Group commitment as a moderator of attributional and behavioural responses to power use

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Abstract

This study used 50 Natural Science and English Literature students who held differential behavioural expectations of ingroup and outgroup members to investigate evaluative, attributional and behavioural responses to power use in an experimental research paradigm. It was hypothesized that subordinates interpret frequent power use by a superior differently depending on whether it is consistent or inconsistent with previous expectations. Frequent power use results in decreased satisfaction and negative evaluations of the superior. Attributional ratings indicated that when an outgroup member engaged in frequent power use, this negatively evaluated behaviour was attributed to the superior’s group membership, and resulted in decreased cooperation on the part of the subordinate. To the extent that frequent power use of an ingroup member was attributed to external circumstances, subordinates maintained a sense of commitment to the ingroup superior, which resulted in displays of cooperative behaviour. © 1998 John Wiley & Sons, Ltd.

INTRODUCTION

Although theoretical and empirical efforts in power research have resulted in substantial knowledge about power exertion (cf. Mulder, 1977), sources of power (cf. French & Raven, 1959), and use of different power tactics (cf. Kipnis, 1972; Kipnis, Schmidt, Price, & Stitt, 1981; Yukl & Falbe, 1991), relatively little is known...
about the way subordinates evaluate such power use, or the way this may affect subsequent collaborative efforts. Yet it is important to bear in mind that the success of any power tactic depends as much if not more on the way subordinates respond to influence attempts than on the nature of the power exertion (cf. Cable, 1988; Hinkin & Schriesheim, 1990; Vanderslice, 1988). Indeed, it has recently been argued that less powerful people closely monitor those in power, and being in a dependent position, are quite motivated to acquire information about their superiors (cf. Fiske & Dépret, 1996).

An important result of previous research efforts is that subordinates generally responded negatively to frequent power use, and seemed to be more content and cooperative when they were granted more autonomy (cf. Baron & Greenberg, 1990; Tjosvold & Okun, 1979; Tjosvold, 1981; Williams & Hazer, 1986). However, given that, with asymmetrical power positions, power exertion is a fact of life in most organizations, an important question becomes which factors determine whether subordinates will accept or resist the resulting loss of autonomy. Already in the classic taxonomy of French and Raven (1959), with referent power, commitment to or identification with the more powerful person is proposed as an important aspect of power relations (see also Veen, 1982). In a similar vein, theoretical and empirical work has uncovered identification of the subordinate with the leader as a critical aspect of charismatic leadership (cf. House, 1977; see also the Leader–Member exchange model of leadership, cf. Dansereau, Graen, & Haga, 1975; Forret & Turban, 1994; Graen & Scandura, 1987). Specifically, people appear to be more likely to display cooperative behaviour as they feel more committed to their superior (Becker & Billings, 1993). Accordingly, from their empirical investigation, Tjosvold, Andrews and Struthers (1992) conclude that the quality of the relationship between superior and subordinate is a more important determinant of effective leadership than the kind of power tactic employed. A similar idea underlies Fiedler’s contingency theory of leadership, in the sense that the effectiveness of a given leadership style depends on formal power differences as well as the quality of the relationship between the leader and subordinates (Fiedler, 1978).

Thus, theoretical notions as well as empirical observations seem to point to the importance of the extent to which subordinates are granted autonomy, as well as the extent to which they identify with their superior as possible determinants of people’s responses to a subordinate power position (see also Dépret & Fiske, 1993; Fiske & Dépret, 1996). However, as research to date has either focused on effects of power use or on effects of commitment, it is as yet unclear whether these effects occur independently of each other or whether they might interactively determine subordinates’ responses. For the present investigation, we propose that when people share

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1 In organizational psychology, affective commitment is considered an important determinant of people’s behaviour at work, such as their effort, performance, and tendency to leave the organization (for an overview, see Mathieu & Zajac, 1990). In the social psychological literature on intergroup relations, similar relations are predicted and observed between ingroup identification on the one hand, and effort exerted for the benefit of the group as well as attempts to leave the group on the other hand (e.g. Ellemers, Spears, & Doosje, 1997). Indeed, for our present purposes it would seem that affective commitment and ingroup identification might be used interchangeably, in the sense that there is considerable overlap in the way these concepts are defined as well as their hypothesized and observed behavioural consequences. However, in social psychological theory more attention has been devoted to the specific question of how identification may influence behavioural interpretations. Therefore, we will use literature on ingroup identification in intergroup relations in order to derive our hypotheses for the present investigation, although we will continue to refer to commitment to one’s superior as a theoretical concept of interest.
a common group affiliation, the resulting feelings of commitment influence the way subordinates interpret leadership behaviour or instances of power exertion, and that such differential interpretations of similar leadership behaviour mediate leadership effectiveness. Indeed, results from a previous study (Bruins, Ellemers, & De Gilder, 1996) offered some preliminary evidence that behavioural interpretations and commitment to one’s superior may interactively determine the responses of people in a subordinate position to power exertion by the superior. The present study aims to address this issue in more detail.

In the present research, we aim to extend our knowledge about the way people respond when they are subject to power exertion, by explicitly focusing on subordinates’ evaluative, attributional, and behavioural responses to power use. Other than previous investigations of power processes, which mostly rely on correlational data obtained in field settings (cf. Hinkin & Schriesheim, 1990; Kipnis & Cosentino, 1969; Veccio & Sussmann, 1991; Yukl, 1989; Yukl & Falbe, 1991), we have opted for an experimental approach that would enable us to study causal relations between theoretically important variables, while keeping less relevant situational aspects constant. In line with previous conceptualizations (cf. Fiske, Morling, & Stevens, 1996), we define power as a form of asymmetrical interdependence, in the sense that the more powerful person controls the outcomes of a less powerful other while this less powerful other does not have complete control over his or her own outcomes. As the success of a cooperation between people of unequal power largely depends on the less powerful person, we are mainly interested in the behavioural responses of those in a subordinate position, that is, in the extent to which the less powerful person is prepared to display a collaborative effort after power use by his or her superior.

