Leader Endorsement in Social Dilemmas:

Comparing the Instrumental and Relational Perspectives

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Abstract

This chapter examines the role of leadership in overcoming social dilemmas within groups. First, based on prior theorising and research we present two alternative perspectives on leader endorsement in social dilemmas, an instrumental and relational perspective. Next, we systematically compare these perspectives in a series of experiments investigating leadership in social dilemmas created within small groups in the laboratory. The results of our studies suggest that when their personal identity is salient group members more strongly endorse leaders who are perceived to be instrumental in solving the free-rider problem. In contrast, when a social identity is salient members more strongly endorse leaders who fulfil their relational needs. Based on these findings we propose a differential needs model of leader endorsement in social dilemmas.

"Leadership is getting someone to do what they don't want to do, to achieve something that they want to achieve"

--- Tom Landry (legendary American football coach)

Introduction

Leadership is commonly defined as a process of influence to attain important group, organisational and societal goals (Bass, 1990; Chemers, 2001; Haslam, 2001, Hollander, 1985, Yukl, 1989). In order to achieve these goals leaders must ensure that conflicts, which frequently emerge between the self-interest of individual members and the collective interest of the group, are resolved. Such conflicts are better known as social dilemmas (Dawes, 1980; Komorita & Parks, 1994; Wilke, 1991). Good leadership is necessary in order to manage these dilemmas, which occur at every level of society. In work teams, for example, an important role of the manager is to ensure that all team members contribute towards the completion of a group task. In sports, a team manager must be able to motivate players to put in their best performance to beat other teams. On a larger scale, political leaders and authorities must secure the cooperation of citizens for the maintenance of important public goods, such as schools and hospitals, and natural resources, such as land and water (Van Vugt, Snyder, Tyler, & Biel, 2000).

Without some form of leadership many groups and organisations would not be able to deal adequately with social dilemmas, because in the absence of leaders and authorities freeriding in groups would be too widespread (Olson, 1965; Yamagishi, 1986). Consistent with this view, B. M. Bass, a leadership theorist, recently stated that successful leadership involves “the moving of followers beyond their self-interests for the good of the group, organisation, or society” (Bass, 1997; p. 130).

Appointing a leader seems a sensible solution to deal with social dilemmas in groups, but it is not a straightforward solution. Leadership is a complex political process involving continuous negotiations between group members about what kind

of leaders they desire. For example, groups must decide where the leader should come from (e.g., from inside or outside the group), how they should be assigned to the group (e.g., by election or appointment), what power base they should have (e.g., reward, coercive or legitimate power), what should be their leadership style (e.g., task or relation-oriented) and personal attributes (e.g., a highly skilled versus highly committed leader), and, finally, how they can be replaced if necessary (Bass, 1990, French & Raven, 1959; Hollander, 1985; Levine & Moreland, 1998; Yukl, 1989).

Furthermore, once leaders are in place, group members must decide whether to cooperate with their directives (Lippitt, & White, 1968; Tyler & Degoey, 1995; Van Vugt & De Cremer, 1999). In this dynamic process, group members will presumably not be focused solely on the perceived instrumentality of leadership in resolving the social dilemma at hand. They might also consider the consequences of having a leader for the social climate in the group and the quality of interpersonal relationships between group members (cf. goal achievement vs. group maintenance; Cartwright & Zander, 1968).

