The 'ultimate attribution error'? A review of the literature on intergroup causal attribution

MILES HEWSTONE
Department of Psychology University of Bristol 8-10 Berkeley Square, Bristol BS8 1HH, U.K.

Abstract

Studies that examine causal attributions for acts by ingroup and outgroup members are reviewed. The tendency for attributions to favour ingroup over outgroup members is found in three paradigms — explanations for positive and negative outcomes, success and failure, and group differences — and in most of the 19 studies reviewed, but the evidence provides only limited support for Pettigrew's (1979) 'ultimate attribution error'. The evidence is limited to specific dimensions in a given study, but strongest for three general findings: (1) More internal attribution for positive acts, and less internal attribution for negative acts, by ingroup than outgroup members; (2) More attribution of outgroup than ingroup failure to lack of ability, and 'explaining away' outgroup success to good luck, high effort or an easy task; (3) A preference for ingroup-serving versus outgroup-serving attributions for group differences. Finally, theoretical issues and methodological shortcomings are discussed with reference to future research.

INTRODUCTION

'We live in a social environment which is in constant flux. Much of what happens to us is related to the activities of groups to which we do or do not belong; and the changing relations between these groups require constant readjustments of our understanding of what happens and constant causal attributions about the why and the how of the changing conditions of our life' Tajfel (1969).

Given the sustained interest in attribution theory within social psychology (e.g. Harvey and Weary, 1984), it is surprising that there has been relatively little interest in attributions at the intergroup level (but see Hewstone, 1989). Attrbutions made for the behaviour of ingroup and outgroup members are, however, often ethnocentric, in the sense that members of a particular group favour members of their own group, rather than members of outgroups.

Pettigrew (1979) referred, with some hyperbole, to an 'ultimate attribution error', defined as 'a systematic patterning of intergroup misattributions shaped in part by
prejudice' (p.464). This 'error' (strictly speaking, a 'bias', cf. Kruglanski and Ajzen, 1983) is an extension of the 'fundamental attribution error' (Heider, 1958; Ross, 1977), the tendency to underestimate situational factors and overestimate personal factors as causes of an actor's behaviour. Its basis is a negativity effect for attributions of outgroup behaviour that serves to defend a negative stereotyped view of the outgroup. If an outgroup member is seen as performing a negative act consistent with this negative view, the tendency to make internal attributions will be enhanced. But a problem arises when an outgroup member is seen as performing a single positive act, inconsistent with the negative stereotype. Pettigrew crossed perceived degree of controllability of the act by the perceiver (high/low) with perceived locus of control of the act (internal/external to the actor) to yield four main attributional possibilities: (1) 'The exceptional case' (low/internal); (2) 'luck or special advantage' (low/external); (3) 'high motivation and effort' (high/internal); (4) 'manipulable situational context' (high/external). Pettigrew put forward two main predictions which specify the ultimate attribution error:

'Across-group perceptions are more likely than within-group perceptions, especially for prejudiced individuals, to include the following:

(1) For acts perceived as negative (antisocial or undesirable), behaviour will be attributed to personal, dispositional causes. Often these internal causes will be seen as innate characteristics, and role requirements will be overlooked.

(2) For acts perceived as positive (prosocial or desirable), behaviour will be attributed to any one or the combination of the following: A. to the exceptional, even exaggerated, special case individual who is contrasted with his/her group; B. to luck or special advantage and often seen as unfair; C. to high motivation and effort; and/or D. to manipulable situational context' (Pettigrew, 1979, p. 469).

He also added three further predictions:

(3) 'The ultimate attribution error is likely to characterize the attributions of most people, but will be sharper for prejudiced individuals.

(4) The ultimate attribution error is most likely to occur when perceivers are conscious of their own and the actor's group memberships.

(5) The intensity of the ultimate attribution error will vary across intergroup situations, being greatest when the groups involved have histories of intense conflict and possess negative stereotypes of each other and when racial and ethnic differences covary with national and socioeconomic differences.

In spite of these general predictions, Pettigrew reported only three published studies of intergroup causal attribution. This article presents the first systematic review of all the available literature.

The focus of this article needs to be specified in two ways. First, intergroup attribution refers to how members of different social groups explain the behaviour (as well as the outcomes and the consequences of the behaviour) of members of their own and other social groups. From this perspective an individual may attribute the behaviour of another not simply to individual characteristics, but to characteristics associated with the group to which the other person belongs or even to group membership per se. In addition, the perceiver or attributor is also conceived of as
Intergroup attribution

a group member, which constitutes a further influence on the intergroup attribution process. This group approach is by no means inconsistent with more traditional attribution theory and research. For example, Jones and McGillis (1976) introduced 'category-based expectancies' in their reappraisal of Correspondent Inference Theory, while Thibaut and Riecken (1955) provided perhaps the earliest evidence that perceived locus of causality (for an act of compliance) varied as a function of the categorization of the other person (internal for high status, external for low status). The fundamental role of social categorization in attribution has, however, only belatedly received detailed attention and been integrated with research on intergroup relations (e.g. Deschamps, 1973-74; Hewstone and Jaspars, 1982a, 1984). Second, the focus on causal attribution deliberately excludes research on trait attribution (which does not address explanation) and responsibility attribution (where judgements are influenced by additional concerns such as moral evaluation and accountability; e.g. Fincham and Jaspars, 1980). There are, in fact, very few studies of intergroup responsibility attribution (see Bornewasser, 1985; Howard, 1984; Wang and McKillip, 1978).

This article reviews the available literature, grouped under three headings — attributions for positive and negative outcomes, success and failure, and group differences. Although the total number of published articles is quite small, some include multiple studies and nearly all of them test predictions for more than one social group, thus providing a respectable data base for conclusions about the consistency of effects. (At this stage a meta analysis is not viable, because most of the original studies do not provide sufficient statistical background information.) There is clear evidence of intergroup attribution bias in all three types of study reviewed and, indeed, in most studies, but this bias is typically limited to specific dimensions, rather than being ubiquitous. Finally, theoretical and methodological issues are considered, which have implications for future research.

POSITIVE AND NEGATIVE OUTCOMES

The first empirical investigation of intergroup attributions was carried out by Taylor and Jaggi (1974) in southern India, against the background of conflict between Hindu and Muslim groups. Subjects (Hindu adults) first rated the concepts 'Hindu' and 'Muslim' on 12 evaluative traits, then read 16 one-paragraph descriptions. They were asked to imagine themselves in a given situation, being acted towards in a certain manner by another Hindu (ingroup member) or Muslim (Outgroup member). Some situations described socially desirable behaviour (e.g. being sheltered from the rain) and other situations described undesirable behaviour (e.g. being refused shelter). Subjects had to explain the behaviour of the other person involved by choosing one of a number of explanations. In each case one explanation was internal, the remainder were external. The basic hypothesis of the study was that perceivers would make more internal attributions for other Hindus performing socially desirable acts, and more external attributions for undesirable acts. Attributions for Muslim outgroup members, in contrast, would be more external for socially desirable, but more internal for socially undesirable acts.