**Power Use and Attribution Processes**

In their recent analysis, Fiske and Dépret (1996) argue that social identifications may play an important role in the way information about powerful others is processed. Indeed, in the social psychological literature, there is substantial empirical evidence showing that people tend to perceive the ingroup more favourably than relevant outgroups (for overviews see Messick & Mackie, 1989; Hinkle & Schopler, 1979), and generally expect more cooperative behaviour from their fellow ingroup members than from outgroup members (Moy & Ng, 1996; Rabbie, 1991). In view of our present research it then seems relevant to assess whether sharing a common group affiliation with one’s superior, which supposedly elicits particular behavioural expectations, results in differential interpretations of the actual behaviour displayed by the superior. Furthermore, we argue that these behavioural interpretations may in turn affect the extent to which subordinates are willing to exert cooperative effort towards their superior.

When we take a closer look at the way people perceive and interpret the behaviour of ingroup and outgroup members, a consistent pattern seems to emerge. From the literature on stereotyping and intergroup relations, it would seem that people attend more to and have better recall for positive than negative ingroup information (cf. Howard & Rothbart, 1980), and are generally motivated to maintain a positive image of the ingroup (cf. Ellemers & Van Knippenberg, 1997). Accordingly, in his summary of research on group level attributions, Hewstone (1990) convincingly

argues that negative behaviour of ingroup members is likely to be ‘explained away’ by attributing it to external circumstances. By contrast, when outgroup members display such negative behaviour, people should be more inclined to make internal attributions (see also Maass, Salvi, Arcuri, & Semin, 1989). When we apply this reasoning to our present investigation in which we look at responses to frequent versus infrequent power use by an ingroup or outgroup superior, we may assume that frequent power use resulting in a loss of autonomy on the part of the subordinate can be considered an instance of negative behaviour, and is therefore less likely to be expected from an ingroup than from an outgroup member. On the basis of the above argument, we would predict that subordinates will tend to attribute frequent power use of an ingroup member to external circumstances, while an internal attribution is more likely to be made when an outgroup member engages in frequent power use (cf. Thomas & Ravlin, 1995). Accordingly, subordinates are expected to display more cooperative behaviour in response to frequent power use by an ingroup superior as compared to an outgroup superior.

However, when we look at how people attribute the behaviour of group members, it may not be sufficient to measure the internal versus external locus of attributions only. In addition to the locus of attributions, it is also important to explicitly assess the level at which internal attributions are made (cf. Oakes, Turner, & Haslam, 1991). Specifically, in the case of group members, an internal (rather than external) attribution may either refer to the person as a unique individual (that is, as an exceptional group member), or to the person as a typical group member (see also Fiske & Neuberg, 1990). Assuming that people generally hold more positive behavioural expectations from ingroup than outgroup members, with respect to this dimension we would predict that expectancy-consistent behaviour (that is, low power use by an ingroup member or high power use by an outgroup member) is more likely to be attributed to the superior as a member of his/her group, while expectancy-inconsistent behaviour (that is, high power use by an ingroup member or low power use by an outgroup member) might rather be attributed to specific characteristics of this particular individual. In this latter case, there is no reason to assume that subordinates would behave more cooperatively towards an ingroup than an outgroup superior who has engaged in frequent power use. Thus, when we assess the level as well as the level at which attributions are made, an important question is whether frequent power use by an ingroup member will be attributed to external circumstances (so that cooperative behaviour on the part of the subordinate is maintained), or whether it is ascribed to specific characteristics of this particular ingroup member (which is likely to imply a loss of cooperative effort towards this superior).

**Group Membership and Ingroup Identification**

In order to predict more specifically how people will interpret power use by an ingroup or outgroup member, it is important to bear in mind that in the situation we want to study, participants are personally affected by the behaviour of their superior. Thus, their responses may differ from those obtained in studies where participants had to rate the behaviour of ingroup and outgroup members as detached observers. Indeed, other researchers before us have pointed out that in the specific case of an asymmetrical power distribution, motives other than the desire to maintain a positive
image of the ingroup may play a role (cf. Fiske, 1993). For instance, Fiske et al. (1996) argue that people in a subordinate position do not necessarily display a ‘positivity bias’, nor do they always discount unexpected behaviour of their superior. Instead, these authors suggested that people in subordinate positions might be more motivated to obtain accurate information regarding their superior in order to predict his/her future behaviour (‘accuracy motive’). Due to the importance of this motive, it may well be the case that more attention is devoted to unexpected behaviour than to expectancy-consistent information. As a result, negative behaviour of an ingroup superior may have a relatively large impact on the resulting impression (cf. the ‘Black Sheep Effect’, Marques & Paez, 1994). A similar line of reasoning is followed by Lind and Tyler (1988; Tyler & Lind, 1992), who emphasize that when people perceive an authority as belonging to the same social group, they are especially motivated to maintain the conviction that this authority will treat them fairly. According to their argument, again this implies that although people are generally reluctant to acknowledge that an ingroup member displayed negative behaviour towards them (cf. Hewstone, 1990), when someone has power over oneself, negative behaviour may undermine the quality of the relationship, particularly when it is displayed by an ingroup authority (see also Smith & Tyler, 1996).

