analyse responses on badge selection due to the dichotomous nature of responses. The results of the tests of significance (partial association chi-square tests) revealed a significant main effect for normative support,  $\chi^2 (1, N = 78) = 19.71, p < .001$ . A higher percentage of participants exposed to an attitude-congruent norm selected an opinion badge consistent with their original attitude than those exposed to an attitude-incongruent norm (84% vs. 35%). However, this effect was qualified by a significant Normative Support x Salience interaction,  $\chi^2 (1, N = 78) = 8.48, p = .004$ . Follow-up analyses revealed a significant main effect for normative support under low salience conditions only,  $\chi^2 (1, N = 40) = 24.75, p < .001$ . As shown in Figure 4, when low salience participants were accountable, they selected an opinion badge that was consistent with the prevailing group norm, displaying greater attitude-behaviour consistency with exposure to an attitude-congruent (92%) than an attitude-incongruent norm (13%). However, when high salience participants were accountable, consistency of badge selection did not vary significantly with the congruence of the current group norm (75% and 57% respectively).

On the measure of willingness to display attitude-consistent behaviour, a 2 (low salience, high salience) x 2 (congruent norm, incongruent norm) x 2 (anonymous, accountable) ANOVA revealed a significant main effect for normative support,  $F (1, 152) = 24.97, p < .001, \eta^2 = .14$ . As expected, participants exposed to an attitude-congruent norm displayed greater attitude-intention consistency than participants exposed to an attitude-incongruent norm ( $M_s = 5.80$  and  $4.20$ , respectively). However, this effect was qualified

by a significant higher order interaction between salience, normative support, and response context,  $F(1, 152) = 15.18, p < .001, \eta^2 = .09$ .

Further analysis of the Normative Support x Accountability interaction as a function of salience revealed a significant interaction under both low salience,  $F(1, 152) = 4.22, p = .042$ , and high salience conditions,  $F(1, 152) = 12.10, p < .001$ . Simple main effects analysis revealed that, under low salience conditions, the main effect for normative support emerged only when responses would be accountable to the in-group,  $F(1, 152) = 21.05, p < .001$ . Exposure to an attitude-incongruent norm reduced individuals' willingness to display attitude-consistent behaviour compared to exposure to an attitude-congruent norm ( $M_s = 2.38$  vs.  $5.60$ —Figure 5, Panel A). In contrast, under high salience conditions, the effect of normative support on willingness to display attitude-consistent behaviour was significant under anonymous response conditions only,  $F(1, 152) = 21.13, p < .001$ , such that high salience participants were less willing to display attitude-consistent behaviour following exposure to an attitude-incongruent norm ( $M = 2.68$ ) than an attitude-congruent norm ( $M = 5.47$ —Figure 5, Panel B).

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 Insert Figures 5a and 5b around here  
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### *Discussion*

The results of Study 2 provide additional support for the importance of accountability to an in-group audience in determining when individuals will engage in group-mediated attitude-behaviour consistency. First, the role of normative support from a salient in-group in strengthening the attitude-behaviour relationship was demonstrated. Consistent with the social identity approach, participants exposed to normative information in line with their initial attitude displayed more attitude-behaviour consistency than

participants exposed to normative information inconsistent with their initial attitude (Hypothesis 1).

In addition, there was evidence that the effect of normative support was moderated by contextual salience of the social identity and level of accountability. With respect to the results for the low salience participants, Study 2 provided additional support for the strategic nature of behaviour when a group identity is less important. On the measures of both intentions and actual behaviour, low salience participants displayed more group-normative behaviour when accountable to the ingroup than when anonymous to the ingroup, a finding consistent with both the results of the first study and Hypothesis 2. Furthermore, as predicted, high salience participants reported greater group-normative intentions and behaviour in anonymous rather than accountable conditions (H3).

