# Perceived self-other differences in persuasibility: the effects of interpersonal and group- based similarity

# JULIE M. DUCK, MICHAEL A. HOGG and DEBORAH J. TERRY

Department of Psychology, University of Queensland, Australia

## **Abstract**

Two experiments examined the effects of interpersonal and group-based similarity on perceived self-other differences in persuasibility (i.e. on third-person effects, Davison, 1983). Results of Experiment 1 (N=121), based on experimentally-created groups, indicated that third-person perceptions with respect to the impact of televised product ads were accentuated when the comparison was made with interpersonally different others. Contrary to predictions, third-person perceptions were not affected by group- based similarity (i.e. ingroup or outgroup other). Results of Experiment 2 (N=102), based on an enduring social identity, indicated that both interpersonal and group-based similarity moderated perceptions of the impact on self and other of least-liked product ads. Overall, third-person effects were more pronounced with respect to interpersonally dissimilar others. However, when social identity was salient, information about interpersonal similarity of the target did not affect perceived self-other differences with respect to ingroup targets. Results also highlighted significant differences in third- person perceptions according to the perceiver's affective evaluation of the persuasive message.

#### Introduction

A number of social cognitive biases (e.g. illusions of invulnerability to victimization, Perloff, 1983, Perloff & Fetzer, 1986; unrealistic optimism about future life events, Weinstein, 1980, 1982, 1989) are based on the perception of a self-other difference in Vulnerability-people 'expect others to be victims of misfortune, not themselves' (Weinstein, 1980, p. 806). For instance, people perceive that they are relatively invulnerable to cancer, heart attack, pneumonia, alcoholism, and sexually transmitted diseases (e.g. Harris & Guten, 1979; Kirscht, Haefner, Kegeles, & Rosenstock, 1966; Perloff, 1982, Weinstein, 1980, 1982, 1984) and that they are less likely than others to get divorced (Lehman & Nisbett, 1985; Perloff & Farbisz, 1985). In a similar vein, the *third-person effect* (Davison, 1983) describes a tendency for people to perceive that they are less influenced than others by the mass media and by persuasive communications in general. Third-person perceptions have been reported in a range of contexts including media reports about apartheid, news broadcasts of Middle East conflict, political advertising, defamatory newspaper articles, dramatic television series with political overtones, and product and public service advertisements (e.g. Cohen, Mutz, Price, & Gunther, 1988; Gunther, 1991; Gunther & Mundy, 1993; Gunther & Thorson, 1992; Lasorsa, 1989; Mutz, 1989; Perloff, 1989; Rucinski & Salmon, 1990; also see Perloff (1993) for a review). The importance of these systematic self-other biases lies, at least in part, in the fact that people may not take adequate precautions to avoid victimization or influence.

Theoretical accounts have emphasized the self-serving nature of these perceived self-other differences. People may be motivated to compare downward with vulnerable others, to distort the risk-relevant features of others, and to resist acknowledging personal risk in order to enhance and protect self-esteem and maintain feelings of personal control (Perloff, 1983; Perloff & Fetzer, 1986; Taylor & Brown, 1988; Wills, 1981). However, cognitive factors may also be involved. People may harbour illusions of invulnerability because the issue being considered (e.g. heart attack, media effects) primes or invokes a stereotyped and unrealistic image of a vulnerable or gullible other who is particularly likely to be affected (e.g. the chronically overweight, unfit person; the undiscerning `couch potato') (Weinstein, 1980).

Nevertheless, `individuals do not uniformly view all others as more vulnerable than themselves' (Perloff & Fetzer, 1986, p. 505 (emphasis added)). For instance, Perloff and Fetzer found that illusions of invulnerability to

negative life events were pronounced when subjects were asked to make comparisons with the average person or the average college student, but were not apparent when subjects were asked to compare themselves with a sibling, a close friend, or a parent. They reasoned that self-serving biases may extend to close friends and loved ones (cf. Brown, 1986; Burger, 1981; Schlenker & Miller, 1977), although they also recognized that it may be more difficult to distort the risk-relevant features of specific comparison others. Indeed, in a recent extension of this research, Duck and Mullin (1995) reported results from two experiments which indicated that comparisons with vague versus specific and distant versus close others increased the magnitude of third-person perceptions.

Typically, third-person researchers have focused on the moderating effects of the broad construct of social distance. They suggest that perceived self-other differences are magnified when people are asked to judge media impact on the opinions of larger, more broadly defined groups of others (e.g. other Stanford students, other Californians, the public at large; Cohen et al., 1988; Cohen & Davis, 1991; Gunther, 1991) or as the conceptual distance between self and targeted others widens (e.g. self, family, neighbours, other inhabitants in the same state, other Australians, others; Gibbon & Durkin, 1995). However, Perloff (1993) notes that a focus on the continuum of increasing audience size or heterogeneity ('my smallest community' to 'my largest community'), may have underplayed an equally important continuum implicit in the concept of social distance - that of perceived self-other similarity ('like me' to 'not like me'). In fact, it could be proposed that the magnitude of perceived self-other differences depends fundamentally on the perceived similarity or congruence between self and other - a possibility acknowledged by Davison (1983) in his original formulation of the third-person effect, but a possibility as yet unexplored.

Because of the self-referent implications of evaluations of similar others, self- serving tendencies should extend to similar (liked) others. Thus, self-other biases should be magnified with respect to dissimilar others, but attenuated with respect to similar others (cf. Brown, 1986; Taylor & Koivumaki, 1976). This proposal is consistent with the widely-held contention that attitude similarity leads to attraction. Indeed, one of the most consistent findings in the area of interpersonal attraction is that people tend to like others who are similar to themselves (Byrne, 1971; Byrne & Nelson, 1965; Clore & Byrne, 1974; Newcomb, 1961; see also, Condon & Crano, 1988; Singh & Tan, 1992; Suman & Kureshi, 1988; but see Rosenbaum (1986a,b) for an alternative view). This can be explained in terms of the rewarding qualities of perceived similarity, and the desire to maintain cognitive consistency or balance (e.g. Heider, 1958) - similarity of opinion is self-validating and rewarding and leads to attraction.