In all four stories used, Hindu subjects were more likely to make internal attributions for socially desirable than socially undesirable behaviour performed by Hindus. In only two of the four stories with a Muslim actor, however, were attributions
more internal for socially undesirable, compared with desirable, behaviours. Taylor and Jaggi did not directly compare the attributions for ingroup and outgroup members performing socially desirable and undesirable behaviours; from their results, however, there were very strong differences. For socially desirable behaviours, internal attribution was higher for ingroup than outgroup actors; and for socially undesirable behaviours, internal attribution was lower for ingroup than outgroup actors.

Given the importance of this first study, Hewstone and Ward (1985) carried out a conceptual replication with four main improvements: (1) there were no ratings of ingroup and outgroup on evaluative traits prior to the causal attributions, which may have induced a competitive response set; (2) there was one internal and one external attribution for each behaviour; (3) the data were transformed to allow for a standard analysis of variance, exploring all main effects and interactions; and (4) respondents from two groups were used, thus investigating reciprocal intergroup attributions.

Our first study involved Malay (majority) and Chinese (minority) groups in Malaysia. Malays behaved as expected, by more frequently making internal attributions for a positive than a negative act by a Malay actor, although they did not reverse this pattern when judging a Chinese actor. When the two actors were compared directly, the Malays attributed a positive act by a Malay actor more to internal factors than a similar act by a Chinese actor, and they attributed a negative act by an ingroup member less to internal factors than a similar act by an outgroup actor. Thus there was clear evidence of ethnocentric attribution, with the effect of ingroup favouritism far stronger than that of outgroup derogation. Contrary to predictions, the Chinese also favoured the Malay actors, at the expense of their own group; they showed no trace of ethnocentric attribution. We then carried out a second study in Singapore, using the same ethnic groups and design, except that Malays were now the minority and Chinese the majority. The only effect was that Malays made more internal attributions for the positive than the negative behaviour of a Malay. The Chinese did not significantly favour either group. Overall, this set of studies indicated that ethnocentric attribution is not a universal tendency and can be reversed, in the case of low status groups, against the background of political and cultural tension.

Stephan (1977) used the same kind of methodology to study fifth and sixth graders in segregated and integrated schools in the Southwest of the U.S. Children from three ethnic groups (blacks, chicanos and anglos) chose between internal and external attributions for positive and negative behaviours by another student from each group. Stephan analysed the data separately for the stimulus person, as a function of ethnicity, and reported ingroup-serving attributions for both anglos and chicanos. The anglos made slightly more dispositional attributions for the positive behaviour of an anglo than did blacks; the chicanos attributed the positive behaviour of chicanos more dispositionally, and the negative behaviour of Chicanos less dispositionally, than did blacks. With this limited analysis, blacks revealed no ingroup-serving attributions, because Stephan failed to analyse how members of each group judged the ingroup in comparison with outgroups.

If one examines the data more closely, in all three groups there was a strong

---

1 Some similar data pertaining to English and French Canadians' attributions of behaviour by ingroup and outgroup members were reported by Mann and Taylor (1974). The data are, however, not reported in sufficient detail to be evaluated alongside the other studies reported here.
tendency to give more internal attributions for positive than negative actions, irrespective of the group membership of the actor. Aside from this main effect, however, there appeared to be no differences in the Anglos' attributions for positive or negative behaviour by the ingroup and outgroups. The Chicanos gave slightly more dispositional attributions for positive behaviour by the ingroup, and slightly fewer dispositional attributions for negative behaviour by the ingroup, than outgroups. The blacks showed the strongest tendency to be ingroup-serving: they gave more dispositional attributions for ingroup-positive than outgroup-positive behaviours, but did not differentiate between groups in attributing negative behaviours. This reinterpretation of Stephan's data suggests rather different evidence for intergroup attribution than he reported and underlines the importance of a full analysis of such data, including main effects for the perceiver's group, the target group and the type of behaviour, as well as all interactions.

In a more realistic study of inter-racial attributions Duncan (1976) asked white American college students to view a videotaped interaction of an increasingly violent argument in which, finally, one participant pushed the other. The major independent variables were the race (black/white) of the 'protagonist' and 'victim' of the push shown on the videotape. The attribution part of the study required subjects to indicate the extent to which the target behaviour should be attributed to situational forces, personal factors, the issue discussed or some combination of these causes. There were significant intergroup effects for both situational and personal attributions. When the protagonist was black, the subjects perceived his violent behaviour to be due less to situational, and more to personal, factors than when the protagonist was white. Although there were no tests comparing the two types of attribution, there appeared to be more person than situation attribution in the black protagonist conditions, and more situation than person attribution in the white protagonist conditions.

Intergroup attributions have also been demonstrated in the sphere of international conflict, where Rosenberg and Wolfsfeld (1977) analysed attributions made for five Israeli and five Arab behaviours during the Middle East conflict. The actions were all major events reported in the news and were classified as successes, failures, moral acts, immoral acts and neutral acts. Attributions were open-ended and coded as situational or dispositional. The strongest effects were found for two groups of students studying in the U.S. who were closely involved with the conflict — pro-Israeli and Israeli students versus Arab students. The former group ('Israelis') gave more dispositional attributions for Israeli success and moral acts, and fewer dispositional attributions for Israeli immoral acts, than did Arab students. They also gave fewer dispositional attributions for Arab success, and more dispositional attributions for Arab immoral acts, than did Arab students.

Finally, Winkler and Taylor (1979) investigated causal attributions for 'game events' from the 1976 Superbowl between the Dallas Cowboys and the Pittsburgh Steelers. Adults categorized in terms of their preference for one team or the other (or no preference) were asked to attribute five game events (the final outcome; one game statistic favourable to each team; and one game statistic unfavourable to each team) to various causes, the most important of which were good play, bad play

2 There is some doubt as to whether all Duncan's videotapes portrayed equivalent behaviour and whether black and white subjects would judge such behaviour differently. Sagar and Schofield (1980) attempted to address these issues, but they did not include causal attributions among their dependent measures.
and situational factors. There was only a marginally significant intergroup effect, such that fans regarded good play by their team as the most important cause of their own good outcomes, whereas when the other team had a good outcome, their good play was a relatively less important cause. Given that the subjects were, in fact, adults who indicated a mere preference for one team or the other, rather than real 'fans', this weak result may be due to a lack of any real ingroup identification.

The results of these six published studies are summarized in Table 1. It is clear that using a variety of subject groups, in different countries, although predominantly using a within-subjects design (discussed below), ingroup-serving attributions have been found in studies investigating positive and negative outcomes. Two types of effect can be distinguished: categorization effects compare the attributions made for ingroup and outgroup members, separately for positive and negative behaviours; outcome effects compare the attributions made for positive and negative behaviours, separately for ingroup and outgroup actors. Although post hoc tests are required to tease apart these effects, such analyses have unfortunately not always been reported. Where this is the case (in this and subsequent tables), I have cautiously interpreted the data reported in the original articles. Overall, categorization effects are found for both types of behaviour in about half the groups tested; there is also a consistent favourable outcome effect for ingroup actors (more dispositional attribution for positive than negative behaviour), but the reverse, contrary to predictions, is not generally found for outgroup actors (i.e. there is not more dispositional attribution for negative than positive outgroup behaviour).