Thus, although others before us have argued that those in a subordinate position may interpret the power that is exerted over them differently depending on whether the superior is an ingroup or an outgroup member, exactly how behavioural interpretations will be affected as yet remains unclear. Specifically, it would seem that frequent power use by an ingroup member may either be discounted (i.e. by attributing it to external circumstances because of positivity biases) or may have a disproportionate negative effect on subsequent cooperativeness (because accuracy motives result in an attribution to personal features of this particular group member). An important question then becomes what determines which of these two responses is most likely to occur.

A possible answer to this problem may be found when we take a closer look at identification with or commitment to one’s superior as a variable that may affect subordinates’ responses to power use. Importantly, the literature on intergroup causal attributions only distinguishes between responses to ingroup versus outgroup members. Accordingly, we have assumed that people will interpret the same behaviour differently depending on whether it is displayed by an ingroup or outgroup superior. However, recent research on intergroup relations has revealed that strength of identification with a particular ingroup (or level of group commitment) moderates the way group members respond to negative information about members of their group. In contrast to people who feel little involvement with their group, especially highly committed group members seem to maintain solidarity with their fellow group members when faced with group threat (Spears, Doosje, & Ellemers, 1997; Ellemers, Spears, & Doosje, 1997). Specifically, when they are informed about negative attributes of ingroup members, those who identify strongly with their group maintain an homogeneous group image, while group members with a lesser sense of ingroup identification are more inclined to focus on intragroup differences (Doosje, Ellemers, & Spears, 1995; Ellemers & Van Rijswijk, 1997).

If we may extend the implications of these findings to our present investigation of power processes, it might also be the case that the extent to which people identify with their ingroup moderates the way they interpret the behaviour of and respond to an
ingroup compared to an outgroup superior. Therefore, we will explore whether people who identify strongly with their group are most inclined to maintain a positive image of an ingroup superior and consequently attribute frequent power use by an ingroup member to external circumstances (i.e. show a positivity bias). By contrast, low identifiers might be more prepared to acknowledge negative behaviour on the part of an ingroup member, which may lead them to ascribe frequent power use of an ingroup superior to particular features of this specific group member (cf. the accuracy motive).

The Present Study

To summarize the argument we have developed so far, we expect that subordinates are generally more likely to respond favourably to superiors who grant them relative autonomy than to superiors who engage in frequent power use (hypothesis 1). However, a common group affiliation is predicted to affect subordinates’ attributional ratings of the superior’s behaviour. In these attributional ratings, we want to distinguish between on the one hand the **locus** of the attribution (i.e. internal versus external), and on the other hand the **level** of attribution (i.e. individual versus group). The prediction we derived from the literature on intergroup attributions, was that expectancy-inconsistent behaviour (i.e. high power use by an ingroup member or low power use by an outgroup member) might be attributed to external circumstances rather than internal dispositions (hypothesis 2a). On the basis of arguments proposed by Fiske et al. (1996) and by Lind and Tyler (1988; Tyler & Lind, 1992) and in line with Fiske and Neuberg’s (1990) continuum model, we also argued that unexpected behaviour, such as frequent power use of an ingroup member or infrequent power use by an outgroup member, may well be attributed at the individual rather than the group level (hypothesis 2b). In view of these different possible hypotheses, we will explore whether level of ingroup identification moderates the kind of attribution people make, in the sense that those who identify strongly with their group are most inclined to make external rather than internal attributions for frequent power use by an ingroup member (cf. hypothesis 2a), while low identifiers might attribute frequent power use of an ingroup superior to specific features of this particular group member (cf. hypothesis 2b). Finally, we predict that these differential attributions will in turn determine subordinates’ cooperative behaviour in response to frequent or infrequent power use by ingroup versus outgroup members (hypothesis 3).

To investigate these theoretical predictions we will use members of different natural groups, who are likely to hold different behavioural expectations of ingroup and outgroup members. Rather than assuming that such differential behavioural expectations exist, we will conduct a **pilot study** to check whether this indeed is the case for the groups in question. In the main study, other members of these same two groups will be used as participants, and the extent to which they identify with their group will be assessed. With members of these natural groups, frequency of power use will be manipulated experimentally in an organizational simulation, in which participants’ group affiliation is counterbalanced across experimental conditions. Evaluative, attributional and behavioural responses will be measured in order to investigate the predicted effects as well as the relations between different dependent variables as proposed in our theoretical analysis.
METHOD

Pilot Study

A pilot study was carried out to find natural groups about which student participants held differential behavioural expectations. Participants in the pilot study were 28 female and 12 male second-year students at the University of Kent majoring in English Literature (N = 16), Natural Science (N = 16) and Law (N = 8). Their mean age was 21.6 years. Because of the size of the population, English Literature and Natural Science students were selected for participation in the main study. Consequently, only the answers of these two student groups will be analysed for the pilot study.

Participants rated the likelihood of the occurrence of 12 behaviours for each of four student groups (English Literature, Natural Science, Law, and Economics). Each behaviour appeared in a sentence describing the way a member of a group (either the ingroup or one of the three outgroups) acted towards a member of the ingroup. For example: ‘An English Literature student overrules decisions made by another English Literature student’, or ‘A Natural Science student helps an English Literature student’. Each statement was rated on a 7-point scale (ranging from 1 = very unlikely to 7 = very likely). Participants always rated the ingroup first. The order in which the three outgroups had to be rated was counterbalanced. Four statements described positive behaviours (English Literature alpha = 0.70; Natural Science alpha = 0.82), four statements were about negative behaviour (English Literature alpha = 0.64; Natural Science alpha = 0.70), and four were filler items that described irrelevant behaviours. Participants also answered six questions assessing their identification with their student ingroup (e.g. I feel strong ties with other English Literature Natural Science students; alpha = 0.89).