In addition to interpersonal similarity, group-based similarity may moderate self± other biases. Drawing on social identity theory (e.g. Hogg & Abrams, 1988; Taifel & Turner, 1979) and self-categorization theory (Turner, 1982, 1985; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), we have suggested elsewhere (e.g. Duck, 1996; Duck, Hogg, & Terry, 1995a, 1996) that perceived self-other differences in persuasibility may reflect the social psychological relationships between self and others in a given social context. It is assumed that the process of selfcategorization accentuates the perceived similarity between self and ingroup others (an assimilation effect), accentuates the perceived differences between ingroup and outgroup (a contrast effect), and motivates respondents both to judge their self-category positively relative to the outgroup (positive distinctiveness) and to make intergroup comparisons that favour the ingroup (e.g. see Brewer, 1979, Brewer & Kramer, 1985; Hogg & Abrams, 1990). Our research suggests that, when social identity is salient, third-person effects are more pronounced with respect to outgroup than ingroup members. Moreover, the degree of self-ingroup assimilation and ingroup-outgroup contrast on the dimension of perceived vulnerability varies with the level of group identification. These findings build on Davison's (1983) suggestion that the concept of reference groups may be an important dimension of self-other similarity moderating the third-person effect. In particular, they capture the us-them distinction implicit in his original formulation of the effect - media impact is something that happens to them, the third persons, not to us, first and second persons.

Although researchers have tended to equate interpersonal and group-based similarity and attraction, arguing that group cohesiveness is no more than aggregated interpersonal attraction (e.g. Lott & Lott, 1965), Hogg (1987, 1992, 1993; Hogg & Hains, 1996; Hogg & Hardie, 1991) suggests that group-based similarity and attraction (social attraction), can be distinguished from interpersonal attraction. Hogg argues that social attraction is group-membership-based regard grounded in depersonalized, prototype-based perceptions of self and others, whereas personal attraction is interindividual attraction, based on idiosyncratic preferences grounded in close personal relations. He has provided evidence which demonstrates that, in salient groups, people appraise each other on the basis of their group prototypicality, not their individuality - interindividual attitudes are influenced by group-based rather than general interpersonal similarity (see Hogg, Hardie, & Reynolds, 1992). Moreover, research using the minimal group paradigm (e.g. Allen & Wilder, 1975; Billig & Tajfel, 1973) has demonstrated that, when social identity is salient, responses to ingroup and outgroup others primarily reflect the categorization rather than the interpersonal similarity or dissimilarity of ingroup and outgroup members - although the effects of interpersonal

similarity are not eliminated. Building on these ideas, the present research was designed to examine the effects of interpersonal and group-based similarity on the magnitude of third-person perceptions.

In a first experiment, we sought to examine the perceived impact on self and others of televised product commercials under conditions designed to emphasize either personal identity or social identity. In keeping with motivational accounts of perceived self-other biases, research has indicated that third-person effects are more pronounced with respect to negative media content (e.g. violence, pornography, defamatory news articles, and product commercials) than with respect to positive media content (e.g. public service advertisements for health and safety issues) (e.g. Duck & Mullin, 1995; Gunther & Mundy, 1993; Gunther & Thorson, 1992; Innes & Zeitz, 1988). Indeed, research suggests that the third-person effect can be eliminated or even reversed when the intended influence is perceived as desirable, intelligent, or beneficial (e.g. Duck, Terry, & Hogg, 1995b; Duck & Mullin, 1995). Thus, we assumed that respondents would demonstrate third-person perceptions in their overall responses to the televised product commercials, but that the magnitude of perceived self-other differences would differ according to variations in the affective evaluation of particular ads. Specifically, we predicted that third-person perceptions would be more pronounced with respect to the least-liked ad than with respect to the most-liked ad because of the stronger motivation to deny negative outcomes in the former context.

Against this background, we expected that the magnitude of the third-person effect would be moderated by the perceived similarity between self and other and that the important dimension of perceived similarity interpersonal or group- based - would vary according to the nature of the social comparative context - interpersonal or intergroup. We assumed that, when personal identity was salient (in a personal orientation condition), perceived self-other differences would be more pronounced when others were described as interpersonally different from the self than when others were described as interpersonally similar to the self. By contrast, we assumed that when social identity was salient (in a social orientation condition), variations in the magnitude of perceived self-other differences according to interpersonal similarity would be less pronounced, if not eliminated, and the third- person effect would be more pronounced with respect to outgroup others than with respect to ingroup others. This prediction derives from the assumption that, when social identity is salient, attraction is depersonalized and others are liked (or disliked) more as embodiments of their group than as unique individuals - in intergroup as opposed to interpersonal situations, the importance of group-based similarity as opposed to interpersonal similarity should be increased (e.g. Allen & Wilder, 1975; Billig & Tajfel, 1973; also see Brown (1988) for a review).