The most obvious limitation of these studies is their reliance on Heider's (1958) original, but limited distinction between internal and external attributions (see Hewstone, 1989). Three of the studies provided subjects with a forced choice between these two types of attribution (Hewstone and Ward, 1985; Stephan, 1977; Taylor and Jaggi, 1974), while one study coded open-ended attributions into only these categories (Rosenberg and Wolfsfeld, 1977). Four main objections to the internal–external distinction have been put forward by Miller, Smith and Uleman (1981):

1. The 'hydraulic assumption' that internal and external attributions are inversely related is unproven.
2. Research may be committing a 'categorical error' in using such broad categories, containing a heterogeneous collection of attributions.
3. There exists a 'teleological confusion' in that statements that seem to imply external attributions can be rephrased as statements implying internal attributions.
4. The reported convergent validity among different measures of internal and external causality is low.

In view of these objections the studies reported in this section should be interpreted with caution and future research should aim to go beyond the internal–external distinction, as shown in the following section.

SUCCESS AND FAILURE

Weiner's (1979, 1983) improved, multi-dimensional approach to the structure of perceived causality specifies the underlying properties of causes in terms of three
Table 1. Intergroup attributions for positive and negative outcomes

<table>
<thead>
<tr>
<th>Study</th>
<th>Core design*</th>
<th>Subjects†</th>
<th>Categorization (Ingroup/outgroup) Type of behaviour</th>
<th>Effects</th>
<th>Outcome (Positive/negative) Type of actor</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td>Positive</td>
<td>Negative</td>
<td>Positive</td>
</tr>
<tr>
<td>(a) Ethnicity</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Duncan (1976)</td>
<td>Between</td>
<td>White male students</td>
<td></td>
<td></td>
<td>+</td>
</tr>
<tr>
<td>Hewstone and Ward (1985)</td>
<td></td>
<td>Male students:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Experiment 1 Within</td>
<td>Within</td>
<td>Chinese</td>
<td></td>
<td></td>
<td>=</td>
</tr>
<tr>
<td>Experiment 2 Within</td>
<td>Within</td>
<td>Malay</td>
<td>+</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Rosenberg and Wolfsfeld (1977)</td>
<td>Within</td>
<td>Chinese</td>
<td></td>
<td></td>
<td>=</td>
</tr>
<tr>
<td>Stephan (1977)</td>
<td>Within</td>
<td>Malay</td>
<td></td>
<td></td>
<td>=</td>
</tr>
<tr>
<td>Taylor and Jaggi (1974)</td>
<td>Within</td>
<td>Middle school students:</td>
<td></td>
<td></td>
<td>Anglos</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Blacks</td>
<td>+‡</td>
<td>=</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Chicanos</td>
<td>+‡</td>
<td>+‡</td>
<td>+</td>
</tr>
<tr>
<td>(b) Other</td>
<td></td>
<td>Adult football</td>
<td>‖/+</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Winkler and Taylor (1979, Study 1)</td>
<td>Within</td>
<td>‘fans’</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A plus sign (+) indicates an ingroup-favouring/outgroup-derogating attribution; a minus sign (−) indicates an ingroup-derogating/outgroup-favouring attribution; an equals sign (=) indicates no significant difference; (‖) indicates a marginally significant difference; and a blank indicates the absence of data.

* Core design refers to the manipulation of categorization and outcome variables.
† Subjects refers to the independent variable analysed; subjects were male and female unless specified.
‡ The relevant statistical test was not computed, but the effect appears highly significant.
§ The ingroup was compared with two outgroups.

dimensions whose utility has been demonstrated in a vast number of studies (see Weiner (1986) for a review): locus refers to the internal (personal) or external (situational) location of a cause; stability refers to the stable (invariant) versus unstable (variant) temporal nature of a cause; and controllability refers to whether a cause is uncontrollable or controllable (usually by the actor). Causes can theoretically be classified within one of the eight cells of a matrix constructed from these three dimensions, but research has tended to focus on four main perceived causes of success and failure: ability (internal/stable/uncontrollable), effort (internal/unstable/controllable), luck (external/unstable/uncontrollable) and task difficulty (external/stable/uncontrollable).

Research on interpersonal attributions for success and failure has identified a self-serving bias (e.g. Bradley, 1978; Zuckerman, 1979), defined as the tendency for perceivers to give relatively more internal attributions for own success and relatively
more external attributions for own failure. For some researchers the crucial test of the self-serving hypothesis is a comparison between attributions for one's own behaviour and the behaviour of others (e.g. Snyder, Stephan and Rosenfield, 1976). If self-success is attributed to internal causes more than other-success, this indicates a self-enhancing effect; if self-failure is attributed to external causes more than other-failure, this indicates a self-protective effect. The limitation of these predictions is that they fail to distinguish between ability and effort as internal causes. If ability is viewed as stable/uncontrollable, while effort is unstable/controllable, then the attribution of a failure to lack of effort has different implications from an attribution to lack of ability. For example, future expectancies of success are lower following lack-of-ability attribution and higher following lack-of-effort attributions (Weiner, Nierenberg and Goldstein, 1976).

If one extrapolates from the interpersonal to the intergroup level, there are various possibilities for ingroup-serving and outgroup-derogating attributions for success and failure (see Table 2). These possibilities broadly support Taylor and Jaggi's (1974) predictions of internal attribution for ingroup positive and outgroup negative acts, but external attribution for ingroup negative and outgroup positive acts, with one exception. Both outgroup success and ingroup failure can be attributed to effort, derogating the outgroup and favouring the ingroup, respectively. Effort is, in fact, a somewhat ambiguous attribution, because although most of us value perseverance, we can explain away the success of a disliked person by claiming how hard he or she had to try. Pettigrew (1979) noted this possibility explicitly in discussing ways in which positive behaviour, such as success, by member of a disliked outgroup can be 'explained away'. Clearly, there exist a variety of attributional possibilities for explaining success and failure by ingroup and outgroup members; I turn now to the available empirical evidence. As in the previous section, I begin with studies on ethnicity, then turn to gender and finally to miscellaneous studies.