It is important to distinguish between two kinds of solutions to social dilemmas, individual and structural solutions (Messick & Brewer, 1983; Van Vugt et al., 2000). Individual solutions involve group members' voluntary efforts to produce valuable goods for their group. The vast majority of social dilemma research has been devoted to studying social-psychological determinants of voluntary cooperation, such as communication, trust, and the development of prosocial norms (for overviews, see Komorita & Parks, 1994; Liebrand, Messick, & Wilke, 1992; Schroeder, 1995). Over the past two decades, however, researchers have become interested in the emergence of structural solutions to social dilemmas, the main question being when groups opt for a change in the structural features of groups in order to resolve the social dilemma. Structural solutions that have been empirically investigated include the introduction of contribution and distribution rules (Sato, 1987; Van de Kragt, Orbell & Dawes, 1983), reward and punishment systems (Komorita, Parks, & Hulbert, 1992; Yamagishi, 1986), systems of exclusion (Kerr, 1999), formal authorities (Tyler & DeGoey, 1995),

and leadership (Foddy & Crettenden, 1994; Foddy & Hogg, 1999; Messick et al., 1983; Rutte & Wilke, 1984; Samuelson et al., 1984; Van Vugt & De Cremer, 1999; Wilke, 1991; Wit, Wilke, & Van Dijk, 1989).

In this chapter, we concentrate on the role of leadership because it is potentially the most viable solution to social dilemmas within small groups (Levine & Moreland, 1998; Messick & Brewer, 1983; Van Vugt & De Cremer, 1999). We investigate two interrelated aspects of leadership in social dilemmas, leadership emergence and leadership influence. First, we examine why group members want to voluntarily assign a leader to the group and what type of leader they choose. Second, we study the influence of different leader types on the voluntary cooperation of members. Together we refer to the voluntary acceptance and cooperation with leaders as leader endorsement.

Our main research aim is to demonstrate that the endorsement of leadership in social dilemmas is a function of the prevailing needs within the group. If members are concerned primarily about their short-term personal welfare, they will endorse leaders who are believed to be instrumental in solving the social dilemma task. In contrast, if members assign greater priority to the long-term group welfare, they will endorse leaders whose primary goal is to strengthen the relationships between group members. In this regard, our research is inspired by the traditional leadership literature, which o draws a distinction between the instrumental and relational roles of leadership in groups (Bass, 1990; Cartwright & Zander, 1968; Hemphil, 1961; Yukl, 1989). Extending this work we argue that the importance of these two leadership functions in social dilemmas is contingent upon the prevailing needs of the group.

Leadership as a Solution to Social Dilemmas

Social dilemma is the generic term for two special classes of social conflicts, the resource dilemma and the public good dilemma (Komorita & Parks, 1994; Messick & Brewer, 1983). A resource dilemma involves a potential conflict between a group of people over the distribution of a finite resource. Many natural resources have this property (Van Vugt et al., 2000). A public good dilemma entails a potential

conflict between group members over the contributions necessary to create a commonly shared good, for example, a group facility or a successful team performance (Stroebe & Frey, 1982). Because public good dilemmas are relatively more common in small groups, the present research focuses on these types of conflicts (although our conclusions may speak to both dilemma types).

At the heart of the public good dilemma lies the freerider problem (Kerr, 1983; Olson, 1965). In creating public goods, group members must decide whether to cooperate by making a contribution or to free-ride on the contributions of others. Free-riding is personally more attractive, but if it is too widespread the group may fail to secure the good, which leaves every group member worse off. Cooperation is thus the most sensible strategy from a collective viewpoint. Yet members may be reluctant to cooperate because (a) it is tempting to free-ride, and (b) even if they cooperate there is a risk that they are being exploited by other group members ("the sucker's pay-off;" Komorita & Parks, 1994). Hence, both motives of greed and fear can explain the emergence of free-riding in social dilemmas (Kerr, 1983).

One of the main tasks of a group leader in a social dilemma is to prevent freeriding. In a fully cooperative group task each member will be inclined to cooperate spontaneously, and therefore the demands on leadership are relatively straightforward. The main leadership function is to coordinate the, often diverse, efforts of group members and bring them together. In a fully competitive group task ("zero-sum game") the role of leaders is also fairly clear. They must primarily serve as an arbitrator to mediate between the individuals (or groups) with opposing interests.