## **EXPERIMENT 1**

#### Method

#### Overview

Subjects completed a short personal preferences inventory and were told either that the study was concerned with the responses of people who were similar to them in terms of personal preferences (interpersonally similar) or that the study was concerned with the responses of people who were different from them in terms of personal preferences (interpersonally different). Subjects also completed a short colour perception task and were told that people could be categorized into two groups - blue or green - on the basis of their ability to distinguish between ambiguous blue-green slides. Half the subjects were themselves uncategorized (personal orientation), whereas half received feedback indicating that they belonged to the blue group (social orientation). Subjects then evaluated the perceived impact of six television product ads on self and two others (either interpersonally similar blue group and green group members, or interpersonally different blue group and green group members) - blue group and green group members represented an ingroup and outgroup respectively for categorized subjects (i.e. in the social orientation condition). Thus the study comprised a 2 x 2 x 2 mixed design - interpersonal similarity (similar or different) by orientation (personal or social) by target (self, blue group members, and green group members) (a within-subjects factor).

#### Subjects

The sample comprised 121 first-year psychology students (39 male and 75 female, seven did not specify gender) enrolled at a large Australian university who participated in partial fulfilment of course requirements. Age ranged from 17 to 61 years, (M=20.28 years, S.D.=5.86). Respondents were tested in sessions of 12-18, and there were 28-34 respondents in each of the experimental conditions.

#### Measures and Procedure

Subjects were told that the study was concerned with people's evaluations of television advertising. First, under the pretence of providing background information about the people in the study, respondents were asked to complete a 20-item true-false inventory, The Personal Preferences Inventory (PPI), which asked about their personal preferences in various domains (e.g. I prefer social sports to competitive sports, I prefer realistic paintings to abstract paintings, I prefer portraits to landscapes, I prefer movies that tell about human relationships to movies that focus on action and adventure). In half the sessions, subjects were told that we were interested in comparing the responses to commercial advertising of people who have similar tastes and preferences (as measured by the PPI). In the remaining sessions, subjects were told that we were interested in comparing the responses to commercial advertising of people who have different personal tastes and preferences.

Next, subjects were asked to complete a short colour perception task. They were shown a series of 16 coloured slides comprising red dots on a blue-green background and were asked to indicate whether they perceived each slide as blue or green. Subjects were told that people have different thresholds for the perception of colour and that this differential threshold can subtly alter their emotional reaction to the same stimulus because different colour combinations evoke different emotions, feelings, and moods. They were told that the majority of people can be classified into one of two groups of roughly equal size - a blue group or a green group - according to which background colour they recognize better, and that this categorization separates groups of people who differ in other related aspects of visual perception. Subjects were told that the study was also concerned with investigating how people with different thresholds for colour perception evaluate the same commercial ads.

Half the sessions were run as personal orientation sessions and half as social orientation sessions. In the personal orientation condition, subjects were not told to which group they belonged (i.e. there was no feedback on the colour perception task) - respondents were aware of the blue-green categorization, but were not themselves categorized. In the social orientation condition, subjects were told that they were in the blue group. Hence, in the social orientation condition, the blue group was the subject's ingroup and the green group was an outgroup. Subjects in the social orientation condition were told that we were not interested in their responses as an individual but rather in the responses of blue group and green group members as a whole and they were asked to identify themselves on further response sheets, not by their individual code number, but simply by their group, blue or green.

Then subjects were asked to evaluate a series of six television product ads (for chewing gum, for toothbrushes, for breakfast cereal, for potato crisps, for cold and 'flu capsules, and for microwave meals). These ads were chosen to represent a variety of ads for products of relevance to the student population and they were presented in one fixed order as above. First, respondents were asked to rate each ad on a series of five 9-point bipolar scales, emotional-unemotional, pleasant-unpleasant, informative-uninformative, stimulating-unstimulating, and effective-ineffective. They were also asked to indicate how each ad compared with other TV ads, (1) *very poorly* to (9) *very well*, and how well they knew this commercial (1) *not at all* to (9) *very well*. These items served primarily as filler items. The key measures asked respondents to indicate how much self and others would be influenced by each ad, (1) not *influenced at all* to (9) *extremely influenced*. Respondents judged the perceived impact on four targets - self, people in general, and either people in the blue group and green group with similar tastes and preferences to them (interpersonally similar) or people in the blue and green group with different tastes and preferences to them (interpersonally different). After watching and responding to each ad in turn, respondents were asked to judge the impact on self and other of the six TV ads overall. They were also asked to indicate which of the six ads they liked best and which of the six ads they liked least.

Finally, a series of questions were included in order to check the effectiveness of the manipulations of interpersonal similarity and orientation. First, respondents were asked how much they thought of themselves as a member of the blue group and as a member of the green group during the task of watching and evaluating the slides, (1) *not at all* to (9) *very much* - these items served as measures of identification with the blue group (ingroup) and green group (outgroup)<sup>1</sup>. Second, respondents were asked how much they would like, how much they would like to meet, and how much their general attitudes and opinions would be similar to others, (1) *not at all* to (9) *very much*. These three items were chosen, respectively, to cover the affective, cognitive, and behavioural components of

<sup>&</sup>lt;sup>1</sup> For respondents in the personal orientation condition, this was prefaced by a comment suggesting that although respondents had not been given feedback about their performance on the colour perception task, some may have felt that they belonged to either the blue or the green group.

attitude. Respondents made these judgements with respect to four others: (1) members of the blue group; (2) members of the green group; (3) someone who gave a similar response to them on the Personal Preferences Inventory (PPI); and (4) someone who gave a different response to them on the PPI. Responses to the three items were combined into composite scales of blue group (ingroup) attraction and green group (outgroup) attraction (Cronbach's alpha=0.77 and 0.67 respectively) and attraction to similar and dissimilar others (Cronbach's alpha=0.75 and 0.68 respectively)<sup>2</sup>. It was assumed that people would be more attracted to interpersonally similar others than to interpersonally different others (personal attraction) and that, when social identity was salient, people would be more attracted to ingroup others than to outgroup others (social attraction, see Hogg, 1992, 1993).