Table 2. Ingroup-serving and outgroup-derogating attributions in achievement contexts

<table>
<thead>
<tr>
<th>Type of outcome</th>
<th>Type of actor</th>
<th>Type of actor</th>
</tr>
</thead>
<tbody>
<tr>
<td>Success</td>
<td>Ability (internal, stable, uncontrollable)</td>
<td>Effort (internal, unstable, controllable)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Good luck (external, unstable, uncontrollable)</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Easy task (external, stable, uncontrollable)</td>
</tr>
<tr>
<td>Failure</td>
<td>Bad luck (external, unstable, uncontrollable)</td>
<td>Lack of ability (internal, stable, uncontrollable)</td>
</tr>
<tr>
<td></td>
<td>Difficult task (external, stable, uncontrollable)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Lack of effort (internal, unstable, controllable)</td>
<td></td>
</tr>
</tbody>
</table>

There is some evidence that this 'self-serving' bias can be dominated by a different sort of 'group-serving' bias, whereby individuals share assigned causality for success with other ingroup members, but attribute more causality for failure to themselves than to other ingroup members (see Taylor, Doria and Tyler, 1983).
Greenberg and Rosenfield (1979), after a review of some of the studies cited above, questioned whether intergroup attributions were based simply on dislike for outgroup members (ethnocentrism), or whether they were always founded on cultural stereotypes. To examine this question with respect of interracial (black–white) attributions, they used a task for which there appeared to be no race-based cultural assumptions (extra-sensory perception). They had white subjects of varying degrees of ethnocentrism (upper or lower third of the sample) watch four videotapes portraying success and failure for black and white actors, and then attribute each performance to Weiner's four causes. The three-way interaction between ethnocentrism, outcome and race of actor was highly significant for attributions to ability and marginally significant for attributions to luck. In the success conditions, high-ethnocentrism subjects tended to attribute black success less to ability and more to luck than they did white success. Low-ethnocentrism subjects tended to attribute black success more to ability and less to luck than they did white success. In the failure conditions, high-ethnocentrism subjects tended to attribute black failure more to lack of ability than they did white failure, while the reverse was true for low-ethnocentrism subjects. In addition, high-ethnocentrism subjects attributed black failure more to lack of ability than did low-ethnocentrism subjects. These results were interpreted as evidence of intergroup attribution biases based on ethnocentrism alone, although it should be noted that the high-ethnocentrism subjects may have endorsed the stereotype that blacks and whites did differ in ESP ability, while low-ethnocentrism subjects did not.

Whitehead, Smith and Eichhorn (1982) investigated attributions for success and failure on a task for which the relevant trait was either part of a social stereotype or not part of any stereotype about the outgroup. In pretesting they found that white students perceived blacks to be more athletic, and slightly less intelligent, than whites. They therefore investigated separately black and white high school students' attributions for success and failure on these two tasks, as a function of race of the actor. For the academic task, there were intergroup effects for both sets of subjects. Black students attributed failure significantly more to lack of ability when the other was white than black; for white students there was a marginally significant tendency to attribute failure more to lack of ability when the other was black than white. Results were stronger on the athletic task. Black students attributed failure more to lack of ability when the other was white rather than black, while white students attributed failure more to lack of ability when the other was black than white. Finally, there was an interaction between race of perceiver and race of subject for task attributions, which the authors interpreted as an intergroup effect. On athletic tasks, blacks attributed the successful performance of whites more to the ease of the task than they did for blacks, and they attributed a white student's failure more to task difficulty than they did for blacks (i.e. the athletic task was seen as more difficult for white students). The ambiguity of these attributions is obvious, because the conventional interpretation of a task attribution for failure would be that it is self-serving for the actor. The authors' interpretation is, however, more plausible in the context of their other findings.

In a final study on ethnic groups, Hewstone, Wagner and Machleit (1989) investigated self-, ingroup- and outgroup-attributions for hypothetical success and failure in a school exam. The subjects, 15-year old West German and Turkish (guestworker) children, were classified as high or low in prejudice towards this outgroup, using
M. Hewstone

a median-split procedure based on a single scale, and then made attributions to all four of Weiner's causes. The only intergroup effects were found for luck attributions. German students' attributed ingroup failure more to bad luck than they did outgroup failure (ingroup-protecting), while Turkish students attributed ingroup success more to good luck than they did outgroup success. This latter effect seems to reflect an internalization of the prejudice that Turkish children are less able academically than German children.

Similar studies have been based on gender groups. Deaux and Emswiller (1974) had male and female students listen to the successful performance of either a male or female who performed well on an object-identification task. They also manipulated the sex linkage of the task, by depicting the objects as either mechanical tools (masculine) or household utensils (feminine). The main dependent variable, unfortunately, confounded ability and luck attributions, by presenting subjects with a scale anchored by an explanation in terms of skill, at one end, and luck, at the other end. For the masculine task, a male's success was attributed more to ability than was the female's equally successful performance. When the task was feminine, however, there was no difference. These results appear to be ingroup-favouring for the males, but ingroup-derogating for the females.

Feldman-Summers and Kiesler (1974, Experiment 1) followed up this study by investigating male and female students' attributions for three levels of success (highly successful/moderately successful/very unsuccessful) by male and female actors. Each subject received a set of six completed task booklets (described as having been completed by subjects in a previous study) in a within-subjects design. The task was an 'academic problem-solving task' perceived to favour males, and attributions were made to all four of Weiner's dimensions. The only categorization effect for attributions was a main effect for the sex of the problem-solver on the motivation (effort) dimension. Male and female subjects attributed more motivation to female than male problem-solvers, regardless of the level of success. As high effort does not provide a plausible cause of failure (unless one argues that, e.g. 'she tried too hard'), it is probably safest to assume that there were no group-favouring or derogating effects in this study.

In a second experiment, using a between-subjects design, male and female students read a description of a highly successful male or female physician, whose speciality was either pediatrics or surgery, and who did/did not take on their father's practice. Attributions again included all four causes, but these judgements were made ipsatively (i.e. 'more' of one attribution implied 'less' of another). As in the first study, all subjects attributed higher motivation to females than males, but there were also intergroup effects in the form of significant interactions between sex of subjects and sex of stimulus person. First, male subjects attributed more ability to the male than the female physician; they also viewed the female physician as more motivated than the male physician. When the physician had taken over the practice from his/her father, male subjects perceived the female to have had an easier task than the male physician. Second, females showed an awareness of unfairness. They perceived the male physician as having had an easier task than the female, and they also attributed greater motivation to the female than the male physician. These results illustrate the ambiguity of effort attributions, which can be derogatory ('look how hard she had to try') or congratulatory ('with effort we can overcome sex discrimination'). This problem is discussed in more detail below.
Occupational variables were also manipulated by Feather and Simon (1975). They investigated schoolgirls' attributions of male and female success and failure in the three domains of medicine, teaching and nursing. Attributions included Weiner's four causes as well as cheating, alleged cheating and examiner's error. There were four intergroup effects, the first three of which were ingroup-derogating. First, these female subjects tended to see ability as a more important cause of male than female success, while they saw lack of ability as a more important cause of female than male failure (especially for medicine). Second, when the female actor succeeded at medicine, her achievement was more likely to be explained in terms of an easy course of studies than when the male succeeded. Third, the female subjects saw cheating as a less important cause when males succeeded than when females succeeded. The only hint of group-serving attribution was that subjects saw alleged cheating leading to failure as a more important cause when a male failed than when a female failed.