Social dilemmas, however, are mixed-motive conflicts in the sense that for individuals there are incentives both to free-ride -- to enhance their personal welfare -- as well as to cooperate for the group. Here the role of leadership becomes more complicated. In order to achieve the group goals, leaders must deter and punish freeriding. At the same time, however, they should contribute to a positive group climate to ensure that members, particularly those with a cooperative inclination, enjoy being in this group

and are tempted to stay and contribute to the group's welfare (Van Vugt, Jepson, & De Cremer, 2001). Social dilemmas thus provide an ideal laboratory to test hypotheses about the different roles and functions of leadership in groups.

Instrumental Perspective on Leadership in Social Dilemmas

Rational decision-making theories, such as game theory, rational choice theory and social exchange theory (Hardin, 1968; Luce & Raiffa, 1957; Olson, 1965; Thibaut & Kelley, 1959), postulate that individuals in social dilemmas are primarily concerned about their short-term self-interest. According to the notion of self-interest, group members endorse leaders when they are instrumental in providing favourable outcomes. Hence, they will cooperate more with leaders who provide material rewards for cooperation and punishments for freeriding. Note that a leader who achieves group success will also be endorsed, according to this perspective, because all members benefit materially if the leader successfully resolves a social dilemma. Group members will therefore primarily look for information about leader characteristics which suggests that they are capable of solving the free-rider problem by modifying members' selfish behaviours.

This instrumental perspective on leadership in social dilemmas has received considerable empirical support (Messick et al., 1983; Rutte & Wilke, 1984; Samuelson & Messick, 1986; Samuelson et al., 1984). For example, Messick et al. (1983) showed that group members were more likely to choose a leader if their group had previously failed to collectively sustain common resource pool. Furthermore, in applied research on a water shortage in California (Tyler & Degoey, 1995) it was found that residents who perceived the shortage as more threatening were more likely to defer control over their personal water use to the water authorities. Finally, in a public good experiment, Yamagishi (1986) found that the introduction of a sanctioning regime to punish free-riders increased the average contribution level in groups.

These findings, however, do not tell the whole story about the role of leadership in social dilemmas. First, if group members are solely concerned about

material outcomes, they would not hesitate to give up complete decisional freedom to a leader so as to eliminate the free-rider problem. In fact, even in a collective crisis individuals are quite reluctant to vote for an autocratic leadership regime (Rutte & Wilke, 1984, 1985; Samuelson, 1993; Tyler & Degoey, 1995). When given the choice between various structural solutions group members tend to prefer democratic solutions, such as majority and unanimity rules, above autocratic leadership (Rutte & Wilke, 1985) -- perhaps due to a feared loss of personal control or concerns about the possibility of corruption and exploitation by the leader.

Second, there are no straightforward effects of the use of reward and punishment schemes by leaders in social dilemmas. For example, in one study it was found that a weak sanctioning regime resulted in a lower level of cooperation than when there was no sanctioning at all (Tenbrunsel & Messick, 1999). Furthermore, Yamagishi (1986) showed that a sanctioning regime had more effect on members with a low trust in other people's voluntary cooperation than on members with high trust in others. Finally, in a recent field study on water conservation we found that when water authorities sanctioned excessive water use – by installing water meters in properties – this intervention had more effect on residents who identified weakly with their residential community than residents with a strong community identification (Van Vugt, 2001).

These results suggest a more group-based view on the role of leadership in social dilemmas. The emergence of leadership and the subsequent influence of leaders may be influenced by the prevailing motives and needs within a particular group. Sometimes group members are more focused on the material outcomes that leaders could potentially provide, judging their ability to solve the problem of freeriding. At other times, however, they may look for their leaders to satisfy other important, non-instrumental needs.

A Relational Perspective on Leadership in Social Dilemmas

An alternative motive for leader endorsement in social dilemmas is the extent to which the leader is capable of fulfilling the relational needs of group members.