#### Results

#### Manipulation Checks

#### Orientation

The effectiveness of the manipulation of orientation was assessed using 2 x 2 x 2 mixed ANOVAs with stimulus group (blue or green) as the within-subjects factor on: (1) identification with the blue group (ingroup) and green group (outgroup) during the task; and on (2) social attraction to blue group (ingroup) and green group (outgroup) members.

Results on the measure of identification indicated significant main effects for orientation (F(1, 114)=8.16, p50.01) and stimulus group (F(1, 114)=23.89, p50.001) that were fully qualified by a significant orientation x stimulus group interaction (F(1, 114)=22.55, p50.001). As expected, subjects in the social orientation condition identified significantly more with the blue group (ingroup) than with the green group (outgroup) (Ms=4.58 and 2.11, F(1, 60)=51.85, p50.001), whereas respondents in the personal orientation condition identified equally with both groups (Ms=4.25 and 4.21, F 51).

Results on the measure of social attraction indicated a significant main effect for stimulus group (F(1, 116)=13.37, p50.001) that was fully qualified by a significant two-way interaction between orientation and stimulus group (F(1, 116)=5.99, p50.05). As expected, subjects in the social orientation condition were more attracted to blue group (ingroup) members than to green group (outgroup) members (Ms=6.04 and 5.54, F(1, 62)=31.20, p50.001), whereas there was no corresponding difference for subjects in the personal orientation condition (Ms=5.71 and 5.61, F51).

#### Interpersonal Similarity

The effects of orientation and interpersonal similarity on attraction to similar and dissimilar others (personal attraction) were examined in a 2 x 2 x 2 mixed ANOVA with stimulus other (similar, dissimilar) as the within-subjects factor. As expected, subjects were more attracted to people with similar responses to them on the Personal Preferences Inventory (PPI) than to people with different responses to them on the PPI (Ms=6.87 and 5.17, F(1, 116)=208.49, p50.001), a result that was not influenced by the between-subjects manipulations.

#### Perceived Impact of Product Advertising

First, 2 (orientation) x 2 (interpersonal similarity) x 3 (target) mixed ANOVAS were conducted on: (1) the perceived influence of the six commercials (averaging the perceived influence of each ad); and (2) the perceived influence of the six commercials (using the subjects' overall impressions of the effect of the six ads). Second, responses to the most-liked and least-liked ad were examined in a 2 x 2 x 3 x 2 mixed ANOVA with valence (most-liked, least-liked ad) as an additional within-subjects factor. Effects involving target provided the critical test of third-person perceptions and significant effects were followed up using the planned contrast, self versus others. Target effects

<sup>&</sup>lt;sup>2</sup> The scales for blue group (ingroup) attraction and attraction to similar others had satisfactory internal consistency and, although the scales for green group (outgroup) attraction and attraction to dissimilar others were not highly reliable, deletion of items did not improve the reported Cronbach's alphas.

that were moderated by orientation were also followed up using the planned contrast, blue group (ingroup) versus green group (outgroup).

# Mean Response to the Six Ads

Contrary to predictions, there was no higher order interaction among orientation, interpersonal similarity, and target (F51). However, results indicated a significant main effect for target (F(2, 232)=12.66, p50.001) that was fully qualified by a significant interpersonal similarity x target interaction (F(2, 232)=4.40, p50.05). Respondents perceived themselves as less influenced than others (blue group and green group members) when others were described as interpersonally different from the self (Ms=4.49 and 4.94, F(1, 60)=11.84, p50.001), whereas there was no significant difference between perceived impact on self and others when others were described as interpersonally similar to the self (Ms=4.81 and 4.94, F(1, 56)=2.72, n.s.).

# Overall Impression of the Six Ads

Similarly, results based on the respondents' overall impressions of the six ads indicated a significant main effect for target (F(2, 230)=5.58, p50.01) that was fully qualified by a significant interpersonal similarity x target interaction (F(2, 230)=6.17, p50.01), but there was no three- way interaction among orientation, interpersonal similarity, and target (F51). The perceived self-other difference was significant when others were described as interpersonally different from the self (Ms=4.52 and 5.06, F(1, 60)=10.24, p50.01) but not when others were described as interpersonally similar to the self (Ms=5.09 and 5.12, F51).

#### Most- and Least-Liked Ad

Results of the analysis on the most-liked and least-liked ad indicated significant main effects for valence (F(1, 115)=246.86, p50.001) and for target (F(2, 230)=15.08, p50.001) that were qualified by a significant valence x target interaction (F(2, 230)=54.98, p50.001): respondents perceived themselves as less influenced than others by the least-liked product ad (Ms=2.61 and 3.90, F(1, 115)=109.88, p50.001) but as more influenced than others by the most-liked ad (Ms=6.13 and 5.64, F(1, 115)=16.01, p50.001). Results also indicated a significant three-way interaction among valence, interpersonal similarity, and target (F(2, 230)=3.68, p50.05), although there was no higher-order effect involving orientation (F(2, 230)=1.21, n.s.). Follow-up tests indicated that the interpersonal similarity x target interaction was significant for the least-liked ad (F(2, 230)=12.39, p50.001) but not for the most-liked ad (F51). For the least-liked ad, the self-other difference was significant with respect to both interpersonally different and interpersonally similar others (Ms=2.10 and 3.90, F(1, 60)=75.56, p50.001; Ms=3.16 and 3.90, F(1, 55)=41.30, p50.001 respectively). However, the third-person effect was more pronounced when others were described as inter-personally different from the self than when others were described as interpersonally similar to the self (mean differences=71.80 and 70.74, t(117)=4.39, p50.001).