Both English Literature and Natural Science students expected positive (English Literature: M = 5.48; Natural Science: M = 6.14) rather than negative behaviour from ingroup members (English Literature: M = 3.88, F(1,29) = 21.79, p < 0.001; Natural Science: M = 3.64, F(1,30) = 62.75, p < 0.001). However, with respect to the outgroup, behavioural expectations were less pronounced. Both English Literature and Natural Science students were somewhat more likely to expect positive (English Literature: M = 4.53; Natural Science: M = 4.33) rather than negative behaviour (English Literature: M = 3.85, F(1,30) = 4.75, p < 0.05; Natural Science: M = 3.18, F(1,29) = 11.81, p < 0.01) from outgroup members. Thus, in line with our theoretical argument, people held positive behavioural expectations about ingroup members, while negative behaviour would be relatively unexpected. Expectations with respect to the outgroup were less pronounced, possibly because the groups in question do not have a history of intergroup conflict. Finally, both English Literature (M = 4.95) and Natural Science students (M = 5.36) clearly identified as members of their student group (mean deviation from the scale midpoint (4) is significant for English Literature (F(1,14) = 8.11, p < 0.01) as well as Natural Science students (F(1,14) = 28.51, p < 0.001)), while there was no difference between the two student groups in terms of strength of identification (F(1,30) < 1, n.s.).
Participants and Design

In the main study, 50 first-year students of the University of Kent participated. Of these participants, 32 were Natural Science students and 18 were English Literature students. Their mean age was 21 years. Participants were recruited during first-year lectures, and were paid £4 Sterling for their participation. In a simulated organization, participants were assigned a subordinate position and collaborated on a stock trading task with a superior who was either said to be an ingroup member or an outgroup member (that is, a Natural Science or an English Literature student, depending on the participants’ group affiliation and the experimental condition). Power use was manipulated by varying the number of times participants’ decisions were allegedly overruled by their superior. This resulted in a 2 (superior’s affiliation: ingroup/outgroup) by 2 (power use: low/high) between-subjects design.

Procedure

Overview

The study was introduced as a study on organizational behaviour. Participants were told that a number of different organization simulations were run at the same time and that each simulated organization consisted of either one, two, or three persons. At each session of the experiment, on average six participants were present. The experiment took place in a room with about 40 computers which were connected with each other via a network. Participants were seated in such a way that they could not see what other participants were doing.

First participants were assigned an identification number and had to indicate their group membership, as Natural Science or English Literature majors. Then they were allegedly paired with an ingroup member or outgroup member with whom they would collaborate in the simulation. Participants were always assigned to the lower power position in the organization. Subsequently, they performed a stock trading task, in which they were either subjected to high or low power use by their alleged partner. After completion of this task, the dependent measures were taken. First, participants were asked a number of questions, then they performed an additional task that was used to assess cooperative behaviour. At the end of the study the participants were fully debriefed, and asked not to discuss the study with others.

Manipulation of Superior’s Group Affiliation

Participants were told that they would be paired with another participant, to form a team of two persons for the organizational simulation. It was further explained that both Natural Science and English Literature students were present. Hence they might either work together with a person from their own group or from the other student group, and the computer would randomly assign them to a partner. Depending on the experimental condition, participants were assigned either to an ingroup or to an outgroup partner, and were asked to write down their partner’s identification number and group affiliation.
Manipulation of Power Use

After the formation of the teams, power differentials were introduced as a natural phenomenon in organizations. Participants were told that they and their partner would be assigned to different power positions, on a random basis. In fact, all participants were allocated to the lower power position. It was explained that their partner, being in the more powerful position, would be responsible for the team performance. Therefore, the superior partner would have to check the subordinate’s decisions and might overrule them. Subsequently, it was explained that teams would collaborate on a trading task, in which decisions had to be made about buying or selling shares of certain stocks. The trading task consisted of 10 different stocks. For each stock, participants had to make a decision to buy or sell, on the basis of a graph depicting recent changes in the value of the stock under consideration. After participants indicated their decision, it was allegedly sent to the superior partner, who either approved or overruled the subordinate’s decision. When the decision was overruled a new decision (allegedly made by the superior partner) was shown on the screen. In the low power use condition subordinates’ decisions on the 10-item stock trading task were overruled twice. In the high power use condition six out of 10 stock decisions were overruled.

Dependent Variables

After the stock trading task was completed, three questions were asked to check whether participants had interpreted the manipulations in the intended way. They were first asked to indicate their own power position and the position of their partner on 7-point scales (1 = very low; 7 = very high). Then participants were asked to indicate to what extent they felt their partner had exerted power over them (1 = not at all; 7 = very much). Subsequently, participants were asked to attribute their superior’s behaviour in terms of locus and level on two bipolar scales. The first scale asked to what extent the superior’s behaviour was caused by internal versus external factors (locus: 1 = personal disposition; 7 = situational circumstances). The second scale pitted group membership against individual characteristics as behavioural explanations (level: 1 = group membership; 7 = individual characteristics).

