

Multiple identities in Northern Ireland: Hierarchical ordering in the representation of group membership

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A study was conducted to explore whether participants in Northern Ireland attend to, and process information about, different group members as a function of a single dimension of category membership (religion) or as a function of additional and/or alternative bases for group membership. Utilizing a bogus 'newspaper story' paradigm, we explored whether participants would differentially recall target attributes as a function of two dimensions of category membership. Findings from this recall measure suggested that information concerning ingroup and outgroup members was processed as an interactive function of both religion and gender intergroup dimensions. Religion was only used to guide processing of more specific information if the story character was also an outgroup member on the gender dimension. These findings suggest a complex pattern of intergroup representation in the processing of group-relevant information in the Northern Irish context.

Northern Ireland has a long history of intergroup conflict. The conflict has historical, theological and political causes and has a number of consequences that serve to maintain the divide (e.g. violence, residential and educational segregation; Cairns & Darby, 1998). This cultural context has been of interest to social psychologists because of The Troubles and the imposition of an intergroup dichotomy, based on religion, to explain the conflict (e.g. Cairns, 1982; Gough, Robinson, Kremer, & Mitchell, 1992). The pervasive distinction between Catholics (the relative minority at 38%) and Protestants (the relative majority at 50%; Cairns

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& Darby, 1998) has been regarded as a key social identity in Northern Ireland (Cairns, 1980; Cairns & Mercer, 1984). The aim of the present research was to explore whether recent qualifications to our knowledge of the basic psychological processes involved in intergroup perception could also enhance our understanding of this real and pervasive social conflict. While categorical processes are key to understanding the conflict in Northern Ireland, the focus on just one dimension of categorization may be an unrealistic (and over-simplified) reflection of intergroup relations in this context, which may, ultimately, serve to perpetuate the divide.

For social psychologists studying intergroup relations, the theoretical basis for intergroup conflict is the categorization process (e.g. Doise, Deschamps, & Meyer, 1978; McGarty & Penny, 1988; Tajfel, 1959; see McGarty, 1999 for a review). While some theorists argue that categorization is a fundamental cognitive process with inherent functionality (i.e. it is useful to simplify our complex perceptual environment; Rosch, 1973, 1978; Rosch, Mervis, Gray, Johnson, & Boyes-Braem, 1976), other theorists maintain that it is an essential process that reflects social reality and helps us create meaning in our social world (Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). Certainly, the importance of categorization to understanding intergroup relations is clear: this pervasive tendency to categorize people seems to be a necessary prerequisite for prejudice and discrimination (with no mental distinction between 'us' and 'them' there can be no category-based discrimination; Schaller & Maass, 1989).

As theoretical and empirical work into the categorization process developed, it became apparent that in some cases multiple dimensions of social categorization may become salient at the same time (Deschamps & Doise, 1978). In other words, a system of *crossed categorizations* could be observed whereby two independent bases for group membership criss-crossed to form new composite intergroup categories (e.g. Brewer, Ho, Lee, & Miller, 1987; Brown & Turner, 1979; Crisp & Hewstone, 2000a; Ensari & Miller, 1998; Hewstone, Islam, & Judd, 1993; Migdal, Hewstone, & Mullen, 1998; Miller, Urban, & Vanman, 1998; Urban & Miller, 1998; Vanbeselaere, 1991). However, does work into crossed categorization have any descriptive or explanatory value outside of strictly controlled laboratory environments and can it have important and useful implications for real-world issues? In an attempt to answer these questions, we explored the applicability of the crossed categorization paradigm to the web of intergroup relations in Northern Ireland.

Previous work has revealed that identity in Northern Ireland is much more complex than a simple Catholic-Protestant dichotomy (Gallagher, 1989). In fact, a number of different social identities seem prevalent (Cassidy & Trew, 1998). Since this sort of intergroup complexity is exactly the type of situation that work into crossed categorization attempts to describe, this makes the Northern Irish context ideal for the application of multiple categorization theory and research. In the typical crossed categorization situation two orthogonal dimensions of categorization are crossed to form four new 'crossed category' groups. In Northern Ireland this could be operationalized as follows: if we take religion and suppose that a second dimension could also become salient and important *at the same time*, then instead of considering only Catholic vs. Protestant, perceivers may attend to both

religion and gender dimensions.¹ This may lead to the formation of composite groups at the level of intergroup representation (i.e. Catholic-females, Catholic-males, Protestant-females and Protestant-males). In terms of ingroup/outgroup relations there are four groups that are similar to, and different from, the perceiver in distinct ways. If the perceiver is a Catholic-female then other Catholic-females would be *double ingroup* members (sharing group membership with the perceiver on both dimensions of categorization), Catholic-males and Protestant-females would be *partial group* members (being partially ingroup and partially outgroup), and Protestant-males would be *double outgroup* members (being different from the perceiver on both dimensions of categorization).