Critically, this second study succeeded in replicating and extending the findings of Study 1. Using a different operationalisation of the importance of group membership (i.e., salience) and examining both intentions and behaviour, there was consistent evidence that individuals who vary in the contextual salience of an identity respond differently to group norms in anonymous and accountable response contexts. Thus, one important contribution of Study 2 is the demonstration that identical patterns emerge irrespective of the manner in which group importance is operationalised. Another advance is the consideration of the impact of both attitude-congruent and attitude-incongruent group norms (cf. Study 1). This allowed us to demonstrate that even individuals for whom the group is not contextually salient will go against previously established attitudes in order to conform to group norms under conditions of ingroup accountability, highlighting further the powerful role of group norms in shaping individual behaviour.

In sum, the results of Study 2 further emphasise the need to examine the responses of all group members to variations in levels of anonymity and accountability. It appears that the effect of norms reaches beyond those for whom the group is an important basis for



self-definition. Norms influence the level of attitude-behaviour consistency displayed by both low and high identifiers, albeit under different conditions.

### General Discussion

The social identity approach to attitude-behaviour relations (Terry & Hogg, 1996) has shown that group norms influence the responses of individuals for whom the group is a salient or important basis for self-definition, but that people who do not meet this criteria are largely unaffected by group norms. In addition, it is assumed that because individuals will act in the best interests of their group when a group membership is salient irrespective of the audience, level of anonymity or accountability should not impact upon displays of group-mediated attitude-behaviour consistency. Our research was designed to challenge these assumptions by examining how low and high identifiers (and participants under low and high salience conditions) respond to variations in response context (i.e., anonymity vs. in-group accountability) regarding the correspondence between their attitudes and their behaviour.

Importantly, these studies show that self-related strategic concerns associated with anonymity and accountability influence the expression of group-normative behaviour by *all* group members. However, the circumstances that elicit group-mediated consistency differ for group members who differ in their attachment to the group. Low identifiers, or those who are in low group membership salience contexts, are subject to concerns about strategic self-presentation of group membership. They are more inclined to follow an in-group norm when accountable to the in-group, a finding that was consistent with both predictions and past research on strategic behaviour (Barreto & Ellemers, 2000, 2002). However, it is important to note that although similar effects have been found in past research, a number of advances are made in our research. We not only demonstrate the effects of norms more systematically than in past research, but highlight that strategic

behaviour occurs in relation to real life groups (cf. minimal groups—Barreto & Ellemers, 2000, 2002) and impacts upon the relationship between attitudes and behaviour.

Although not predicted at the outset, level of anonymity and accountability was found to influence the expression of group-normative behaviour among individuals for whom the group was a more important basis for self-definition. Both high identifiers and high salience participants were more likely to intend to follow the group norm with respect to intentions and behaviour in the absence of self-presentation concerns—that is, in anonymous conditions. Moreover, given that the current studies were designed to elicit the strategic effects of anonymity rather than the cognitive effects of anonymity (i.e., accountability rather than mere visibility), the observed effect is unlikely to be due to the cognitive effects of anonymity outlined in research on the SIDE model (e.g., Postmes, Spears, & Lea, 1998). Instead, the tendency of high identifiers and high salience participants to report greater group-normative intentions and behaviour in anonymous conditions may reflect a strategic and reasoned choice.

On the basis of these results and drawing on self-determination theory (Deci & Ryan, 2000, 2003), it was speculated that the *preference* of individuals for whom the group is a basis for self-definition, given that the norms and standards of the group have been internalized, might be to engage in group behaviour in anonymous conditions because such behaviour cannot be attributed to external constraints and is more truly diagnostic of loyalty to the group. Indeed, for these individuals, external constraints to engage in group behaviour might have the unintended consequence of reducing displays of group-normative behaviour by shifting individuals from intrinsic motivation to extrinsic motivation. The question of the motivation of high identifiers in the attitude-behaviour context under anonymous and accountable conditions is an important issue for future research. In addition, it is important to consider the long-term consequences of anonymous group-normative behaviour. According to Emler (1990), claims to group membership can

only truly be validated and maintained by public displays of group behaviour. Thus, it is possible that high identifiers might be expected to “step up to the plate” in certain contexts, such as when the group is in a low status position or in times of intra- or intergroup threat in order to maintain their claim to group membership.