People join groups for a multitude of different reasons, only some of which are instrumental (e.g., the achievement of some specific group goal). An important alternative motive for group membership is that it allows individuals to fulfil a desire to establish positive social relationships with other people. Group membership gives people a sense of identity and belonging, which is regarded by many theorists as essential for the survival and psychological well-being of an individual (Baumeister & Leary, 1995; Brewer, 1979; Deci & Ryan, 2000; Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987).

For example, social identity theory (Tajfel & Turner, 1979) assumes that people's sense of who they are, their identity, is shaped in part by the social groups with which they are associated. This aspect of people's self-concept is described as one's social identity (Tajfel, 1972): "that part of an individual's self-concept which derives from his [or her] knowledge of his [or her] membership of a social group (or groups) together with the value and emotional significance attached to that membership (1972, p. 273). Social identity theory argues that people seek a positive social identity, which is achieved through a positive distinctiveness from relevant other groups. Whereas social identity theory was originally formulated as a theory to describe the intergroup dynamics underlying social identity processes, more recent adaptations of this theory have focused more on the intragroup dynamics of social identity (Hogg & Abrams, 1988; Turner et al., 1987). Recently, for example, social identity researchers have started to investigate the emergence of leadership in groups (Hains, Hogg, & Duck, 1997; Hogg, 2001; Turner & Haslam, 2000).

These insights are useful for understanding the different roles of leadership in social dilemmas. Within social dilemmas, the emergence and effectiveness of leadership may be dictated, in addition to their perceived instrumentality, by the perceived influence on the relational needs of members (i.e., identity and belongingness needs). Leaders can fulfil these needs by developing pleasant social relationships with group members and by creating an encouraging social climate so that members enjoy their group membership and wish to stay. Leaders who facilitate

these goals will be perceived as legitimate (French & Raven, 1959). Hence, members will cooperate voluntarily with them in solving social dilemmas without the promise of specific material rewards or the threat of punishments (Lind & Tyler, 1988; Tyler, 2000; Tyler & Dawes, 1993; Tyler & Lind, 1992).

A Differential Needs Model of Leadership

What specific factors determine whether instrumental or relational needs are more salient in the endorsement of leaders in social dilemmas? Following an instrumental perspective on leadership in social dilemmas, leaders' primary role is outcome-directed. Leaders must help to increase the material pay-offs for the group and its members and, to ensure this, they must demonstrate the ability to detect and punish free-riding. In contrast, a relational perspective asserts that to secure acceptance and cooperation from group members leaders must show a concern about the social relationships within the group.

This differential needs-model thus suggests that impressions about the role of leaders may differ between members, as well as between groups, depending on their dominant needs and motives. A key difference between group members presumably lies in the extent to which they consider themselves to be part of the group. Either they perceive themselves essentially as a unique individual, in which case their personal identity is more salient, or as member of a group, in which case their social identity is more salient (Turner et al., 1987).

When their social identity is salient group members tend to believe that they have very much in common with other group members, both in terms of opinions, values, shared goals and interests (Spears, Oakes, Ellemers, & Haslam, 2000). The salience of a social identity thus blurs the distinction between an individual's self-interest and the group's interest – they are perceived as overlapping – which effectively solves the social dilemma conflict (Brewer, 1979; De Cremer & Van Vugt, 1999). Furthermore, a salient social identity enhances depersonalised trust in other group members' cooperative intentions (Kramer & Brewer, 1984). Both mechanisms, a cooperative goal and depersonalised trust, may explain why group members exhibit

greater voluntary cooperation in social dilemmas when a social identity is activated (Brewer, 1979; Brewer & Kramer, 1986; De Cremer & Van Vugt, 1999; Kramer & Brewer, 1984). Conversely, when a personal identity is salient, individuals perceive little communality between their attitudes and interests and those of the other group members. Hence, they are less likely to cooperate spontaneously and they expect no cooperation from others either.