The analyses reported above involved 11 significant effects involving target that were explored using the planned contrast, self versus other. Post-hoc comparisons using the Tukey procedure revealed that, on the majority of these tests (73 per cent), respondents did not differentiate between ratings of perceived influence on blue and green group members - as would be expected given that none of the significant target effects involved orientation. However, on the most-liked ad, respondents perceived blue group members as more influenced than green group members (Ms=5.82 and 5.46) and, when the others were described as interpersonally similar to the self, respondents perceived blue group members as more influenced than green group members on the average response to the six ads (Ms=5.06 and 4.81) and on the overall impression of the six ads (Ms=5.32 and 4.91). These results are inconsistent the first suggests bias in favour of the blue group, whereas the latter two suggest the reverse. Thus, it is unlikely that they reflect systematic differences in responses to the two groups.

#### **Discussion**

As expected, results of Experiment 1 provided further evidence of third-person effects in perceptions of vulnerability to commercial advertising (cf. Duck, 1996; Gunther & Mundy, 1993; Gunther & Thorson, 1992) but indicated that perceived self-other differences were moderated both by the perceiver's affective evaluation of the ad and by interpersonal similarity of the comparison other. Evidence of third- person perceptions was found both on the mean response to the six ads and on the overall impression of the six ads, but a comparison of responses to the most-

liked and least-liked ad, indicated that the magnitude and direction of perceived self-other differences also varied according to the perceiver's affective evaluation of particular ads. Respondents perceived themselves as less influenced than others by the least-liked product ad, but as more influenced than others by the most-liked product ad. These results are consistent with a motivational account that emphasizes self-serving tendencies. Typically, people are motivated to deny personal persuasibility relative to others. However, when the ad is liked or perceived as particularly good, people are presumably more motivated to acknowledge personal persuasibility, which may result in the elimination, or even reversal, of the typical third-person effect (cf. Duck et al., 1995b).

Taken across the six ads, third-person effects were significant when others were described as interpersonally different from the self but not when the others were described as interpersonally similar to the self. In addition, on the least-liked ad, third-person effects - although significant with respect to both interpersonally similar and interpersonally different others - were significantly reduced when others were described as interpersonally similar to the self. These results illustrate the importance of interpersonal similarity as a factor that moderates social perceptual biases based on self-other distinctions - similar others are evaluated more like the self than dissimilar others. Moreover, to the extent that close relationships are characterized by perceptions of interpersonal similarity, these results parallel previous findings on third-person perceptions and illusions of unique invulnerability which indicate that perceived self-other differences disappear when subjects are asked to compare themselves with specific and close persons such as a sibling, a close friend, or a parent (e.g. Duck & Mullin, 1995; Perloff & Fetzer, 1986).

By contrast, despite the successful manipulation of orientation, there were no significant variations in the third-person effect according to group-based similarity - a pattern of results that is somewhat surprising given previous research findings on group membership and the third-person effect (e.g. Duck, 1996; Duck et al., 1995a, 1996). This may reflect the minimal nature of the experimentally-created social categorization (based on the threshold for identifying ambiguous coloured slides as blue or green)- -especially by contrast to the more vivid manipulation of interpersonal similarity (using people's personal preferences on a range of behaviours and issues). Indeed, our previous research indicating significant variations in third-person perceptions according to the social psychological relationship between self and others has been based on enduring, and potentially more salient and meaningful, identifications (e.g. political identity, student identity, gender identity). It could also be that the experimental situation (even in the social orientation condition) provided more of an interpersonal rather than an intergroup context given that the information about blue and green groups was embedded in an over-arching account of the experiment as being concerned with the responses of interpersonally similar or interpersonally different others. Moreover, respondents were asked to consider both interpersonally similar blue group and green group members or both interpersonally different blue group and green group members. This emphasis on the equivalence of ingroup and outgroup members in terms of interpersonal similarity, as well as the operationalization of target as a within-subjects factor may have worked against the perception and reporting of group differences.

With these points in mind, a second experiment was designed to explore further the effects of interpersonal and group-based similarity on perceived self-other differences in vulnerability to influence. This experiment was designed to use an en- during, rather than an experimentally-created, group identity and to operationalize stimulus group (ingroup or outgroup) as a between-subject factor. Our predictions paralleled those for Experiment 1.

#### **EXPERIMENT 2**

#### Method

#### Overview

An introduction to the task emphasized interest either in subjects' responses as unique individuals or as members of the group, university students. Subjects were then asked to evaluate the perceived impact of television ads in general and of the most-liked and least-liked ad from each of three stimulus blocks of televised ads on self and other university students (ingroup) or non-university students (outgroup)<sup>3</sup> who were either interpersonally similar to or interpersonally different from the respondent. Thus, the study comprised a 2 (orientation - personal or social) x2 (interpersonal similarity - similar or different) x2 (stimulus group - ingroup or outgroup) between-subjects design

<sup>&</sup>lt;sup>3</sup> The distinction 'students' and 'non-students' is frequently made on campus (e.g. in signs regarding entrance fees and eligibility requirements) and respondents did not express any difficulty in making judgements about non-students.

all subjects judged the impact of commercial advertising on two critical targets (self and other) (a within-subjects factor).

#### Subjects

The sample comprised 102 third-year psychology students (34 male and 68 female) enrolled at a large Australian university who participated in partial fulfilment of course requirements. Age ranged from 19 to 53 years, (M=24.13 years, S.D.=7.12). Respondents were tested in sessions of 11-28, and there were 10-17 respondents in each of the experimental conditions.

## Procedure

The experiment was conducted as part of an ongoing course on attitudes and social cognition. Half the sessions were introduced with an emphasis on personal orientation and half with an emphasis on social orientation. In the personal orientation condition respondents were told that we were interested in the effects of television advertising on different people and different groups of people who comprise the viewing population. Specifically, they were told that we were interested in their personal opinion about the impact of commercial advertising, that we expected there would be wide individual variation in their views and that, at the end of the session, we would discuss the range of views. By contrast, in the social orientation condition, respondents were told that we were interested in their opinion as university students, that we expected that university students may have a particular view on this issue that might be different from that of other groups and that, at the end of the session, we would discuss this particular view.