In conclusion, the studies reported here provide important insights into the question of *who* is most likely to display group-mediated attitude-behaviour consistency. Early research on the social identity approach to attitude-behaviour relations (e.g., Smith & Terry, 2003; Terry & Hogg, 1996; Terry, Hogg, & McKimmie, 2000; Wellen et al., 1998) suggested that the answer to this question was simple—individuals who were highly committed to the group. However, these studies demonstrate that the answer is more complex than first thought and is more likely to be “it depends”, not only on aspects of group membership (i.e., identification, salience, and group norms), but also on the strategic concerns in the immediate social context.

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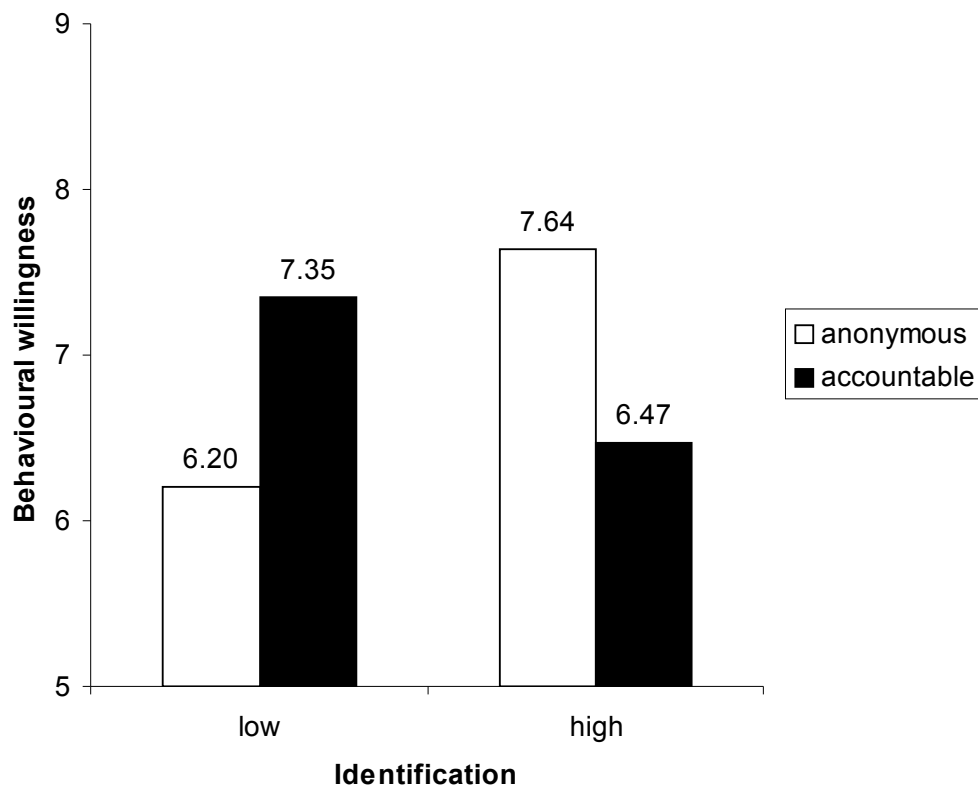
## Footnotes