The Moderating Role of Identity

The attitudinal and behavioural differences between social and personal identifiers yield important implications for the perceived role of leadership in social dilemmas. First, lacking in trust, personal identifiers probably see a greater urgency to voluntarily accept a leader as a solution to the social dilemma. Moreover, they will be looking for evidence in leaders which shows that they are capable of overcoming the free-rider problem in their group. Finally, the primacy of self-interest over the group interest dictates that the behaviour of personal identifiers is shaped by the expected material rewards and punishments received from the leader. Accordingly, personal identifiers will be more accepting of and influenced by instrumental leadership in overcoming a social dilemma.

What about social identifiers? Because the conflict between their self-interest and the collective interest is absent, or at least less intense, they are more optimistic that the social dilemma can be resolved through the voluntary contributions of themselves and others in the group. Hence, they presumably perceive less need to move from an unstructured group setting to a situation with a group leader. Yet, when a leader is already there they will assign less weight to the specific instrumental qualities that the leader brings to the group. After all, they have an intrinsic motivation to cooperate with the leader in securing the collective good. What social identifiers presumably care about more is the possible impact of leadership on the psychological experience of their group membership, in other words, their social identity.

Both intragroup and intergroup aspects of leadership may be important in fostering a positive social identity, thus fulfilling the needs of social identifiers. Within the group the leader must be seen to contribute to a pleasant social climate in order to be influential. Consistent with the group-value model (Tyler & Lind, 1992) group members base their judgements about a leader on the quality of their interactions with them. The perceived quality of these interactions is influenced primarily by the behavioural style of a leader. If a leader treats members respectfully, for example, by being fair and by keeping promises, this will positively influence the psychological experience of group membership, hence foster an individual's social identity (De Cremer & Van Knippenberg, in press). Furthermore, a leader who provides encouragement and support as opposed to threats and punishments is also likely to strengthen an individual's social identity.

Intergroup qualities of leadership may also determine whether a leader is able to fulfil the relational needs of group members. Yet, whereas impressions about the intragroup leader qualities are primarily shaped by the behavioural style of a leader, impressions about intergroup qualities are probably derived primarily from the personal attributes of a leader, both cognitive and motivational attributes. Consistent with a social identity model of leadership (Haines et al., 1997; Hogg, 2001), leaders have been found to be more influential to the extent that they represent the group prototype, which are "fuzzy sets of attributes that define and prescribe attitudes, feelings, and behaviours that characterise one group and distinguish it from other groups" (Hogg, 2001; p. 187). Prototypes are heavily influenced by the specific comparative intergroup context.

In addition to the social-cognitive leader attributes, the intergroup context may also influence members' expectations about the motivational attributes of leaders. In particular, members would expect their leader to express a strong desire to belong to this group rather than to some other group in order to maximise the distinctiveness with other groups. Leaders can achieve this by showing to members that they care about the group, like its members, and are committed to stay in the group, particularly

when things are going wrong. The perceived strength of leader's group commitment is presumably an important determinant of leader endorsement when members' social identity is salient, perhaps more so than the stereotypical leadership skills that a leader brings to the group (e.g., communication and coordination skills).

Prediction

We can now formulate our main research hypothesis. We have offered two alternative needs perspectives on the role of leadership in social dilemmas. According to an instrumental model the primary role of a leader in social dilemmas is to solve the free-rider problem. In contrast, the relational model asserts that a leader's primary function is to strengthen the social relationships between group members. These models are not mutually exclusive. With many other leadership theories (Bass, 1990; Cartwright & Zander, 1968; Hollander, 1985; Yukl, 1989), we believe that both instrumental and relational functions are probably important in managing social dilemmas within groups. Yet, the relative weight of these leadership functions may vary with the dominant needs of group members, which are contingent upon their self-definition.

Members who perceive themselves and others primarily as unique individuals, personal identifiers, will be more focused on the instrumental qualities of leaders, evaluating them in terms of their effectiveness in modifying individuals' self-interested behaviours. Conversely, when individuals see themselves as group members, social identifiers, they will concentrate more on the relational qualities of a leader: Is the leader able to maintain pleasant social relationships with group members and promote a positive social identity? These differential needs, activated by the salience of one's identity, will influence various stages of leader endorsement in social dilemmas (a) the voluntary acceptance of leadership as a solution to a social dilemma, (b) the negotiation process within groups about the preferred type of leader, and, finally, (c) the cooperation with the leader's directives.