Then, a series of 11 questions was posed regarding participants’ evaluative responses in terms of their satisfaction, evaluation of the superior, and legitimacy judgements. This set of questions was answered on 7-point scales, ranging from 1 (not at all) to 7 (very much). To measure satisfaction, we asked participants to indicate the extent to which they were satisfied with (1) the trading task they had performed together with their superior, (2) the power position they held, (3) their superior partner, and (4) the cooperation with this superior during the trading task (alpha = 0.93). Participants’ evaluation of the superior was measured by asking them to rate their superior in terms of (1) cooperativeness, (2) likeability, and (3) managerial qualities (alpha = 0.81). Finally, perceived legitimacy was assessed by asking participants to rate the extent to which they felt (1) their partner’s power position was legitimate, (2) their partner had the right to overrule their decisions, (3) their partner’s behaviour in the trading task was appropriate, and (4) their partner’s behaviour was justified (alpha = 0.78).
Behavioural Measure

After they had completed the above dependent measures, participants had to carry out a collaborative task. Their behaviour on this task was used to measure cooperative effort exerted towards the superior partner. The collaborative task was introduced by explaining that the superior partner had to produce an annual report on the results of different stocks. For this purpose, information had to be compiled, involving six different subtasks, that would be presented by the computer. For each subtask participants could decide to either work for themselves, work for the team or not to work on the subtask at all (see also Emerson, 1962). It was explained that participants who decided to work for themselves, would later receive feedback about their own performance on these subtasks. To the extent that they worked for the team their work would contribute to the team’s performance. However, only their partner, being the team supervisor, would be rewarded for good team performance. Finally it was explained that when participants chose not to work at all on a specific subtask this implied that this subtask would not contribute to the team performance, nor to the compilation of individual feedback.

Behavioural Considerations and Identification

After completion of this collaborative task, some further questions were asked to facilitate interpretation of the behaviour participants displayed. Specifically, participants were asked to indicate to what extent their behaviour during the collaborative task had been guided by (1) a desire to achieve a good team performance, (2) a desire to receive accurate feedback about their own ability, and (3) a sense of commitment to their partner. These questions could also be answered on scales ranging from 1 (not at all) to 7 (very much). Finally participants answered the same six questions that were used in the pilot study, to check whether they identified with students majoring in the same subject, and they were asked to state their sex and age.

RESULTS

Manipulation Checks

Participants, who always held the lower power position, indicated that they had less power ($M = 3.23$) than their partners ($M = 6.54$; $t(49) = 14.43, p < 0.001$). Additionally, participants thought they had less power when their partner engaged in frequent power use ($M = 2.34$) than when their partner used their power sparsely ($M = 4.13$; $t(48) = 5.18, p < 0.001$). In line with the intended effect of our manipulations, participants in the high power use condition felt that their partner had exerted more power over them ($M = 5.65$) than participants in the low power use condition ($M = 3.83$; $t(48) = 5.79, p < 0.001$).

The unweighted mean level of identification computed from six items (alpha = 0.87) confirms that participants identified as members of their student group ($M = 5.01$; which deviates significantly from the scale midpoint (4) with $F(1,48) = 34.35$, 564
Since the identification items were administered at the end of the experiment, it is important to note that participants in all four experimental conditions showed similar levels of identification with their natural group ($F$s < 1).

**Evaluative Responses**

We first calculated three unweighted mean scores, for the evaluative questions that were intended to assess participants’ satisfaction, evaluation of the superior, and legitimacy. These three composite evaluative ratings were subjected to a 2 (superior’s affiliation: ingroup/outgroup) by 2 (power use: low/high) MANOVA. This analysis only revealed a multivariate main effect of power use ($F(3,44) = 15.99, p < 0.001$), which was significant at the univariate level for all three measures (see Table 1). Overall, participants held more positive evaluations in the low power use condition than in the high power use condition. Thus, in line with hypothesis 1, they were less satisfied, evaluated their superior less positively and considered their behaviour to be less legitimate when the superior had engaged in more frequent power use.

<table>
<thead>
<tr>
<th>Evaluative rating</th>
<th>Power use</th>
<th>Univariate test</th>
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<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Satisfaction</td>
<td>5.31</td>
<td>3.30</td>
</tr>
<tr>
<td>Superior evaluation</td>
<td>5.44</td>
<td>3.94</td>
</tr>
<tr>
<td>Legitimacy rating</td>
<td>5.26</td>
<td>4.05</td>
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</table>

**Attributions**

The two bipolar attributional items (locus: internal/external, and level: group/individual) were subjected to a 2 (superior’s affiliation: ingroup/outgroup) by 2 (power use: low/high) MANOVA. As predicted, the analysis did not yield multivariate significant main effects of superior’s affiliation ($F(2,45) = 1.26, n.s.$) or power use ($F(2,45) < 1, n.s.$), but a multivariate significant two-way interaction was obtained ($F(2,45) = 4.06, p < 0.05$), which emerged at the univariate level for the locus ($F(1,46) = 4.11, p < 0.05$) as well as the level ($F(1,46) = 3.84, p < 0.056$) of the attribution that was made.