1. In most Australian universities, membership in the campus student union is compulsory for all students and all students must pay union fees. In return, the student union funds a number of services for students (e.g., childcare, legal services) and engages in political action to protect the rights of students (e.g., campaigns against the introduction of full-fee paying places). The introduction of voluntary student unionism, a position advocated by the current conservative government, would mean that students would have the right to choose whether they wish to join a student association and pay union fees. However, many believe that this would result in poorer services to students and would stifle political action.
2. Studies of the attitude-behaviour relationship typically assess the relationship between attitudes and behaviour by means of a correlation. However, in experimental studies, this method is not appropriate because the sample sizes in each cell are not large enough to provide sufficient power to test for differences in the strength of the attitude-behaviour relationship across experimental conditions. 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 (see Smith & Terry, 2003; Terry, Hogg, & McKimmie, 2000; Wellen et al., 1998).
3. We dichotomized the identification scale to obtain criterion groups for ANOVA to maintain consistency in presentation of results across the two studies. However, because this may have reduced measurement power, we conducted moderated regression analyses on the behavioural intention and expressed attitudes measures. The regression results mirrored the ANOVA results. For both the behavioural intention score and the expressed attitudes score the Identification x Accountability interactions were significant ( $\beta = -.41, p = .003$  and  $\beta = -.46, p < .001$ , respectively). Simple slope

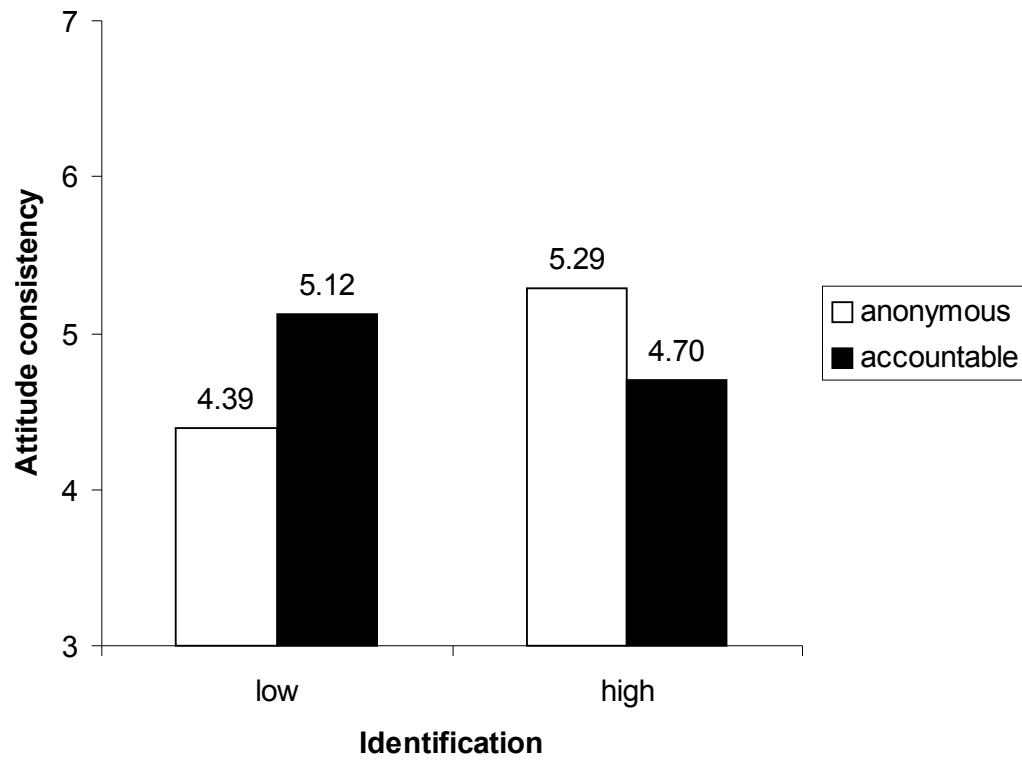


analysis (see Aiken & West, 1991) revealed an identical pattern to simple main effects analysis in ANOVA for both outcome measures.