A subsequent study on gender-linked attributions yielded no effects at all. Stephan and Woolridge (1977) deliberately chose a traditional masculine task and had male and female students watch a videotape of two females attempting to assemble an automobile carburetor. One female was successful, the other was not. There were no significant interactions of sex of subject by outcome. A study published in the same year, however (Garland and Price, 1977), did report that men's attitudes towards women in management were significantly related to their attributions of female occupational performance. Male students completed the 'Women as Manager Scale' (WAMS; Peters, Terborg and Taynor, 1974) and then attributed a woman's success or failure in a management position to Weiner's four causes. For the success condition, as predicted, there were significant positive correlations between the WAMS and attributions to both ability and hard work, and there were significant negative correlations with both luck and task attributions. These results suggest that, generally, males' attributions for female performance may vary as a function of their attitudes towards women, a variable that has seldom been reported.

Three relatively recent studies also examined achievement attributions. Yarkin, Town and Wallston (1982) examined white students' causal attributions for a successful banking officer's career. Race and gender of the officer were crossed in a between-subjects design, and attributions were made to all four causes. There were no intergroup differences, but the categorization of the officer as white and male did influence attributions. In this condition the officer's success was attributed more to ability and less to luck than in the other three conditions. This result can be interpreted as ingroup-serving by the male, but ingroup-derogating by the female, students.

In a very different context, Hewstone, Jaspars and Lalljee (1982) studied the attributions for success and failure in school examinations given by schoolboys from British 'public' (private) and 'comprehensive' (state) schools. Categorization of stimulus person and outcome of the exam were both manipulated in a within-subjects design, including attributions to all four causes. The boys from public schools showed clear group-serving attributions only for failure. They attributed failure by an ingroup member less to lack of ability and more to lack of effort compared with failure by an outgroup member. The boys from comprehensive schools showed only a marginally significant tendency to attribute their failure more to bad luck than they did outgroup failure. These attributions fitted quite well with previously-collected data, from different samples, based on a content-analysis of open-ended essays by the two groups of pupils. Public schoolboys emphasized their intellectual ability and
higher academic standards, while comprehensive boys drew attention to the privileges of a public school education.

Finally, Ho and Lloyd (1983) examined female college students’ attributions for the reported success or failure on an anagrams test by a sample of ingroup (students enrolled in the same course), high status outgroup (university teachers) or low status outgroup (apprentices in a vocational school) others. Subjects were classified as internal or external on Rotter’s (1966) locus of control scale and attributions were made to all four causes in a between-subjects design. There were no significant interactions of group membership with outcome; this lack of intergroup effects may, however, be due to the un-compelling nature of the ingroup–outgroup manipulations (did these subjects really see students on the same course as an ‘ingroup’ and their teachers as an ‘outgroup’?).

The results of the 10 published articles on intergroup achievement attributions are summarized in Table 3, with findings separated for success and failure and type of attribution. Based on a variety of subjects and with between- as well as within-subjects designs, there is consistent evidence for intergroup attributions in achievement contexts. Only three studies failed to show such effects, but in all the other studies effects were limited to specific attributions. As Table 3 shows, effects are stronger for failure than success and strongest for attributions of failure to ability (outgroup failure is attributed more to lack of ability than is ingroup failure). Thus ingroup-protection, instigated by the threatening implications of failure, appears to be stronger than ingroup-enhancement. Outgroup-favouring or ingroup-derogating attributions have also been reported in several studies, but predominantly for lower status/dominated groups (e.g. migrant labour populations and females).

With a view to stimulating and improving future research, four shortcomings of this literature are identified: (1) As noted earlier, some of the results are ambiguous because we do not know how perceivers interpreted their causal attributions. This may be just as serious a problem in the case of the stable–unstable dimension, as for the internal–external dimension (see Darley and Goethals, 1980). Russell’s (1982) Causal Dimension Scale deals with exactly this problem of translating the perceiver’s causal attributions into causal dimensions (e.g. Weiner’s locus, stability and controllability dimensions). Having made their attributions, respondents are asked to rate their perceived causes on a set of scales to assess separately each of Weiner’s three dimensions. In this manner researchers can ascertain, for example, whether effort was used as an unstable cause, and whether this view varied as a function of the social categorization of the target.

(2) Not only can the meaning of perceived causes vary across perceivers and situations, but they can be interdependent (Heider, 1958; Weiner, 1983). For this reason researchers may have lost valuable information by computing separate analyses for each of the four main attributions. By including type of attribution as a repeated-measures factor in the analysis, one can test for the differences between the ratings of the four causes — for example, is ingroup-success attributed more to ability and effort than to luck and task factors? This contrast is considered essential in testing the self-serving bias at the interpersonal level, yet this information is ignored in every one of the published studies. This kind of analysis would indicate how subjects explain group members’ outcomes in terms of configuration of causes (see Hewstone, Gale and Purkhardt, 1990, Study 1, for an application of this method).

(3) Researchers could analyse open-ended responses and expand the ecological
validity of intergroup attribution, as has been done in interpersonal studies (e.g. Cooper and Burger, 1980; Frieze, 1976). While open-ended procedures are time-consuming and weaker in terms of psychometric criteria (Elig and Frieze, 1979), they may lead to the identification of new perceived causes and new theoretical ideas (see Hewstone et al., 1990; Sousa and Leyens, 1987).

(4) Finally, given the impressive body of research on the affective consequences of interpersonal achievement attributions (see Weiner, 1986), it is surprising that no such research exists at the intergroup level. According to Weiner, the locus dimension is of central importance in affective consequences: success attributed internally results in greater self-esteem (pride) than success attributed externally; failure attributed internally results in lower self-esteem than failure attributed externally. Does this relationship hold for vicarious attributions for another ingroup member? And what, if any, affective consequences follow from ingroup-favouring and outgroup-derogating attributions? The role of emotions within the context of intergroup behaviour has received little attention (see Dijker, 1987; Pettigrew, 1986), but the attributional approach offers a promising avenue for future research.

**GROUP DIFFERENCES**

I have so far reviewed the evidence for intergroup attributions concerning behaviour and the outcomes, or consequences, of behaviour by members of the ingroup and outgroups. As some of the major theorists in the area of intergroup relations have pointed out, however, people also make attributions about differences between groups and social positions occupied by groups, what one might call ‘social facts’. Thus Sherif (1966) pointed out that white Americans may see black people’s inferior social position as ‘caused by’ their being ‘uneducated, poverty stricken, superstitious, disease ridden’ (p.110) and Campbell (1967) identified the tendency to perceive highly visible racial (rather than multiple, diffuse and complex environmental) causes for group differences. Despite these relatively early insights, there have been only three published articles that have examined attributions for group differences.