Previous work has identified several distinct patterns of intergroup bias across the four crossed-category groups. The basic patterns previously observed in the literature can be described by the relative differences between the four groups formed by the combination of two initial dimensions of categorization. Exhaustive accounts of the development of these patterns can be found in Brewer *et al.* (1987), Crisp and Hewstone (1999) and Hewstone *et al.* (1993). Importantly, for the purposes of the present research, a broad distinction between these models can be made in terms of whether an additive or interactive combination of dimensions occurs (see Singh, Yoeh, Lim, & Lim, 1997). The first class of patterns assume an *additive* combination of dimensions. If A–B and X–Y are dimensions of group membership, and categories A and X are ingroups and B and Y are outgroups, then, according to the additive principle, evaluations of categories A and X are summed to predict the evaluation of the combined category AX; the evaluations of categories A and X *independently* contribute to the co-joint category AX). In contrast, the second class of patterns assumes an *interactive* combination of category dimensions (i.e. the evaluation of the combined category AX is dependent on how the two contributing dimensions A–B and X–Y influence each other). To illustrate, an additive pattern may comprise the evaluations (AX [+ 2], AY [0], BX [0], BY [– 2]) whereas an interactive pattern may comprise the evaluations (AX [+ 2], AY [+ 2], BX [0], BY [– 4]). The difference between the two is that evaluations in the additive pattern are a simple additive combination of the evaluations of the individual components, whereas the evaluations in the interactive pattern depend on an interactive combination of components. Thus, for the interactive pattern, X vs. Y categorization makes no difference to the combined category evaluations of AX [+ 2] vs. AY [+ 2] since prior categorization on the A–B dimension was A. However, X vs. Y categorization *does* contribute to the combined category evaluations BX [0] vs. BY [– 4] since prior categorization on the A–B dimension was B. The essence of interactive patterns is that prior categorization on the first dimension (A–B) determines the effects of subsequent (or simultaneous) categorization on the second dimension (X–Y).

¹Eurich-Fulcher and Schofield (1995) pointed out that many social categories are correlated and that this may affect the consequences of crossed categorization. In this context this is particularly the case: religion is correlated with political affiliation and place of residence. Thus, the dimensions of categorization used in this study (religion and gender) are perfectly orthogonal to simplify the analysis. However, exploration of the effects of crossing real correlated categorizations in this context is certainly an important line of work for future research.

While previous work has begun to address issues of multiple identities in Northern Ireland (Cassidy & Trew, 1998), the potential value of the crossed categorization paradigm in this context has yet to be explored. The conflict-reducing qualities of crossed categorization have been demonstrated at an anthropological level (Evans-Pritchard, 1940; Murphy, 1957; see also LeVine & Campbell, 1972) as well as at a psychological level (Crisp, Hewstone, & Rubin, 2001; for a review see Crisp & Hewstone, 1999), and recent work has specifically explored the possibilities of reducing overall levels of bias in existing multiple category situations (i.e. shifting from one pattern to another; Crisp & Hewstone, 2000b). The aim of the present study was to ascertain, in the first instance, whether perceivers in Northern Ireland would, given the opportunity (but without explicit prompting), process more than the dimension of religion when encountering a Catholic or Protestant in the context of a newspaper story. The salience of social categories is not fixed and rigid but highly flexible and context dependent (Oakes, 1987). As such, we may reasonably expect use of more than a single dimension of categorization and some corresponding moderation of the dominance of religion in varied social contexts.

If it could be established that people do represent different social category members as a function of something other than just religion, then this would suggest that the crossed categorization paradigm would be a useful model to apply to the intergroup context in Northern Ireland. Furthermore, given its putative bias-reducing qualities, application of crossed categorization to the Northern Irish context could pave the way for its involvement in the development of conciliatory strategies to reduce discrimination and conflict.