First, to stimulate interest in the issue, subjects were asked to think about television advertising in general they were asked to think about all the various products and issues that are advertised on TV and about the good ads and the bad ads. They were then asked to take a few minutes to write down as many TV ads as they could remember. Next, subjects were asked to indicate how much they thought television advertising in general influences themselves and others including their best friend, women in general, teenagers who are unemployed, housewives who watch daytime television, their parents, schoolchildren, men in general, and shiftworkers who watch the afternoon soaps as well as one of four critical targets - university students who are similar to them, university students who are different from them, non-university students who are similar to them, and non-university students who are different from them. The notion of being similar or different to them was clarified by the respective phrases, 'e.g. have similar personal preferences', and, 'e.g. have different personal preferences'. The ratings of self and the critical target other were presented first, with the order of presentation counterbalanced across condition. Ratings of the remaining targets served as filler items and were completed in one fixed order, as above. Judgements were made on a 9-point scale, (1) not at all to (9) very much.

Respondents were then shown three blocks of six television advertisements - two blocks of product ads and one block of public service ads (PSAs). The blocks of ads were chosen to represent a cross-section of current ads, for various products and of varying technical and production quality - given the limited number of available public service advertisements only one block of PSAs was included. To reduce serial order effects, the blocks were presented in one of three different orders, and, within blocks, the six ads were also presented in one of three different orders. Respondents were asked to watch each block and choose from the block the ad they liked most and the ad they liked least. They were then asked to indicate how much they liked these two ads, (1) not at all to (9) very much, and to indicate how much these two ads would influence themselves and the target others (as above). Finally, as a check of the manipulation of orientation, respondents were asked to indicate how conscious they were of their identity as a student during this exercise and how much they identified with university students, (1) not at all to (9) very much<sup>4</sup>.

#### Results

Manipulation Checks

<sup>&</sup>lt;sup>4</sup> Although a more elaborated measure of group salience would have been preferred, two items only were used because of the constraints associated with running the experiment as a class exercise.

Results of a 2 (interpersonal similarity) x2 (orientation) x2 (stimulus group) ANOVA on the item measuring salience of student identity indicated no significant between-subjects differences: contrary to expectations, respondents in the personal and social orientation conditions reported being equally conscious of their identity as a university student during the exercise (Ms=3.09 and 2.98, F51). There were also no significant between-subjects differences on the item measuring general identification with university students: respondents in the personal and social orientation conditions did not differ in their level of identification with the student ingroup (Ms=3.85 and 4.04, F51).

# Perceived Impact of Advertising

To ease explanation of results, the effects of the between-subjects factors on perceptions of impact on self and other were examined separately for the least-liked and most-liked product ads and public service ads using a series of 2 x 2 x 2 mixed ANOVAs with target (self, other) as the within-subjects factor. Effects involving target provided the critical test of third-person perceptions.

#### Least-Liked Ads

An analysis of perceptions of the least-liked product ads indicated a significant main effect for target (F(1, 94)=104.65, p50.001) that was qualified by interpersonal similarity (F(1, 94)=20.52, p50.001). The perceived self $\pm$  other difference was significant with respect to both interpersonally different and interpersonally similar others (Ms=1.96 and 3.45, F(1, 45)=61.25, p50.001; Ms=2.02 and 2.58, F(1, 49)=21.71, p50.001 respectively). However, the perceived self-other difference was more pronounced when the other was described as interpersonally different from the self than when the other was described as interpersonally similar to the self (mean differences=71.49 and 70.56, t(100)=4.65, p50.001). Results also indicated a significant target x orientation interaction (F(1, 94)=4.61, p50.05): compared with respondents in the social orientation condition, respondents in the personal orientation condition perceived the comparison other to be more influenced (Ms=3.20 and 2.75, F(1, 94)=5.45, p50.05), whereas there was no corresponding difference in perceptions of impact on the self (Ms=2.04 and 1.94, F51).

As expected, results also indicated a significant four-way interaction among orientation, interpersonal similarity, stimulus group, and target (F(1, 94)=4.52, p50.05). The four-way interaction was explored in two ways. First, because of theoretical interest in third-person perceptions, perceived self-other difference scores were calculated by subtracting the perceived influence on self from the perceived influence on other. The effects of the experimental variables on perceived self-other differences were then examined in a 2 x 2 x 2 between-subjects ANOVA (see Table 1 for the cell means). Results indicated a significant three-way interaction among orientation, interpersonal similarity, and stimulus group (F(1, 94)=4.52, p50.05): the interpersonal similarity x stimulus group interaction was significant for respondents in the social orientation condition (F(1, 94)=6.10, p50.05) but not for respondents in the personal orientation condition (F51). In the social orientation condition, tests for the simple effects of interpersonal similarity within stimulus group indicated that the magnitude of the perceived self-other difference in perceived influence did not vary according to interpersonal similarity when respondents judged ingroup others (F51): however, respondents perceived a larger third-person effect with respect to outgroup others who were inter-personally different than with respect to outgroup others who were interpersonally similar (Ms=1.43 and 0.15, (F(1, 94)=11.03, p50.001). That is, the expected reduction in the important of interpersonal similarity information when social identity was salient was evidenced in judgements of ingroup, but not outgroup, others. Second, to examine whether these between-groups differences in third-person perceptions were a function of significant differences in self ratings or other ratings, separate 2 x 2 x 2 between-subjects ANOVAs were conducted on these measures. These analyses indicated no significant three-way interactions, suggesting that between-subjects differences in third-person perceptions reflected subtle changes in ratings of both self and other.