Hewstone and Jaspars (1982b) compared the explanations for institutional racism given by black (West Indian) and white adolescents. Accurate information was provided concerning four specific racial differences between black and white people in Britain (rates of arrest, unemployment, educational achievement and occupational status). Respondents read each item and rated two attributions referring to negative dispositions of black people and discrimination by white authority figures, respectively. For example, ‘The unemployment rate among young black people is 17 per cent, among young white people it is 9 per cent. (a) Is this because black people are too lazy to work? (b) Is this because white bosses discriminate against black people? (Hewstone and Jaspars, 1982b, p.5). Black respondents attributed discrimination less to personal characteristics of blacks than did white respondents on all four items; and they attributed discrimination more to white authority figures than did white respondents on two items. When they had an opportunity to discuss their attributions with another ingroup member, black respondents further polarized their low attributions of the cause to personal characteristics of blacks. This pattern of attributions for group differences that reflect negatively on the ingroup can be seen as a further instance of group-serving causal attributions. Gurin, Gurin, Lao and
Table 3. Intergroup attributions for success and failure

<table>
<thead>
<tr>
<th>Study</th>
<th>Core design*</th>
<th>Task</th>
<th>Subjects†</th>
<th>Success</th>
<th>Outcome</th>
<th>Failure</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Ethnicity</td>
<td>Within</td>
<td>Extra-sensory</td>
<td>White male students:</td>
<td>Ability</td>
<td>Effort</td>
<td>Luck</td>
</tr>
<tr>
<td>Green and Rosenfield (1979)‡</td>
<td>perception</td>
<td>High ethnocentrism</td>
<td>+ = $/+ = + = = = =</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Low ethnocentrism</td>
<td>- = $/- = - = = = =</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Hewstone, Wagner and Machleit (1989)</td>
<td>Within</td>
<td>Academic</td>
<td>Junior high school</td>
<td>= = = =</td>
<td>= = = +</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td>students:</td>
<td>Germans</td>
<td>= = = =</td>
<td>= = = +</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Turks</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td>Whitehead, Smith and Eichhorn (1982)</td>
<td>Between</td>
<td>Academic</td>
<td>High school students:</td>
<td>= = = +</td>
<td>= = = +</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Black</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Athletic</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Black</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>White</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td>(b) Gender</td>
<td>Between</td>
<td>Students:</td>
<td>Masculine</td>
<td>Female</td>
<td>= **</td>
<td></td>
</tr>
<tr>
<td>Deaux and Emswiller (1974)</td>
<td></td>
<td></td>
<td>Male</td>
<td>= **</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feminine</td>
<td>Female</td>
<td>=</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>=</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Feather and Simon (1975)‡</td>
<td>Between</td>
<td>Occupational</td>
<td>High school students:</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>= = = =</td>
<td>= = = =</td>
<td>= = =</td>
</tr>
<tr>
<td><strong>Feldman-Summers and Kiesler (1974)</strong></td>
<td><strong>Experiment 1</strong>:</td>
<td><strong>Problem-solving</strong></td>
<td><strong>Students</strong>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Within</strong></td>
<td></td>
<td>Female</td>
<td>= ↔ = = = ↔ = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>= ↔ = = = ↔ = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Experiment 2</strong>:</td>
<td><strong>Between</strong></td>
<td><strong>Successful</strong></td>
<td><strong>Students</strong>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>physician</strong></td>
<td>Female</td>
<td>= + = +</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>+ + = +</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Stephan and Woolridge (1977)</strong></td>
<td><strong>Within</strong></td>
<td><strong>Masculine</strong></td>
<td><strong>Students</strong>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Female</td>
<td>= = = = = = = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>= = = = = = = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>(c) Other</strong></td>
<td><strong>Yarkin, Town and Wallston (1982)</strong></td>
<td><strong>Between</strong></td>
<td><strong>Successful</strong></td>
<td><strong>White students</strong>:</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td><strong>banker</strong></td>
<td><strong>Female</strong></td>
<td>= = = = = = = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Male</strong></td>
<td>= = = = = = = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Hewstone, Jaspars and Lalljee (1982)</strong></td>
<td><strong>Within</strong></td>
<td><strong>Academic</strong></td>
<td><strong>High school students</strong>:</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>Private school</strong></td>
<td>= = = = + + = =</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td><strong>State school</strong></td>
<td>= = = = = = = $/$+</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Ho and Lloyd (1983)</strong></td>
<td><strong>Between</strong></td>
<td><strong>Problem-solving</strong></td>
<td><strong>Female students</strong></td>
<td>= = = = = = = =</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

A plus sign (+) indicates an ingroup-favouring/outgroup-derogating attribution; a minus sign (-) indicates an ingroup-derogating/outgroup-favouring attribution; an equals sign (=) indicates no significant difference between ingroup and outgroup attributions; § indicates a marginally significant difference; the sign ↔ denotes agreement across groups concerning a difference that cannot be interpreted as an intergroup effect; and a blank indicates the absence of data.

* Core design refers to the manipulation of categorization and outcome variables.
† Subjects relates to the independent variable analysed; subjects were male and female unless specified.
‡ Post-hoc tests on the interaction were not reported.
** A single ability-luck dimension was used.
†† Cheating was perceived as a more important cause of female vs. male success.
+++ Alleged cheating leading to failure was perceived as more important for male versus female targets.
Beattie (1969) reported that young blacks in the U.S. who made similar attributions (judging economic or discriminatory factors more important causes of their social position than individual skill and personal qualities) often aspired to jobs that were nontraditional for blacks and were more ready to engage in collective action than were blacks who did not make such attributions.

The realism of the previous study did not allow for the examination of attributions concerning intergroup differences that were favourable and unfavourable to each group of respondents. Yet, when realistic differences between groups are to be explained, these differences might favour the ingroup or outgroup. Thus, while attributions might serve the interests of the ingroup or outgroup, social facts or intergroup differences to be explained may themselves favour either group. Hewstone, Bond and Wan (1983) clarified this distinction by referring to group-serving attributions and group-favouring facts. They asked students from two rival universities (the higher status Hong Kong University, H.K.U., and the lower status Chinese University, C.U., in Hong Kong) to explain eight social facts relating to differences between the two groups; of the two available attributions for each fact, both were internal, but one was ingroup-serving and the other was outgroup-serving. Both open-ended and rating-scale dependent measures revealed group-serving attributions, which were clearest on the rating-scale attributions. There were, in fact, two group-serving effects, which were found in the presence of an ingroup or outgroup experimenter and for facts favouring either group. First, the lower status C.U. students gave higher ratings on the C.U.-serving attributions than did students from the other group. Second, both groups of students gave higher ratings on ingroup-serving than outgroup-serving attributions. It is apparently not necessary that an intergroup difference favours the ingroup rather than the outgroup, because unwelcome aspects of reality can be avoided by an appropriate choice of explanation.