To investigate these possibilities we adapted a paradigm by Park and Rothbart (1982). This paradigm is high in ecological validity because it is framed as a study of how people read newspaper stories, but also allows a measure of category-based information processing that is unconfounded by social desirability effects (i.e. a recall measure). In addition, previous work has identified memory biases with regard to nationality (implied by the speaker's accent) in this context (Cairns & Duriez, 1976), making a recall measure here particularly appropriate. Importantly, Park and Rothbart made a conceptual distinction between superordinate and subordinate person attributes. Superordinate attributes are more general characteristics of an individual (e.g. gender or race), whereas subordinate attributes are more specific details (e.g. occupation). Although the inclusiveness of social categorization is to some extent context dependent (Messick & Mackie, 1989), there is evidence that certain categories are generically superordinate (Rosch, 1978). Broad important categorizations like gender, nationality, ethnicity and religion seem to be generally superordinate to more specific, and less inclusive, subcategories (Brewer, Dull, & Lui, 1981) or individual characteristics (Turner *et al.*, 1987). The relative primacy of such generically superordinate dimensions over more specific attributes has been demonstrated empirically by Stangor, Lynch, Duan, and Glass (1992). Stangor *et al.* used the category-confusion paradigm (Taylor, Fiske, Etcoff, & Rudderman, 1978) to establish that participants used categories such as gender and race to categorize individuals who could potentially be categorized in any number of other ways. More specific bases for classification (e.g. style of dress) were used less, and

mainly to form subtypes of the higher-order classifications. Park and Rothbart's findings also contribute to the empirical evidence for specifying a superordinate/subordinate attribute distinction. While there was no difference in the recall of superordinate attributes of (gender) ingroup or outgroup targets, the subordinate attribute of interest (occupation) was better remembered for the gender ingroup than the gender outgroup. Park and Rothbart had predicted these findings on the basis of a functionality hypothesis. They argued that when encountering an outgroup member, superordinate information is enough for the perceiver meaningfully to encode the necessary person information. We do not meet many outgroup members and would not generally interact with them a great deal, hence we do not *need* to know anything other than that they are outgroup members. For ingroup members, however, Park and Rothbart suggested that simply relying on the superordinate characteristic of an individual is not enough meaningfully to structure the encounter. It is also necessary to encode additional (subordinate) information. Since perceivers generally need to interact with a large number of ingroup members, it is necessary to gain more diagnostic information in order to equip them with a more differentiated (and therefore meaningful) structure for their social environment.² Park and Rothbart suggested that differential processing of ingroup- and outgroup-relevant information in this way could be seen as a contributor to the 'outgroup homogeneity effect' (i.e. the tendency to perceive an outgroup as having greater homogeneity (less variability) than an ingroup; Jones, Wood, & Quattrone, 1981). However, for the purposes of the study reported below we simply utilized the conceptual and methodological value of a recall differential in an attempt to demonstrate that more than a single intergroup dimension can be *processed* in a real intergroup situation with important social categorizations. In the following study, both religion and gender were available bases for social categorization in bogus newspaper stories presented to Catholic female participants in a university setting. In such a social context we expected some degree of moderation of the dominance of religion. If multiple dimensions of categorization are important in social judgement in real contexts, then differential recall should occur as a function of *both* religion and gender dimensions of categorization.

Method

Overview

Sampling restrictions allowed us best access to Catholic females so these were selected as the double ingroup.³ Thus, in the stories Catholic females were double ingroup members, Protestant females

²Although it could be argued that the gender categories used by Park and Rothbart (1982) are exempt from the argument that lack of contact increases outgroup homogeneity (i.e. females and males have almost continual contact with each other), they point out that even in this case there is plausibly more within-sex than between-sex contact, and that we observe members of our own sex in more differentiated roles than members of the opposite sex.

³There was no restriction made in terms of religion or gender when recruiting participants to avoid inadvertently raising the salience of these identities or suggesting the social categorization focus of the studies. The particular participant group used in the present studies was determined by availability. Unfortunately, we were not able to recruit enough participants from other religious or gender categories to compare participants' own religion and gender group memberships.