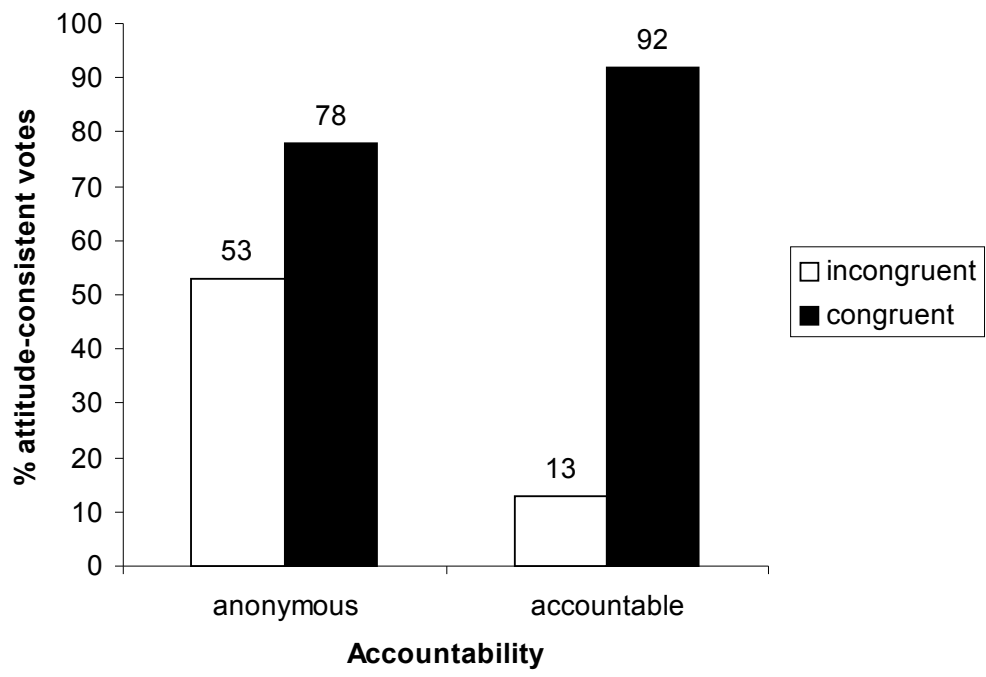
4. There was also a significant Salience x Normative Support x Accountability interaction on the measured of perceived attitude-norm similarity,  $F(1, 145) = 6.26, p < .02, \eta^2 = .04$ . However, this higher order interaction much smaller than the main effect, and follow-up analyses of simple main effects revealed the main effect for normative support to be significant for all combinations of salience and accountability.