Inspection of the relevant means and analysis of simple main effects for each attribution reveals an interesting pattern. When the superior partner is an outgroup member, the behavioural attribution in terms of locus is similar regardless of whether low ($M = 3.92$) or high ($M = 4.31; F(1,46) < 1, n.s.$) power use was displayed (see Table 2). For an ingroup superior, however, it turned out that, on average, high power use ($M = 3.23$) was less likely to be attributed to situational circumstances but rather to the personal disposition of the superior partner than low power use ($M = 4.67; F(1,46) = 5.15, p < 0.05$). As we have argued in the Introduction, it may be the case
that people respond differentially to information about ingroup members depending on the extent to which they identify with their group. Therefore, we subdivided participants into high and low identifiers on the basis of a median split on the composite identification score, in order to explore whether level of ingroup identification moderates the differential interpretation of high versus low power use by an ingroup superior. It turned out that the tendency to attribute high ingroup power use \( (M = 3.00) \) less to situational circumstances, but more to the internal disposition of their superior, than low ingroup power use \( (M = 5.25) \) could only be traced to low identifiers \( (F(1,21) = 13.44, p < 0.001; \text{cf. hypothesis 2b}) \), while high identifiers made identical attributions for high \( (M = 3.50) \) and low \( (M = 3.50) \) ingroup power use \( (F(1,21) < 1, \text{n.s.}; \text{cf. hypothesis 2a}) \).

For the level at which the superior’s behaviour is attributed, a different pattern emerged (see Table 3). In line with our argument (cf. hypothesis 2b) participants tended to attribute high power use of an outgroup superior \( (M = 4.38) \) less to individual characteristics (and more to the superior’s group membership) than low power use \( (M = 5.58; F(1,46) = 4.93, p < 0.05) \), although on this measure we obtained similar attributions for ingroup superiors who displayed low \( (M = 5.00) \) and high power use \( (M = 5.31, F(1,46) < 1, \text{n.s.}) \).

<table>
<thead>
<tr>
<th>Power use</th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>Ingroup superior</td>
<td>4.67\text{a}</td>
<td>3.23\text{b}</td>
</tr>
<tr>
<td>Outgroup superior</td>
<td>3.92\text{a}</td>
<td>4.31\text{a}</td>
</tr>
</tbody>
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Note. Only means with a different superscript differ significantly \( (p < 0.05) \) from each other, in an analysis of simple main effects.

<table>
<thead>
<tr>
<th>Power use</th>
<th>Low</th>
<th>High</th>
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<tbody>
<tr>
<td>Ingroup superior</td>
<td>5.00\text{a}</td>
<td>5.31\text{a}</td>
</tr>
<tr>
<td>Outgroup superior</td>
<td>5.58\text{a}</td>
<td>4.38\text{b}</td>
</tr>
</tbody>
</table>

Note. Only means with a different superscript differ significantly \( (p < 0.05) \) from each other, in an analysis of simple main effects.

### Behavioural Measure

As explained in the Method section, a second task was introduced to measure actual cooperative effort exerted towards the superior partner. For each of six subtasks, participants could choose to either work for the team, work for themselves, or not work at all. Cooperative behaviour was measured by counting the number of times (out of six trials) participants chose to work for the team. A two-way analysis of variance on this behavioural measure only revealed the interaction effect of superior’s
Table 4. Means relevant to the interaction effect of power use and superior’s affiliation on cooperative behaviour

<table>
<thead>
<tr>
<th>Power use</th>
<th>Low</th>
<th>High</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ingroup superior</td>
<td>3.08&lt;sup&gt;a&lt;/sup&gt;</td>
<td>3.46&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td>Outgroup superior</td>
<td>3.75&lt;sup&gt;a&lt;/sup&gt;</td>
<td>2.23&lt;sup&gt;b&lt;/sup&gt;</td>
</tr>
</tbody>
</table>

Note. Only means with a different superscript differ significantly (p < 0.05) from each other, in an analysis of simple main effects.

affiliation and power use ($F(1,46) = 3.78, p < 0.058$) we predicted in hypothesis 3. Inspection of the relevant means (see Table 4) and analysis of simple main effects revealed that cooperativeness towards an ingroup superior was equal, regardless of whether the superior had engaged in low ($M = 3.08$) or high ($M = 3.46$) power use ($F(1,46) < 1$, n.s.). However, participants behaved less cooperatively towards an outgroup superior who had engaged in high power use ($M = 2.23$) than when power use had been low ($M = 3.75$; $F(1,46) = 4.92, p < 0.05$).

**Behavioural Considerations**

In order to check whether our behavioural measure indeed assessed cooperative behaviour, participants were asked to indicate to what extent their behaviour in the last task had been guided by a desire to achieve a good team performance, or by a desire to get accurate feedback about their own ability. Furthermore, in order to check the validity of our theoretical argument regarding the role of commitment as a behavioural determinant, we also asked to what extent a sense of commitment to their partner had played a role in participants’ behaviour on this task. Preliminary analyses indicated that there was no difference between the experimental conditions in the extent to which each of these considerations had played a role. In order to assess how these behavioural considerations had guided participants’ cooperative effort, we regressed the measure of cooperative behaviour on the three behavioural considerations. The overall regression was significant ($R^2 = 0.59$, $F(3,46) = 22.18$, $p < 0.001$), and all three predictors were significantly related to the criterion. In line with our characterization of the behavioural measure as an assessment of cooperative effort, participants worked more for the team the more they reported their behaviour to be influenced by a desire to achieve a good team performance (beta $= 0.38$, $t = 2.89$, $p < 0.01$), and the less they reported their behaviour to be influenced by a desire to get accurate feedback about their own ability (beta $= -0.31$, $t = 3.17$, $p < 0.01$). More relevant to our theoretical analysis is the finding that more cooperative effort was displayed the more participants reported their behaviour to be influenced by a sense of commitment to their partner (beta $= 0.30$, $t = 2.23$, $p < 0.05$). When stepwise regressions were performed separately for behaviour towards ingroup or outgroup superiors, it turned out that only commitment to the partner significantly predicted cooperative behaviour towards an ingroup superior ($R^2 = 0.43$, $F(1,23) = 17.25$, $p < 0.001$, beta $= 0.65$), while the desire to achieve a good team performance was the only significant predictor of cooperative behaviour towards an outgroup member ($R^2 = 0.57$, $F(1,23) = 30.00$, $p < 0.001$, beta $= 0.75$).
Behavioural Interpretations and Behavioural Responses