Research Paradigm and Procedure

To systematically investigate the claims made by the differential needs-model

we conducted a series of laboratory experiments in which we used a step-level public goods task (Van de Kragt, Orbell, & Dawes, 1983) to simulate a small group social dilemma. A step-level public good is an investment task in which group members are endowed with a monetary sum, which they can either keep to themselves or invest in a collective good (Komorita & Parks, 1994). This good, usually an extra monetary bonus, becomes available only if a sufficient number of people contribute a sufficient amount towards the provision of the good.[1] Yet, and herein lies the crux of the dilemma, when the good is provided it becomes available to all group members regardless of whether they contributed or not. This is known as the non-excludability criterion of public goods (Olson, 1965). Consequently, it is in each member's immediate self-interest to contribute nothing in the hope that others will contribute. This is essentially the free-rider problem that is inherent to public good dilemmas.

The participants in our experimental studies, all undergraduate students, conducted these public good tasks in small groups, consisting of six members each. We used only ad-hoc groups. Group members were informed that they were linked with each other via computers, but, in reality, all the computer messages had been pre-programmed. Before the public good task started, members received information about their particular group as well as the purpose of the study.

In half of the conditions, they were told that the study intended to compare group decision-making within groups from several different universities, all in Southern England, and that the results of their group would be compared with those of other universities participating in the research. This was the social identity-condition, because it highlighted group membership by drawing an intergroup comparison (i.e., social competition; Turner, 1975). Others were told that the aim of the study was to investigate individual decision-making within groups, and no reference was made to a between-university comparisons. This was the personal identity-condition, because it de-emphasised group membership by highlighting an interpersonal comparison between members. The same identity manipulation was used in all the studies we report here (for a similar procedure, see Kramer & Brewer, 1984, exp. 1 and 2).

Within this experimental context, we investigated the moderating role of social identity on the various stages of leader endorsement in social dilemmas. In the first part of our research we concentrated on the emergence of leadership in public good dilemmas. In the second part we studied the actual influence of leaders on the contribution decisions of group members.

Emergence of Leadership in Groups

When does leadership emerge in public good dilemmas? When are group members willing to give up their personal freedom to a leader, and what kind of leader do they prefer?

Preference For a Group Leader

We predicted that the voluntary acceptance of a group leader to solve the dilemma would be determined primarily by instrumental needs. Members would be more likely to defer to a group leader if they thought their group was unable to provide the good through voluntary contributions (De Cremer, 2000; Messick et al., 1983; Samuelson et al., 1984). Like any structural solution, the introduction of leadership in groups entails costs, both financial and psychological, associated with the appointment of a leader. Such transition costs (Samuelson & Messick, 1995; Van Vugt, 1997) tend to lead to a preference for the status quo unless the status quo is clearly undesirable.

Accordingly, we predicted that there would be a stronger preference to accept a group leader if the group had failed previously to secure the good. Furthermore, the preference for a leader would be stronger when a personal identity rather than a social identity was activated in group members. Compared to social identifiers, personal identifiers would perceive a greater need for a structural change. These hypotheses were tested in a first experiment in which individuals, in groups of six, were asked to complete a step-level public good task, introduced as a group investment game (Van Vugt & De Cremer, 1999; exp. 1). At the start of the game, each group member would receive an endowment of £3. They were told that the group received a £30 bonus (£5 per member), provided that a sufficient number of members would make an

investment (step-level good; Van De Kragt, Orbell & Dawes, 1983).[2]

We then activated members' identity by stressing either an intergroup comparison (social identity) or interpersonal comparison (personal identity). The post-experimental questionnaire results revealed that this manipulation was successful. Participants in the social identity-condition identified more strongly with their group than participants in the personal identity-condition. Next**,** individuals were asked if they wanted to contribute their £3 to the group and were subsequently provided with false feedback about the group's success (or failure) to secure the good. Afterwards, in preparation for the second round of contribution sessions, they were asked if they wanted to appoint a group leader.