(outgroup religion/ingroup gender) and Catholic males (ingroup religion/outgroup gender) were partial group members, and Protestant males were double outgroup members.

Participants and design

In all, 112 Catholic female undergraduates at the University of Ulster (median age = 19 years) were allocated randomly to a 2 (gender: ingroup vs. outgroup) \times 2 (religion: ingroup vs. outgroup) \times 2 (story valence: positive vs. negative) \times 2 (attribute: superordinate vs. subordinate) mixed design with repeated measures on the last factor. After Park and Rothbart (1982), we also varied the valence of the stories used. Although previous work has found that the valence of information interacts with category information in an ingroup-favouring manner (Howard & Rothbart, 1980), Park and Rothbart found no effect of story valence. Thus, our inclusion of a story valence manipulation constituted a further test of whether valence can affect recall as a function of category membership.

Materials

The first questionnaire consisted of a supposed extract from an article published in an unspecified Northern Irish newspaper. The stories used were adapted from materials originally developed by Park and Rothbart (1982). Four different stories were used. Two of them depicted the protagonist in a favourable situation and two represented the protagonist in an unfavourable situation. Fictional protagonist names were chosen, in combination with place names and personal pronouns used, to be unambiguously female or male and Catholic or Protestant. Previous work has demonstrated that names and places of residence are clear indicators of religion in Northern Ireland (Cairns, 1980; Houston, Crozier, & Walker, 1990; Hunter, Platow, Howard, & Stringer, 1996; Hunter, Stringer, & Coleman, 1993; Millar & Stringer, 1991; Stringer & McLaughlin-Cook, 1985), thus both were included as cues in the stories used. The fictional names used were: Catholic female (Theresa McCann, Maire Muldoon, Brigit O'Kane and Bernadette Toal); Protestant female (Susan Brown, Joan Chambers, Elizabeth Wright and Anne Robinson); Catholic male (Malachy O'Loughlin, Seamus McSweeney, Joseph Hume and Sean O'Connell); and Protestant male (George White, Robert Black, David Paisley and Samuel Smith). An example of a double ingroup (Catholic-female) member in a favourable story was the following:

A man's life was saved today by the quick reaction of a nearby stranger. While running in the park near her home in Newry, Co. Down, Theresa McCann, 23, witnessed the collapse of a fellow jogger. McCann, a cashier in a local grocery shop, immediately ran over to where the victim had fallen, and began to administer cardio-pulmonary-resuscitation (CPR), asking other joggers to call an ambulance. She accompanied the ambulance to the local hospital where a doctor reported that the victim had suffered a mild heart attack, and that the CPR procedures administered by McCann very likely saved his life.

In contrast, an example of a double ingroup (Catholic-female) member in an unfavourable story was:

A weekend accident caused by drunken driving claimed the lives of two, and injured one other. Bernadette Toal, 57, from the Bogside in Derry, was seriously injured when her car left the westbound lane of the motorway, crashed through the central reservation and swerved head-on into a car in the east-bound lane. The second driver and a passenger were both killed instantly. A police report indicated that Toal was severely intoxicated at the time of the accident. Toal, who is employed as an advertising agent for a department store, is listed as being in a critical condition. Funeral services for the victims are to be announced later today.

There were four versions of the two positive and two negative stories, each with a different crossed category protagonist. Group membership in terms of gender (female or male) and religion (Catholic or Protestant) was defined by the name, the location of the story's events and the personal pronouns

used. This resulted in four stories \times four crossed categorizations = 16 different stories (for all stories see Crisp, 1998). These were counterbalanced such that each version was read by seven different participants.

The stories were followed by five filler scales to maintain the cover story that asked participants to rate the story on the following dimensions: boring–interesting, poorly written–well written, main character liked–main character disliked, unclear–clear, discouraging–encouraging; the scales ranged from 1 = Not at all to 7 = Very much so. The third filler item (main character liked–main character disliked) served as a measure of explicit evaluation. Inclusion of this measure allowed a comparison of explicit intergroup differentiation and implicit processing of group-relevant information (i.e. recall).