The results of the different rating scales (satisfaction, partner evaluation, and perceived legitimacy) consistently show more negative judgements following high compared to low power use, regardless of the superior’s affiliation. The behavioural measure, however, reveals less cooperative behaviour as a result of high power use with an outgroup superior, while cooperativeness seems unaffected by power use when the superior is an ingroup member. Furthermore, in the latter case, cooperative behaviour appears to result from a sense of commitment to the ingroup superior. Since participants attributed the superior’s power use differently, depending on their group affiliation, we investigated whether attributional differences might account for differential feelings of commitment, and as such influence participants’ behavioural responses (cf. hypothesis 3).

It turned out that commitment to an outgroup superior was neither related to the locus \( r = -0.03, \text{n.s.} \) nor to the level of the attribution \( r = -0.03, \text{n.s.} \). For the ingroup superior, however, we obtained a significant correlation with locus of the attribution \( r = 0.37, p < 0.05 \); but not for level \( r = 0.01, \text{n.s.} \). The correlation with locus indicates that commitment to the superior is more important as a consideration to display cooperative behaviour, the more the superior’s power use has been attributed to situational circumstances. In fact, further analyses reveal that this relation is even stronger when only attributions for high power use are taken into consideration \( r = 0.55, p < 0.05 \). When comparing the effects on different dependent measures, it appears that high power use is always rated negatively, and in the case of an outgroup superior this results in decreased cooperation on the part of the subordinate (motivated by a lessened desire to obtain a good team performance). However, the above correlational analyses show that, to the extent that high power use of an ingroup superior can be attributed to external circumstances, commitment to this superior can be maintained, and hence cooperative behaviour towards the ingroup superior remains unaffected.

As we have seen in the analysis of the attributional responses and in line with our theoretical argument, only low identifying group members were inclined to ascribe frequent power use of an ingroup member internally (cf. hypothesis 2b). Furthermore, we had predicted that to the extent that this was the case, there would be no reason for these low identifying group members to behave cooperatively towards an ingroup superior who had engaged in frequent power use. Indeed, when we explored the responses of high and low identifying group members separately, it turned out that low identifiers (who attributed high ingroup power use internally), show similar behavioural responses after high power use, regardless of whether it was displayed by an ingroup \( M = 3.00 \) or an outgroup \( M = 2.75 \) superior \( F(1,21) < 1, \text{n.s.} \). Thus, in line with our theoretical argument, the two-way interaction on cooperative behaviour only emerged among high identifiers \( F(1,21) = 5.32, p < 0.05 \), with means and simple main effects indicating that they behaved more cooperatively in response to high power use of an ingroup superior \( M = 4.00 \) than when the superior was an outgroup member \( M = 2.00; F(1,21) = 6.42, p < 0.05 \).

To summarize this pattern of findings, it turns out that only low-identifying group members tend to attribute high power use of an ingroup superior to the internal disposition of this particular group member (cf. hypothesis 2b). Indeed, to the extent that they make this attribution, they feel less committed to this superior, and behave
less cooperatively (cf. hypothesis 3), as is evidenced by our correlational analyses. However, high-identifying group members, insofar as they are more likely to attribute high power use of an ingroup superior externally (cf. hypothesis 2a), maintain a sense of commitment, and as a result show more cooperative behaviour towards an ingroup than an outgroup superior after high power use (cf. hypothesis 3).

**DISCUSSION**

In the present study frequent power use resulted in unfavourable evaluations of the superior as well as his/her behaviour, and elicited lower subordinate satisfaction than relative autonomy. This both corroborates our first hypothesis, and is in line with findings obtained in field studies in organizational settings (cf. Tjosvold, 1981; Tjosvold & Okun, 1979; Tjosvold et al., 1992). Extending previous research, and in line with our theoretical argument, the present study furthermore shows that subordinates’ behavioural interpretations are guided by the group affiliation of their superiors as well as their leadership behaviour (cf. hypotheses 2a and 2b). Moreover, these attributional judgements affect the extent to which subordinates are prepared to behave cooperatively towards their superior in subsequent interactions (hypothesis 3). Thus, in a general sense, the present investigation offers empirical support for the theoretical argument we presented in the Introduction.

From the literature on intergroup attributions we derived the hypothesis that unexpected behaviour would be attributed more to external circumstances than to the internal disposition of the superior. Furthermore, we argued that high power use by an ingroup member and low power use by an outgroup member could both be considered unexpected behaviours. It turned out that, with respect to locus, subordinates made similar attributions for high and low power use when it was displayed by an outgroup member. Contrary to what we predicted in hypothesis 2a, subordinates attributed unexpected ingroup behaviour (i.e. high power use) more to internal dispositions than to external circumstances. Thus, rather than supporting our prediction with respect to the locus of behavioural attributions (hypothesis 2a), these findings are more in line with the argument proposed by Fiske and Neuberg (1990) regarding the level at which attributions are made (hypothesis 2b).