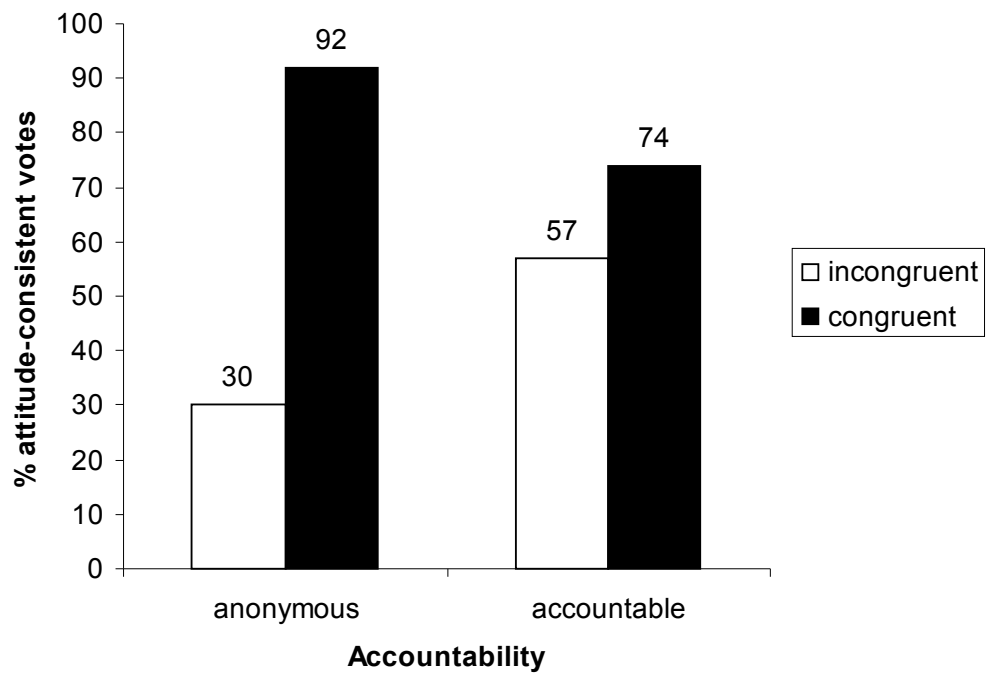


*Figure 1.* Interaction between identification and accountability on willingness to display attitude-consistent behaviour (Study 1).

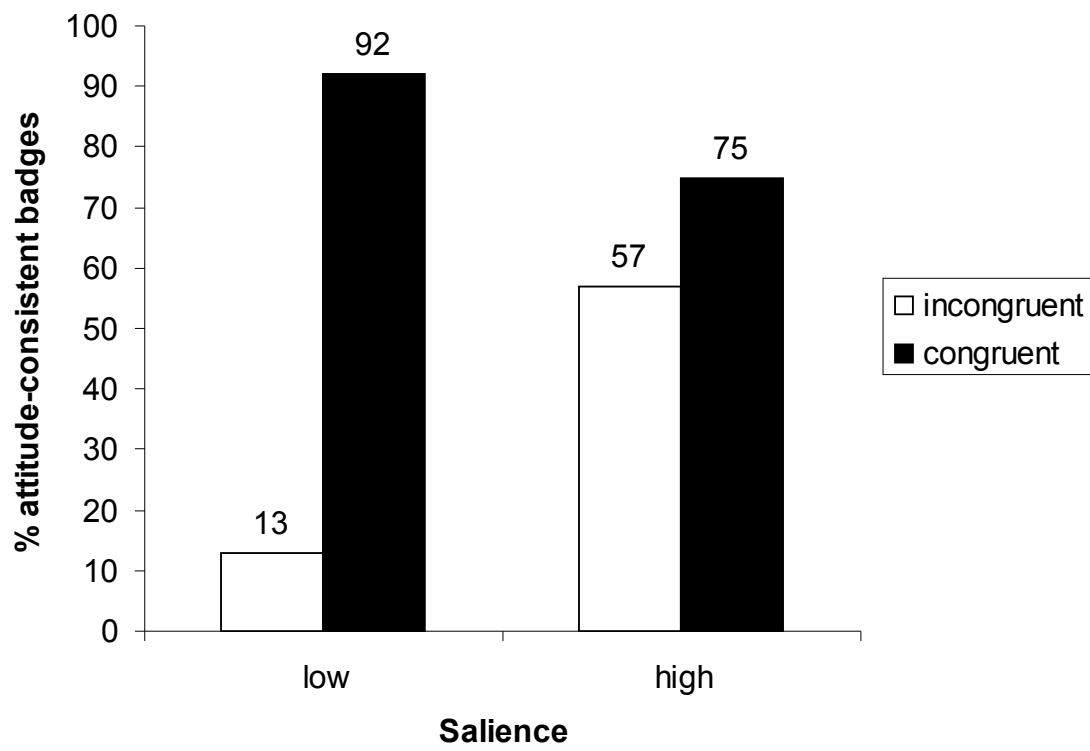


*Figure 2.* Interaction between identification and accountability on consistency in expressed attitudes (Study 1).