The third, and final, study returned to gender-linked attributions. Bond, Hewstone, Wan and Chiu (1985, Experiment 1) examined males’ and females’ attributions for sex-typed behaviours when faced with an interviewer of the same or opposite sex, and in the presence or absence of a same-sex audience. Hong Kong-Chinese students were asked to make attributions for three male-typed and three female-typed behaviours; of the two available internal attributions for each behaviour, one was ingroup-serving and the other was outgroup-serving. Pretesting ensured that the facts were perceived as being both equally true and equally desirable by both males and females, and that explanatory traits were rated equally positive by both groups. For male behaviours, there were no significant interaction effects involving sex of subjects. Instead, there was a strong tendency for males and females to endorse the male-serving attributions more strongly than the female-serving attributions. For female behaviours, however, females rated female-serving attributions higher than did males, and higher than they did male-serving attributions, but only when the same-sex audience was absent. Males rated male-serving attributions similarly to females, but their ratings were higher for male-serving than female-serving attributions, again in the audience-absent condition. Overall, then, both groups showed some evidence of group-serving bias (rating ingroup-serving attributions higher than outgroup-serving attributions), but this tendency was weakened in front of an ingroup audience. Bond et al. (1985, Experiment 2) then carried out a conceptual replication of this study in the U.S., where the women's liberation movement has been stronger historically (cf. Kalmuss, Gurin and Townsend, 1981). As expected, this study yielded stronger
Table 4. Intergroup attributions for group differences

<table>
<thead>
<tr>
<th>Study</th>
<th>Core design*</th>
<th>Subjects</th>
<th>Higher ratings of ingroup versus outgroup-serving attributions</th>
<th>Effects Higher ratings of ingroup-serving attributions by ingroup versus outgroup</th>
</tr>
</thead>
<tbody>
<tr>
<td>(a) Ethnicity Hewstone and Jaspars (1982)</td>
<td>Within</td>
<td>Black male adolescents†</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>(b) Gender Bond et al. (1985)</td>
<td>Experiment 1 (Hong Kong)</td>
<td>Within</td>
<td>Students: Female</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td>Experiment 2 (U.S.A.)</td>
<td>Within</td>
<td>Female</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Male</td>
<td>=</td>
</tr>
<tr>
<td>(c) Other Hewstone, Bond, and Wan (1983)</td>
<td>Within</td>
<td>Students:‡ Higher status (H.K.U.)</td>
<td>+</td>
<td>=</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>Lower status (C.U.)</td>
<td>+</td>
</tr>
</tbody>
</table>

A plus sign (+) indicates an ingroup-favouring/outgroup-derogating attribution; an equals sign (=) indicates no significant difference.
* Core design refers to ratings of ingroup- and outgroup-serving attributions.
† Responses of black and white adolescents were contrasted, but for the latter group none of the available responses constituted 'ingroup-serving' attributions.
‡ H.K.U. denotes Hong Kong University, C.U. denotes Chinese University of Hong Kong.

intergroup effects. American students showed group-serving bias across both male as well as female facts, and when the same-sex audience was absent or present.

The results of the three published articles on intergroup attributions for group differences are summarized in Table 4. Two types of effect are distinguished: higher ratings of ingroup-serving versus outgroup-serving attributions; and higher ratings of ingroup-serving attributions by the ingroup compared with the outgroup. Both effects are found in all studies, but the former appears to be the stronger and more consistent one.

DISCUSSION

From the literature reviewed (which includes all the published work known to the author) there is some support for each of Pettigrew's (1979) five main predictions, although there is also a need for more systematic future research: (1) There is a tendency to attribute negative outgroup behaviour to personal causes within the actor. When found, this tendency takes the form of a categorization effect (there is more internal attribution for a negative act by an outgroup than an ingroup member), rather than an outcome effect for outgroup actors. Contrary to Taylor and Jaggi's hypothesis, there is generally not more internal attribution for negative than
positive acts by an outgroup member. There is also a tendency for outgroup failure to be attributed more to lack of ability than is ingroup failure.

(2) For positive acts, Pettigrew's predictions cannot be tested precisely, because none of the available studies has included attributions to 'the exceptional case'. For the remaining three causes, there is some support. Studies on attributions for positive outcomes have sometimes reported less internal attribution for a positive act by an outgroup than an ingroup member. There is also evidence that outgroup success is sometimes explained away in terms of good luck, high effort or an easy task.

(3) There is evidence of group-serving attributions for subjects in many studies, but while effects can be stronger for prejudiced individuals (Greenberg and Rosenfield, 1979), this effect has not always been found (Hewstone et al., 1989).

(4) The prediction that group-serving attributions are more likely when perceivers are aware of their own and the actor's group memberships is supported by the weakness or absence of effects when manipulations are weak or unconvincing (Ho and Lloyd, 1983; Winkler and Taylor, 1979), and by stronger effects when minority groups become aware of intergroup disparities (Hewstone et al., 1983).

(5) Group-serving attributions do vary across intergroup situations (Bond et al., 1985; Hewstone and Ward, 1985), and may be stronger when the groups have histories of intense conflict and possess negative stereotypes and when group differences covary with national and socioeconomic differences (Hewstone and Ward, 1985, Experiment 1; Taylor and Jaggi, 1974). The bias can, however, be extinguished, even reversed, for members of subordinate or low status groups (e.g. Deaux and Emswiller, 1974; Hewstone and Ward, 1985, Experiment 1).

Notwithstanding the general support for Pettigrew’s predictions, more complete understanding of intergroup attributions would benefit from closer attention to the cognitive and motivational bases of these effects and the methodological shortcomings of the research to date.

Cognitive and motivational bases

The influence of cognitive versus motivational factors on self-serving attributions has received detailed discussion at the interpersonal level (e.g. Bradley, 1978; Miller and Ross, 1975), although Tetlock and Levi (1982) have concluded that it is impossible to choose between the two viewpoints. It is, however, useful to point to some of the most obvious factors of each type, with a view to stimulating future research.

The most basic cognitive factor is the salience of group membership; group membership must be noted, consciously or unconsciously, by perceivers in order to affect causal attributions. Taylor and Fiske (1978) have summarized evidence that perceptually salient information is overrepresented in causal explanations; for example, a single black person in a small group of otherwise white people is perceived as disproportionately causal in the group's performance (Taylor, Fiske, Etcoff and Ruderman, 1978; cf. Oakes, 1987). Once group memberships are perceived, they tend to be linked to expectancies (Deaux, 1976) and schemata (e.g. Fiske and Taylor, 1984) associated with social categories (stereotypes).

In explaining expectancy-confirming or schema-consistent behaviour, Pyszczynski and Greenberg (1981) have suggested that people may simply rely on the dispositions implied by the stereotype, without even considering other possible causal factors.
Furthermore, Kulik (1983) has reported that situational factors, that would in other cases be seen as compelling explanations, were ignored in favour of dispositional factors as causes of expected behaviour. In contrast, perceivers are thought to engage in more thorough attributional processing of behaviours that are expectancy-disconfirming or schema-inconsistent (Pyszczynski and Greenberg, 1981). Behaviour is apt to be situationally attributed and settings normally considered to inhibit the observed behaviour can be judged instead as causal (Kulik, 1983). As several authors have pointed out (Alloy and Tabachnik, 1984; Cooper and Fazio, 1979; Hamilton, 1979) this process would protect stereotypes about the outgroup from change. From this attributional perspective it is easy to understand why attempts to reduce intergroup hostility so rarely generalize beyond specific encounters: researchers must ensure that counter-stereotypic behaviour cannot be explained away in terms of situational demands or individual exceptions to the rule (Hewstone, 1988, 1989; Hewstone and Brown, 1986). To understand these processes, future research should (1) measure expectancies and correlate them with attributions; and (2) investigate measures such as processing time and memory for consistent and inconsistent outcomes and relate them to attributions.