Accordingly, it would seem that people are inclined to attribute unexpected ingroup behaviour to the specific disposition of this particular ingroup member (cf. Erber & Fiske, 1984; Ruscher & Fiske, 1990; Ruscher, Fiske, Miki, & Van Manen, 1991). Indeed, the measure we designed for the specific purpose of investigating the (individual or group) level at which attributions are made offers more explicit support for this argument in the sense that unexpected outgroup behaviour (i.e. infrequent power use) is attributed more to the particular individual than expected outgroup behaviour (i.e. frequent power use) while the latter is more likely to be attributed to the group affiliation of the superior. Thus, the results of these attributional measures indicate that people turn to specific features of the particular individual to account for an unexpected behavioural style (cf. hypothesis 2b). For unexpected ingroup behaviour this general tendency emerges on the locus measure, while for unexpected outgroup behaviour a similar effect is obtained on the level measure. Although we did not predict this particular pattern of attributions, in retrospect both tendencies may

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be explained from ego-defensive motives, in the sense that subordinates should always be motivated to explain frequent overruling by their superior by referring to factors outside themselves instead of, for instance, their personal incompetence. When the superior is an outgroup member, it is relatively easy to attribute frequent overruling to his/her group affiliation. However, such a group-level attribution constitutes less of an attractive option when an ingroup superior is concerned, because it would imply saying something negative about one’s own group. Therefore in this particular case an attribution to idiosyncratic features is preferred.

The results of our behavioural measure show that frequent power use of an outgroup superior is simply reciprocated, as it results in less cooperative behaviour on the part of the subordinate (cf. Baron & Greenberg, 1990). Thus, in a more general sense, we may conclude that directive leadership styles employed by supervisors who are seen as outgroup members are likely to reduce cooperative effort on the part of subordinates. In fact, this might be the reason why in organizational settings directive leadership requires constant monitoring and is therefore relatively inefficient (cf. the LMX-model, Dansereau et al., 1975; see also French & Raven, 1959). However, to the extent that people perceive their superior as a member of their own group, they show equally cooperative behaviour after frequent and infrequent power use, that is, regardless of whether the behavioural style of the leader is rated favourably or unfavourably. Consequently, the results of the present investigation complement existing knowledge by demonstrating that a loss in autonomy does not necessarily result in decreased cooperation by the subordinate, but that behavioural responses to frequent power use depend on a sense of identification with the superior (cf. hypothesis 3).

The empirical evidence for an interactive effect of the behavioural style and group affiliation of the superior on subordinates’ cooperative effort that was obtained in this study corroborates principles underlying classic theories of leadership (e.g. Fiedler, 1978), and extends conclusions that have been drawn on the basis of observations in organizational settings. Results from field studies have been cited in support of the theoretical notion that the quality of the leader–subordinate relation is a more important determinant of leadership effectiveness than the particular behavioural style that is used (cf. Graen & Scandura, 1987; Tjosvold, et al., 1992). Nevertheless, in field observations it is difficult if not impossible to disentangle effects of the quality of the supervisory relationship from effects of the leadership style. Thus on the one hand, the similarity of the results from this organizational simulation to findings in field studies supports the validity of our experimental paradigm as a means to study these issues. On the other hand, the present investigation enables us to draw more explicit conclusions about causality and informs us of the psychological processes underlying differential effectiveness of leaders in organizational settings. Specifically, an important feature of our experimental paradigm therefore is that it enabled us to manipulate the quality of the relation between superior and subordinate, while keeping the actual behaviour of the superior constant, and allowed us to measure subordinates’ evaluations of their superior’s leadership style independently of their behavioural responses (i.e. cooperative effort). As a result, we may now conclude more confidently that people are more likely to behave cooperatively towards a superior with whom they identify, even if they evaluate their behavioural style negatively.

2We would like to thank one of the reviewers for suggesting this as a possible explanation.
Turning to the question of which psychological mechanism causes subordinates to maintain cooperative effort when they are confronted with a loss of autonomy, in line with our theoretical argument, it looks as though the level of ingroup identification is an important moderator in this respect. Specifically, it seems that only high-identifying group members may attribute negative ingroup behaviour to external circumstances as a means to maintain a positive group image (cf. hypothesis 2a). Indeed, to the extent that high-identifying group members attribute frequent ingroup power use to external circumstances, they also maintain a sense of commitment to the ingroup superior and show cooperative effort. Conversely, the results with respect to low-identifying group members indicate that they are more inclined to attribute high power use to the specific disposition of this particular group member. As such, they seem to indicate that they do not regard this individual as a typical group member (cf. the ‘Black Sheep Effect’, Marques & Paez, 1994). Consequently, they feel less committed to their ingroup supervisor and are less likely to show cooperative behaviour after frequent power use. While these results again point at the crucial role of commitment (cf. Becker & Billings, 1993), they enable us to specify that the way subordinates interpret unfavourably evaluated leadership behaviour, which depends on the extent to which they identify with their superior, determines whether or not they maintain a sense of commitment and display cooperative behaviour even after a loss of autonomy.

Taken together, the results of this investigation offer convincing support for our theoretical argument that pre-existing expectations based on a sense of common identity, may moderate the way subordinates interpret and respond to leadership behaviour. It is important to emphasize that the attributional and behavioural responses to ingroup and outgroup superiors were different, even though frequent power use was evaluated equally unfavourably regardless of whether it was displayed by an ingroup or outgroup superior. When we return to the problem outlined at the outset of this contribution, the results of the present study provide more insight into the question of how those in power can try to guide the behaviour of their subordinates without eliciting uncooperative responses. Specifically, in order to achieve and maintain a situation characterized by cooperative efforts, it seems crucial to evoke a sense of common identity as co-workers and create a work atmosphere in which organizational members generally hold positive expectations of their superior’s intentions.

REFERENCES