Subsequently, the participants were required to perform a four-item cued recall task. Two items referred to superordinate characteristics (gender and religion), while two referred to subordinate characteristics (occupation and age⁴) of the story's protagonist. These items closely parallel the gender (superordinate) and occupation (subordinate) attributes used by Park and Rothbart (1982). Since we were interested here in the effects of multiple categorization, the second superordinate item (religion) was expected to confirm Park and Rothbart's hypotheses regarding superordinate memory. An additional subordinate attribute was also included to increase the sensitivity of the measure of subordinate attribute recall.

Procedure

The experiment was carried out in a lecture theatre. Participants were greeted by the experimenter and informed that the study concerned how people read newspaper stories. After reading the instructions on the first page of the questionnaire the participants read one story and then completed the five rating scales. The questionnaires were put in envelopes and the participants thanked for their participation. After 45 min (at the end of the lecture) a surprise cued recall test was administered. Participants were required to recall four specific items from the story. Participants then placed their recall sheet in the envelope and were debriefed.

Results

Overview

Although whether an item was recalled or not was generally clear, there was a degree of value judgement involved in some cases (e.g. an incorrect spelling or an alternative description of an occupation). To ensure accurate measurement, two independent raters who were blind to the experimental conditions and hypotheses assessed recall. Because of the high level of agreement in the raters' judgements (superordinate items: $r(112) = .971$, $p < .0005$; subordinate items: $r(112) = .957$, $p < .0005$), the scores were collapsed into a single index of recall. The main findings are shown in Table 1.

To test the conceptual distinction between superordinate and subordinate attributes, recall was initially analysed using a 2 (story valence: positive vs. negative) \times 2 (gender: ingroup vs. outgroup) \times 2 (religion: ingroup vs. outgroup) \times 2 (attribute: superordinate vs. subordinate) Mixed Analysis of Variance (ANOVA) with repeated measures on the last factor. This analysis revealed a main effect of attribute ($F(1,104) = 8.04$, $p = .006$). Recall was better overall for superordinate ($M = 1.32$) than subordinate ($M = 1.10$ attributes). A gender \times attribute interaction approached significance ($F(1,104) = 2.89$, $p = .092$). There was a gender \times

⁴The specific age was required during the recall phase (an individuated characteristic), rather than a category membership (i.e. young/elderly) to avoid the possibility that age could be regarded as a superordinate attribute.

Table 1. Mean recall of attributes as function of gender and religion (all $N_s = 28$)

Items recalled	Categorization			
	Gender: ingroup		Gender: outgroup	
	Religion: ingroup	Religion: outgroup	Religion: ingroup	Religion: outgroup
Superordinate attributes	1.30	1.07	1.46	1.45
Subordinate attributes	1.00	1.20	1.34	0.857

religion \times attribute interaction ($F(1,104) = 8.04, p = .006$) and the four-way interaction between story valence, gender, religion and attribute approached significance ($F(1,104) = 3.72, p = .057$). Importantly, attribute type (superordinate vs. subordinate) interacted with the other factors supporting the contention by Park and Rothbart (1982) that such a distinction is valid. In order to decompose these complex higher-order interactions a story valence \times gender \times religion ANOVA was computed for superordinate and subordinate attribute recall separately.

Superordinate attributes

The story valence \times gender \times religion ANOVA revealed a main effect of target gender ($F(1,104) = 7.13, p = .009$). Participants had better recall of superordinate attributes if the story character was a member of the gender outgroup ($M = 1.46$) than if they were a member of the gender ingroup ($M = 1.19$). There were no other main effects or interactions. Although recall according to the gender categorization is not consistent with previous findings from Park and Rothbart (1982; i.e. recall of superordinate information about ingroup and outgroup members should be equivalent), recall according to the religion dimension ($M_{\text{ingroup}} = 1.38$; $M_{\text{outgroup}} = 1.26$; $F(1,104) = 1.55, p = .22$) did conform to the hypothesis that there would be no intergroup differential with regard to memory for superordinate attributes.

Subordinate attributes

The ANOVA revealed only one reliable effect, a significant two-way interaction between gender and religion ($F(1,104) = 5.40, p = .022$). This suggested that both gender and religion group memberships were used to guide the processing of information about the main story character. Simple main effects analysis was employed to specify the exact nature of this interaction. This analysis revealed only one significant difference: recall was greater for religion ingroup characters

($M = 1.34$) than religion outgroup characters ($M = .837$) *only* when the character was also outgroup on the gender dimension of categorization ($F(1,108) = 5.52$, $p = .021$).