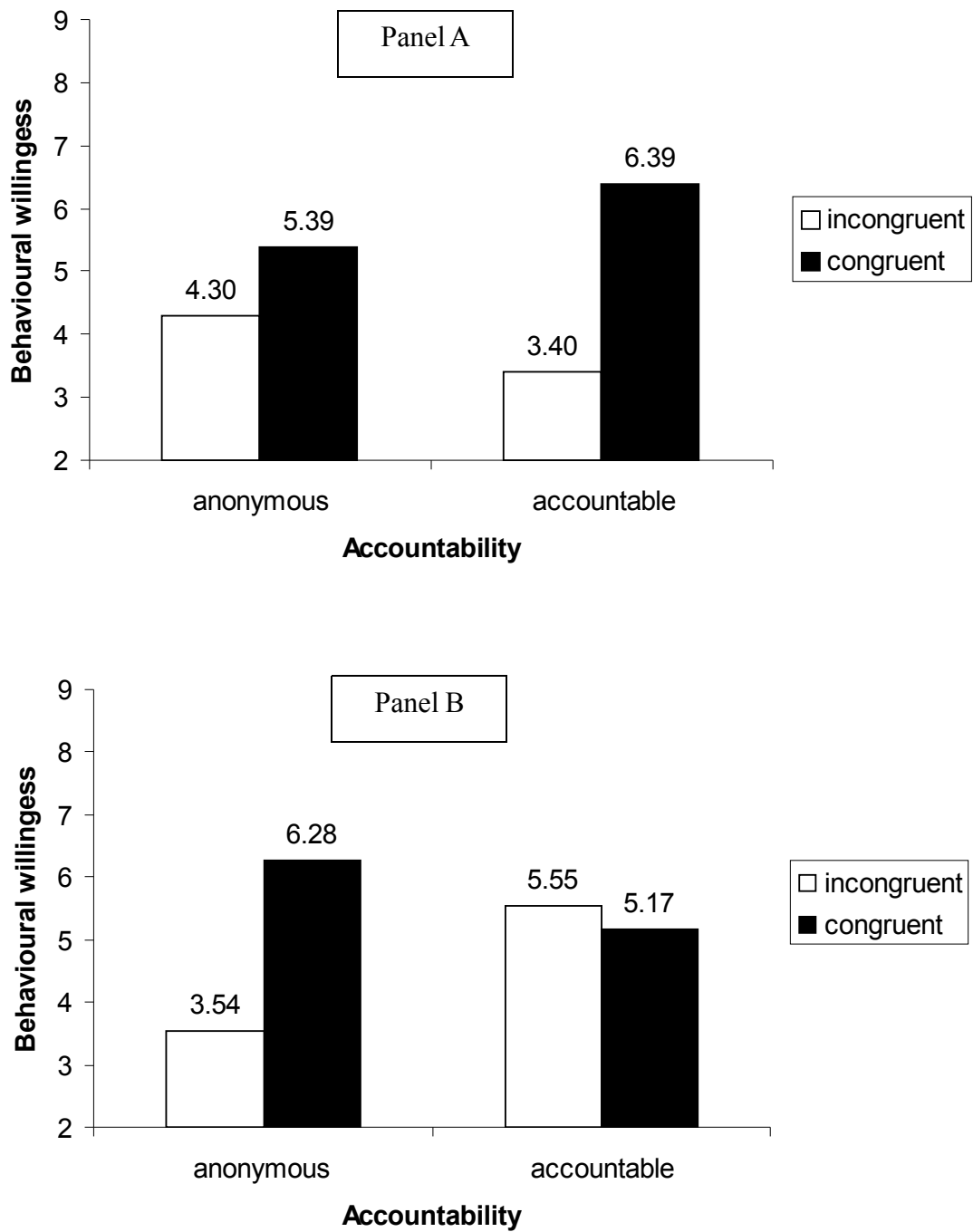




*Figure 3.* Interaction between normative support and accountability on voting behaviour in Study 2 for the low salience participants (Panel A) and high salience participants (Panel B).



*Figure 4a.* Interaction between normative support and salience on badge selection (accountable participants only—Study 2).



*Figure 5.* Interaction between normative support and accountability on expressed attitudes in Study 2 for the low salience participants (Panel A) and high salience participants (Panel B).