An analysis of perceptions of the least-liked public service ad indicated a significant main effect for target (F(1, 93)=39.00, p50.001) that was qualified by an interpersonal similarity x target interaction (F(1, 93)=6.82, p50.01). Although the perceived self-other difference was significant for both respondents in the interpersonally different and interpersonally similar conditions (Ms=2.43 and 3.49, F(1, 93)=40.25, p50.001; Ms=2.33 and 2.75, F(1, 93)=6.79, p50.05 respectively), the perceived self-other difference was more pronounced when the other was described as interpersonally different from the self (mean differences=71.06 and 70.42, t(99)=2.72, p50.01).

Table 1. Third-person perceptions (other-self) for the least-liked product ads by orientation, stimulus group, and interpersonal similarity: Experiment 2

Interpersonal Similarity	Orientation			
	Personal		Social	
	Ingroup	Outgroup	Ingroup	Outgroup
Similar	0.71**	0.62****	0.78*	0.15
Different	2.08****	1.50***	0.85***	1.43****

Note. Scale range is -8 (self more influenced than other) through 0 (no difference) through +8 (other more influenced than self). Results of one-sample t-tests indicate whether the mean difference is significantly different from zero, \*p < 0.10, \*\*\*p < 0.05, \*\*\*\*p < 0.01.

#### Most-Liked Ads

Results of an analysis of the most-liked product ad indicated no significant between-subject or within-subject effects - overall, respondents perceived self and other as equally influenced by the most-liked product ad (Ms=4.16 and 4.08, F(1, 94)=1.32, n.s.). Similarly, results of an analysis of the most-liked public service ad indicated no significant between-subjects or within-subjects effects - overall, respondents perceived self and other as equally influenced by the most-liked public service ad (Ms=4.41 and 4.53, F51).

#### **Discussion**

Results of Experiment 2 provided further evidence that third-person perceptions are moderated by interpersonal similarity of the comparison other, as well as by the perceiver's affective evaluation of the message. In addition, results provided some support for the notion that group-based similarity may also play a role when social, rather than personal, identity is salient.

Consistent with Experiment 1, and with motivational accounts of the third-person effect, results provided evidence of third-person perceptions with respect to the least-liked product ads, but not with respect to the most-liked product ads (where self and other were perceived as equally influenced). A similar pattern of responses was obtained on perceptions of the impact of public service ads. Taken together, these results suggest that the perceiver's affective evaluation of the ad rather than the objective intent of the ad (e.g. product ads versus public service ads) is the more important determinant of the magnitude and direction of perceived self-other differences in persuasibility. In general, third-person perceptions are evidenced for messages that the perceiver dislikes or feels are not good to be influenced by (cf. Duck et al., 1995b; Gunther & Mundy 1993; Gunther & Thorson, 1992). These results also accord with a recent re-interpretation of the third-person effect as an optimal impact effect, that is, as a manifestation of illusory superiority (Hoorens & Ruiter, 1996).

As in Experiment 1, third-person perceptions (on both the product ads and public service ads) were more pronounced with respect to dissimilar others than with respect to similar others, providing further evidence for the important moderating effects of interpersonal similarity (see below). However, despite the absence of between-groups differences in the self-reported salience of social identity, results on the least-liked product ad also indicated that the effect of interpersonal similarity on third-person perceptions was qualified by the other's group identity in the social orientation condition: third-person perceptions were more pronounced with respect to interpersonally different outgroup others than with respect to interpersonally similar outgroup others, but there was no corresponding difference according to interpersonal similarity when the target was an ingroup member.

Contrary to predictions, there was no evidence of a main effect for stimulus group in the social orientation condition and there was no evidence that the effects of interpersonal similarity were less pronounced overall in the social orientation condition. Instead, results indicated a more complex pattern in which the expected reduction of interpersonal similarity effects held for ingroup but not outgroup members. Although not predicted, and although somewhat different from the pattern of results obtained in minimal group studies that have manipulated both categorization and interpersonal similarity (e.g. Allen & Wilder, 1975; Billig & Tajfel, 1973), this pattern of results is explicable. The failure to find significant effects for orientation on the manipulation check of group salience may reflect inadequacies in the checks or in their timing within the experiment.

The absence of effects for interpersonal similarity on self-ingroup judgements is consistent with the assumption that, when social identity is salient, ingroup members are liked not as unique individuals, but as embodiments of the group - that is, affective evaluation is based on social rather than personal attraction (cf. Hogg et al., 1992). These results accord with previous findings which suggest that information about group identity is more important than information about interpersonal similarity when social identity is salient (e.g. Billig & Tajfel, 1973), although they are notable in demonstrating the elimination of differences according to interpersonal similarity information (cf. Allen & Wilder, 1975). It is also important to note that third-person perceptions were still evidenced with respect to ingroup members - self and ingroup members were not perceived as interchangeable (i.e. evaluated equally) as might be expected if perception is depersonalized in terms of the ingroup prototype. This may reflect the intragroup comparative context invoked in the ingroup target condition. When perceivers are asked to consider self and ingroup without the outgroup being made explicit, respondents may emphasize differences within the ingroup (see Oakes, Haslam, & Turner, 1994). It may also be that respondents were motivated to maintain a self-ingroup difference given the over- inclusive nature of the category, university students (cf. optimal distinctiveness theory, Brewer, 1991, 1993a,b).