Implicit vs. explicit measures

To explore the relationship between implicit (recall) vs. explicit (evaluative scale) measures, two analyses were carried out. First, a correlation between the evaluative 'filler' item and recall of subordinate attributes was computed. No significant correlation was observed between superordinate attribute recall and evaluation ($r(112) = -.058$, $p = .540$) or between subordinate attribute recall and evaluation ($r(112) = -.170$, $p = .074$). Second, the same 2 (story valence) $\times 2$ (target gender) $\times 2$ (target religion) ANOVA as computed for the recall measure was carried out on the explicit evaluative measure. This analysis revealed a story valence main effect ($F(1,104) = 123.96$, $p < .0005$). Unsurprisingly, characters in favourable stories were evaluated more positively ($M = 5.71$) than characters in unfavourable stories ($M = 2.89$). This main effect was not qualified by target categorization either independently or interactively (story valence \times gender: $F(1,104) = .318$, $p = .574$; story valence \times religion: $F(1,104) = 1.27$, $p = .262$; story valence \times gender \times religion: $F(1,104) = .179$, $p = .673$). Thus, while explicit measures of evaluation revealed no intergroup differences, differentiation between the four social categories did occur in terms of group-relevant information processing.

Discussion

The findings from this study demonstrate that in the Northern Irish intergroup context, when targets are multiply categorizable, perceivers can use more than a single dimension of categorization and recall subordinate attributes according to an interactive combination of these categorizations. On the broadest level, this supports the main contention of work into crossed categorization: that in real, as well as more controlled laboratory, environments people attend, and process information about, ingroup and outgroup members differentially as a function of not just a single, but multiple dimensions of categorization.

These findings suggest that social categorization on the basis of religion in Northern Ireland can be qualified by reference to interactions with other bases for group membership in certain social contexts. Religion and gender were combined in an interactive fashion in participants' cognitive representation of the group identities relevant to the story characters. Religion had considerable influence on what was remembered by perceivers, but only in combination with gender identity. More specifically, recall was greater for religion ingroup members (Catholics) than religion outgroup members (Protestants) *only* when the story character was simultaneously a gender outgroup member (male).⁵ This pattern of findings

⁵In terms of crossed categorization outcome patterns, this tendency to selectively utilize a second dimension of categorization dependent on prior use of a dominant dimension can be described as 'hierarchical' ordering (derogation). However, this name is a little misleading in this context since the measure of recall simply constitutes differential processing rather than evaluation.

supports previous work demonstrating that the web of intergroup affiliations in Northern Ireland is more complex than a simple Catholic–Protestant dichotomy can capture (Cassidy & Trew, 1998; Gallagher, 1989). These findings also support the contention offered at the start of this paper that the context-dependency of social categorization (Oakes, 1987) can lead to multiple bases for group membership becoming salient and that such dimensions can be combined in complex ways. In the particular social context that provided the setting for this research (a university) the putative dominance of religion was moderated by an alternative dimension of categorization (gender).

What do these findings suggest in terms of people's use of multiple social categorizations? In the present study, perceivers engaged in a selective use of category-based information to guide subsequent processing of more specific (subordinate) information. When a story character was identified as a gender ingroup member (in this case a female), no additional bases for categorization were used to guide subsequent encoding of subordinate attributes. However, the second dimension of categorization (religion) was utilized *if* the story character was an outgroup member on the gender dimension (i.e. male). This qualifies the common view that religion is a dominant basis for social categorization in Northern Ireland: in the present social context (a university environment), the use of religion to guide processing was moderated by simultaneous categorization on an alternative dimension of group membership. These findings have two important implications. First, it is advisable for future work to consider what other possible bases for social categorization are available in the experimental context to avoid potentially masking important conditions that qualify the use of religion as an orienting categorization. Second, these findings suggest that religion is not used invariably to guide intergroup perception in Northern Ireland: there do seem to be certain social contexts and moderating factors (i.e. alternative bases for categorization) that can reduce the applicability of the religion dimension of classification to the impression formation process. Since social categorization seems a prerequisite for intergroup bias (Schaller & Maass, 1989), then promoting the salience of social categories additional to religion may tentatively be expected to reduce levels of prejudice and discrimination. Clearly, more work is needed to explore these possibilities, but the findings here constitute a first step in the potential application of crossed categorization research to the development of intervention strategies to reduce intergroup conflict.