Consistent with predictions, group members exhibited a stronger leadership preference if the group previously failed to secure the good. Furthermore, regardless of outcome feedback, personal identifiers displayed a stronger preference for appointing a group leader than did social identifiers, which was consistent with their contribution pattern. Fewer people contributed in the personal identity-condition (70%) than in the social identity-condition (88%). Moreover, personal identifiers considered their fellow group members to be less trustworthy, less cooperative and less fair than did social identifiers.

What Kind of Leader?

We also investigated whether personal and social identifiers would differ in the type of leader they preferred for their group. The differential needs-model would predict that personal identifiers more strongly preferred a leader instrumental in solving the dilemma, whereas for social identifiers the relational qualities of a leader would dominate. Accordingly, after expressing whether they wanted a group leader or not, participants were told that, regardless of preferences, each group would have a leader in place for the second contribution round. Each member would have an input in the kind of leader that was to be assigned to their group.

Accordingly, they were asked to give preference ratings to six different leadership prototypes, which represented a wide range of leadership options in work

organisations (Bass, 1990; Yukl, 1989). The leader type that received the highest overall group rating would be assigned to the group. Based on the leadership literature, these prototypes were then divided into three pairs of more or less contrasting leader types, which were accompanied by a short description:

(i) Democratic versus autocratic leader. The democratic group leader was described as "a leader who will ask each member of your group informally about their intended contribution decision, and then make a decision about which group members should contribute their endowment." In contrast, the autocratic leader was portrayed as "a leader who decides for the group which group members should contribute their endowment, without consulting the group."

(ii) Elected versus appointed leader. The person to serve as the group leader was someone who would either be "chosen by the majority of the group members via a vote" (elected) or "appointed by the experimenter" (appointed).

(iii) Internal versus external leader. The internal leader was described as "a person from Southampton University" and the external as "a person from one of the other universities participating in this experiment."

Insert Table 1 here

As can be seen in Table 1, group members preferred leaders who, by virtue of either a personal attribute (from inside the group), their assignment to the group (elected), and source of power (democratic) were more strongly embedded within the group. Indeed these three leader types were perceived as more legitimate than external, appointed, or autocratic leader types. Yet, there were some interesting differences in preference as a result of the salience of one's identity. Social identifiers displayed a stronger preference than personal identifiers for an internal leader and an elected leader, whereas personal identifiers displayed a stronger preference for an external and appointed leader. A possible interpretation of these findings is that

elected leaders and leaders from inside the group would facilitate the social interactions between the leader and group, thus fostering a positive social climate. Finally, social and personal identifiers displayed an equally strong dislike for an autocratic leader. This corroborates the findings of other social dilemma research by showing that members have a desire to keep some control over their contribution decisions (Rutte & Wilke, 1985; Samuelson, 1993).

Conclusions

We can conclude from this first study that both instrumental and relational motives play a role in the emergence of leadership in social dilemmas. Instrumental rather than relational concerns determine whether group members want to move from a leaderless group to a group with a leader. In determining what kind of group leaders members wish to appoint, however, other non-instrumental motives become important. Overall, there is a preference for leader types that due to either a personal attribute (from inside the group), the way they have been assigned to the group (through election), or their power base (democratic) are regarded as more legitimate. Furthermore, the preference for a legitimate leader type is particularly strong when a social identity is activated among group members, perhaps because social identifiers are primarily concerned about the quality of leader-member relationships.