Contrary to predictions, when social identity was salient, interpersonal similarity information about outgroup members impacted significantly on perceived self-other differences - third-person perceptions were more pronounced with respect to interpersonally different outgroup others than with respect to interpersonally similar outgroup others. Moreover, the perceived self-other difference was particularly pronounced with respect to an interpersonally different outgroup other - as would be expected if the effects of interpersonal and group-based similarity operated additively. However, the perceived self-other difference was least pronounced (and, in fact, nonsignificant) with respect to an interpersonally similar outgroup other. This finding seems counter-intuitive, although a re-examination of results for respondents in the social orientation condition in Experiment 1 indicated that it may not be an isolated effect<sup>5</sup>. Perhaps information indicating that an outgroup member is interpersonally similar to oneself disconfirms one's initial assumptions and, as a result, strongly affects the impressions one forms (cf. Fiske, 1980; see Smeaton, Byrne, & Murnen (1989) for a similar argument), while variability among ingroup members is more expected (see Brewer, 1991, 1993a,b; Hogg, 1996; Simon, 1993; Simon, Pantaleo, & Mummendy, 1995). It may also be relevant that the outgroup used in Experiment 2, non-university students, was a quasi-group defined more by non-membership in the in group category, university students, than by clearly defined outgroup characteristics (e.g. see Simon, 1993). This factor may have contributed to a greater reliance on information about interpersonal similarity than is typically the case. Future research might determine whether interpersonal similarity information is equally important in more clearly defined intergroup contexts where there is a more pronounced outgroup stereotype and outgroup identity.

#### **General Discussion**

Taken together, these experiments not only provide further evidence of qualifications to the third-person effect based on affective evaluations of the message, but also provide evidence to confirm the moderating effects of one aspect of social distance - perceived similarity. They suggest that a `like me'- not like me' continuum suggested by both Perloff (1993) and by Davison (1983) has significant and predictable effects on the magnitude of perceived self-other differences. In this sense, results complement previous research demonstrating the importance of audience size and heterogeneity (e.g. a `my closest group or community' to `my largest group or community' continuum, Cohen et al., 1988; Cohen & Davis, 1991; Gibbon & Durkin, 1995; Gunther, 1991). Moreover, results suggest that both interpersonal and group-based similarity may be important facets of the perceived similarity continuum.

The present results point most clearly to the effects of interpersonal similarity - third-person effects were moderated by interpersonal similarity in both experiments and on multiple measures - although it is notable that there were no significant effects involving interpersonal similarity when respondents evaluated the impact on self and other of most-liked ads. The finding that perceived self-other differences are more pronounced to the extent that the other is perceived to differ from self in terms of personal preferences, is consistent with the body of evidence

Examination of overall impressions of the six ads for respondents in the social orientation condition indicated a marginally significant interaction between interpersonal similarity and stimulus group, F(1, 62)=3.88, p=0.053. There was no significant difference according to interpersonal similarity when the targets were ingroup members (Ms=70.30 and 70.38, F(1, 29)=1.51, n.s.), however, the self-outgroup difference was significantly larger for dissimilar versus similar outgroup others (Ms=70.53 and 0.07, F(1, 29)=6.89, p50.05). Moreover, the largest third-person effect was evidenced for dissimilar outgroup members, and the clearest case of self-other equality was evidenced for interpersonally similar outgroup members.

which suggests a strong association between interpersonal similarity and liking (e.g. Byrne, 1971; Clore & Byrne, 1974). Indeed, similarity has a well-established link with attraction and it is feasible that self-serving biases extend to include liked others (cf. Brown, 1986; Burger, 1981; Schlenker & Miller, 1977). By constructing a social world in which self and similar others are perceived to possess more positive and less negative qualities than do others, one's own sense of personal worth is inflated (e.g. Brown, 1986; Tesser & Campbell, 1983; Wills, 1981). Cognitively oriented processes (e.g. based on the need for cognitive consistency and balance) may also be involved. Nevertheless, these results are somewhat at odds with recent findings on the so- called, better-than-average effect the tendency to evaluate oneself more favourably than other on individual traits. Findings on this phenomenon indicate that target individuation and personal contact with the target, rather than perceived similarity to the target, are important components of the effect (Alicke, Klotz, Breitenbrecher, Yurak, & Vredenburg, 1995).

Evidence that perceived self-other differences are also affected by group-based similarity was less consistent and was weakened by problems with the manipulation check for orientation on Experiment 2. None the less, results suggested that, at least in contexts where the acknowledgment of influence is most ego-threatening (i.e. on least-liked product ads), the magnitude of third-person perceptions may be affected not only by the interpersonal similarity between self and other, but also by the target's group membership (ingroup or outgroup) (Experiment 2). To this extent, results complement recent research on social identity and third-person perceptions (Duck, 1996; Duck et al., 1995a, 1996) and provide support for Davison's (1983) suggestion that the concept of reference groups may be relevant to understanding the third-person effect. Results of Experiment 2 are consistent with a theoretical position proposed by Hogg (1987, 1992; Hogg & Hardie, 1991) which argues that group- based similarity and attraction (social attraction), can be distinguished from interpersonal attraction based on idiosyncratic preferences (personal attraction). Indeed, the present results suggest that when social identity is salient, information about interpersonal similarity may be relatively unimportant in the evaluation of ingroup members. On the other hand, results indicating assimilation to inter- personally similar outgroup members suggest a complex interaction of interpersonal and group-based similarity that might be further explored.

Our emphasis on the moderating effects of the perceived similarity between self and the comparison other accords with a growing literature examining the role of psychological closeness in individuals' reactions to social comparisons (e.g. Brewer & Weber, 1994; Brown, Novick, Lord, & Richards, 1992; McFarland & Buehler, 1995; Tesser, 1988) and with a current focus on the importance of the level of abstraction in the comparison in other self-serving biases (e.g. the better-than-average effect, Alicke et al., 1995). As such, this research not only extends our understanding of the third-person effect, but also contributes, at a broader level, to an understanding of the common mechanisms that may underlie perceived self-other differences in various social comparative domains.

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