Notwithstanding the advantages of extending the study of crossed categorization to measures of information processing and category representation (as well as just differential evaluation), these findings testify to the need to use more varied measures in crossed categorization research. Previous work has found that different measures sometimes reveal different patterns across the four crossed category groups (e.g. Brewer *et al.*, 1987; see also Vescio, Hewstone, Crisp, & Rubin, 1999), although sometimes different measures covary (e.g. Marcus-Newhall, Miller, Holtz, & Brewer, 1993). These findings support the use of more implicit measures of perceivers' representation of social groups. It is notable that the explicit measure of bias, a question that directly required an evaluation of the story character, was unaffected by either religion or gender identity. While these findings broadly

support previous dissociations between explicit and implicit measures (Greenwald & Banaji, 1995), and the need to consider a more complex notion of intergroup perception, it is important to note that the measure of recall was an index of attention and amount of processing, rather than evaluation *per se*, and as such it could be that the two measures in this study were, in fact, unrelated. It is also important to note that the measure of evaluation was a single item scale, and a more reliable index may have revealed explicit bias and an association with the implicit measure. Future work should clarify the exact relationship between such measures in multiple category contexts.

Park and Rothbart (1982) found no effect of social categorization on memory for superordinate attributes which we replicated for the religion dimension. However, we did find, unexpectedly, that memory for superordinate attributes was better for a gender outgroup than for a gender ingroup member. This may suggest that even superordinate category memberships may be differentially remembered in certain contexts. Alternatively, it is possible that the need to make the stories realistic (i.e. interesting enough to appear in a newspaper) meant that the four particular types of stories used were inadvertently confounded with female/male typicality (e.g. working with mentally retarded people is more typical of a female than male activity). Future work could complement these findings to investigate whether the effect can be eradicated by using materials that are not typical of either particular gender group (although this greater experimental control would perhaps detract from the realism of the stories used). The limitations on generalizability should also be acknowledged. This study used only one participant group with only two dimensions of social categorization. It is likely that the pattern of category membership is more complex than even the more detailed crossed categorization paradigm can capture (e.g. crossing correlated categories such as religion, political affiliation and place of residence is likely to paint an even more complex picture; Eurich-Fulcher & Schofield, 1995). Future work should explore in more detail the interactions between religion, gender and other bases for social categorization with more varied participant groups.

Finally, it is important to note that the recall measure did not directly assess intergroup bias or stereotyping, but rather served as an index of perceivers' implicit tendency to process information differentially as a function of category membership. In this respect it was very useful, demonstrating that multiple bases for group membership were combined in complex ways to determine how information concerning group members was processed. The measure would have informed the issue of intergroup bias in this context if the manipulation of story valence had had an effect; however, there was no clear influence of story valence on information processing in this context (replicating the findings of Park & Rothbart, 1982). Although it could be argued that these findings simply reflect the fact that recall has little to do with bias (or that in this specific context there was no bias, as suggested by the explicit measure), this seems unlikely given previous evidence. For example, other work has shown an ingroup favouring recall bias when perceivers process valenced information about ingroup and outgroup members (Howard & Rothbart, 1980). One possibility why differential recall did not occur as a function of story valence is the sensitivity of the measures. Although the number of subordinate

attributes constituting the recall measure was increased to two (compared to Park & Rothbart (1982), who used one item), this may still have been too insensitive to reveal story valence effects. It is possible that with more sensitive measures (i.e. more items), more subtle valence-specific recall differentials may qualify the total amount of information processed about different groups.

Overall, this research has demonstrated that in certain social contexts within Northern Ireland, multiple dimensions of group membership can be attended to, even when cues for categorization are not made salient. This testifies to the importance of studying multiple categorization effects in intergroup perception, particularly in the Northern Irish context where one dimension of group membership (religion) is commonly considered dominant. The tendency to differentially recall (and thus mentally represent) crossed ingroup and outgroup information strongly suggests that this is an important consequence of encountering multiple group members, even if we experience this information through the media. Ultimately, the consideration that social categorization is not a unitary process, but can involve many different alternative bases for classification, that combine in additive and interactive ways, may help us to more fully understand, and perhaps attenuate, category-based prejudice and conflict.

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