With reference to motivational factors, intergroup biases in attribution can be seen as part of a much wider process — the search for positive social identity. According to social identity theory (Tajfel and Turner, 1979), individuals define themselves to a large extent in terms of their social group memberships and tend to seek a positive social identity (or self-definition in terms of group membership); this identity is achieved by intergroup comparisons focused on the establishment of positively valued distinctiveness between one's own and other groups. From this perspective group members could use their attributions to achieve or enhance a positive social identity (e.g. by attributing positive ingroup, or negative outgroup, acts to internal, stable and/or controllable causes), or to protect that identity (e.g. by attributing negative ingroup, or positive outgroup, acts to external, unstable and/or uncontrollable causes).

Although social identity theory provides a plausible account of intergroup attribution results, three main sorts of empirical evidence are lacking. First, we need to investigate the relationship between ingroup-serving (or outgroup-derogating) attributions and self-esteem. As Abrams and Hogg (1988) have argued, self-esteem can be both a dependent and independent variable in relation to intergroup behaviour: it is a product of specific forms of intergroup behaviour and perception (including, presumably, causal attributions) as well as a motivating force for those behaviours and perceptions. At present, however, there is little evidence of a straightforward relationship between self-esteem and intergroup discrimination, a problem which further attributional research could help to resolve. Second, we need to study the relationship between ingroup identification and intergroup attribution (see Brown, Condor, Matthews, Wade and Williams 1986), for an appropriate method) to address Pettigrew's (1979) fourth hypothesis. Third, social identity theory makes predictions about the variables that influence when minority groups will challenge dominant groups — perceptions of illegitimacy and instability — and Taylor and McKirnan (1984) identified causal attributions as one of the key processes in their model of how intergroup relations change over time. Some consistent evidence concerning the relationship between these perceptions and attributions has been reported (Bond et al., 1985; Hewstone et al., 1983), but it is still not clear what, if any, causal
relationship exists between them. Future work should therefore analyse (using experimen-
tal and correlational techniques) whether causal attributions determine, or merely
reflect, intergroup relations.

While it may not prove possible to choose between cognitive and motivational
bases of intergroup attribution (cf. Greenberg and Rosenfield, 1979), the fact that
so many potential factors exist underlines the pervasiveness of intergroup attributions
and hence the need to gain a fuller understanding of the phenomena.

Methodological shortcomings

Although there is some empirical support for the 'ultimate attribution error', generali-
zations are limited by five main methodological shortcomings that should be dealt
with in future research.

(1) Experimental design

As is made clear in the summary tables of findings, researchers have reported signifi-
cant intergroup effects using both within- and between-subjects designs. Although
it is generally acknowledged that within-subjects designs have the advantage of
removing subject variance from error terms used to test treatment effects, they may
have disadvantages in terms of contexts that limit generalization of results and in
terms of their transparent hypotheses (Greenwald, 1976). To some extent these prob-
lems can be dealt with by appropriate counterbalancing, but we might expect stronger
intergroup attributional bias in within-subjects designs, because the literature on
salience shows that social categorization becomes more salient when two or more
categories appear simultaneously, than when not (see Oakes, 1987). On the other
hand, Greenwald argued that the within-subjects design can have greater external
validity, because it contains confounds that are actually found in real life (e.g. sequen-
tial judgements of ingroup and outgroup actors). Future research should pay closer
attention to these issues and should compare within- and between-subjects designs
within the same study.

(2) Statistical analysis

The summary tables also make clear that several studies have not analysed significant
interactions (e.g. categorization \times \text{outcome}) in detail and thus failed to specify which
simple effects are significant (e.g. outcome effects for ingroup and outgroup actors,
respectively). The appropriate post hoc tests are well-known and should always be
reported (e.g. simple main effects; see Winer, 1971).

(3) Independent variables

One of the advantages of studies (when different levels of outcome or achievement
are compared for ingroup and outgroup members) is that we can compare the effects
of ingroup favouritism and outgroup derogation (see discussion of Hewstone and
Ward, 1985, above). A more precise understanding would be gained, however, by
including a control condition which contained neither group label nor information
relating to ingroup or outgroup membership. This condition is too rarely included
in studies of intergroup perceptions (cf. Bornewasser, 1985) but would provide a useful baseline.

(4) Dependent variables

Pettigrew (1979) argued that future studies should include his complete set of potential attributions for positive outgroup behaviour. More generally, research should avoid forced-choice measures and the limited distinction between internal and external attribution. It should also undertake more detailed pilot work and content-analysis of open-ended responses to identify what attributions are relevant to a particular domain (e.g. Hewstone et al., 1990, Study 2). A potentially fascinating linguistic analysis of intergroup attribution is offered by Semin and Fiedler's (1988) Linguistic Category Model. Research by Maass, Salvi, Arcuri and Semin (1989) has shown that socially desirable/ingroup and socially undesirable/outgroup behaviour are encoded at a higher level of abstraction, and that socially undesirable/ingroup and socially desirable/outgroup behaviours are encoded at a low level of abstraction. The precise relationship between attributional and linguistic biases at the intergroup level has yet to be shown, but Maass et al.'s methodology offers a sophisticated and unobtrusive method for coding attributional (as well as other) biases from open-ended responses.

(5) Stimulus materials

Pettigrew (1979) also noted that subjects in most experiments were 'removed from the behaviour itself' (p. 473). The vast majority of the research reviewed used simple printed materials and it is high time to move from vignettes to videotapes (e.g. Duncan, 1976). As Pettigrew also argued, we need direct tests of the 'ultimate attribution error' in face-to-face interactions between perceiver and actor. In all fairness, these criticisms could equally well be addressed to much of the published research on intergroup perceptions. Nonetheless, if these questions are dealt with in future research they will lead to a more complete and valid body of research on intergroup attribution.

CONCLUSION

I have reviewed 19 publications (some containing multiple studies, almost all containing multiple groups) that attempt to document intergroup attributional bias or group-serving attributions. Although the evidence is not overwhelming, there is some support for Pettigrew's (1979) notion of an 'ultimate attribution error' and each of his five hypotheses (see preceding section). Group members' attributions do typically favour ingroup rather than outgroup members, when explaining positive and negative outcomes, success and failure, or group differences. These group-serving attributions are, however, limited to specific attributional dimensions. These intergroup attributions may help to form and maintain stereotypes, impede attempts at the reduction of intergroup hostility and even, ultimately, form the basis of an ideology that ascribes group differences to genetic characteristics. For all these reasons, social psychologists need to acknowledge, and understand, this bias.
More critically, the data do not support Pettigrew’s overstated name for this set of hypotheses. First, as Tables 1, 3 and 4 (above) reveal, ingroup-favouring/outgrouping-derogating attributions are far from ubiquitous, let alone ultimate. Second, this pattern of attribution refers to a bias not an error. We should therefore prefer a more modest label, such as ‘intergroup attributional bias’.

REFERENCES