The Influence of Leadership on Cooperation

A second goal of our research program was to determine the effectiveness of leadership in managing public good dilemmas in groups. Do groups perform better in solving social dilemmas when a leader is in place? Which leader types are more effective in fostering and sustaining cooperation and to what extent does their effectiveness vary with the needs of the group? These questions are important, because, as we have seen, group members are quite reluctant to voluntarily accept a leader who takes all the investment decisions for the group – an autocratic leader. Therefore, leaders must rely on other tactics to ensure that the group is successful.

Based upon a differential needs-model of leadership, we anticipated that the influence of leaders would vary with the prevailing needs of group members, thought

to be activated by their level of identity. Whereas personal identifiers would be more sensitive to information about the perceived instrumentality of a leader in tackling free-riding, social identifiers would be more strongly influenced by the perceived relational qualities of a leader. We expected that these impressions were derived primarily from the leader's power basis within the group, their style of leadership, and their personal attributes and characteristics.

Power Base of Group Leader

Early research on power and influence has identified several key power bases of leaders in groups (French & Raven, 1959). Leaders reward or punish group members, they are liked and respected, they are believed to be legitimate, or they posses important information and skills. Leaders who control one or more of these power bases are thought to have more influence on group members. Following this taxonomy, we can distinguish between leaders that have either an instrumental or a relational power base. Instrumental leaders reward members if they cooperate and punish if they do not cooperate. Conversely, relational leaders exercise influence by being liked and respected by group members.

Following a differential needs-model, we predicted that leaders with an instrumental power base would be more effective in inducing cooperation, particularly when a personal identity was activated and members would be focused on their immediate outcomes. In contrast, leaders with a relational power base should have little or no influence on personal identifiers, but they should be able to influence the contribution decisions of social identifiers who would be more focused on the quality of the leader-member relationships.

To test this we conducted a second experiment with a similar procedure to the first study (Van Vugt & De Cremer, 1999; exp. 2). Participants played eight sessions of an investment game, and before each session they received an endowment of £3. A bonus would be provided to all members if the entire group contributed £12 or more. Unlike the first experiment, however, members could now invest any part of their endowment (from zero to three pounds). Hence, the average personal contribution per

session should be at least £2 to reach the bonus. After these instructions, we induced members' level of identity (social vs. personal) using the same procedure as in the first study.

Subsequently, group members played four contribution sessions. After each session, they received feedback that their group had failed to provide the bonus. Following the fourth session, they were told that, as a result of their failure, a group leader would be appointed for the subsequent sessions. This leader was somebody from within the group who would monitor the contribution decisions and communicate to members via the computer. At this point, the leader introduced him/herself via an email message on the screen. In half of the conditions, the leader was given an instrumental power base. This was their message to the group:

"I have to make sure your group will receive the bonus in the forthcoming sessions. However, I do not believe that each group member will contribute enough voluntarily. In the next sessions I will penalise the least contributing member per session. That is, in each session the group member contributing the least amount will get a fine of £2.20. This amount will be subtracted from the amount of money he or she will have earned by the end of the sessions. Because people who do not contribute affect the group's success, I think a punishment is the best thing to ensure that they will contribute enough next time."

In the other half the leader was given a relational power base. They sent the following message:

"I have to make sure your group will receive the bonus in the forthcoming sessions. I trust each of you to contribute enough of your endowment to the provision of the good. If the group fails, however, I will send an encouraging message to group members who contributed little to ask them to contribute sufficiently the next time. I will not punish anyone, but I will try to give you support and explain things if necessary. You can trust me that everyone will be treated equally and with respect."

After this initial message from the leader, the contribution sessions continued. After each session, group members again received feedback from the leader that their

group had failed to secure the bonus. Instrumental leaders subsequently sent messages stating that they had penalised the least contributing member(s) of that particular session, whereas relational leaders sent encouraging messages to group members. After the eighth session, the experiment was interrupted and members were asked to complete some final questions.

Insert Table 2 about here.

The pattern of contributions, which is displayed in Table 2, confirmed our prediction in part. When a personal identity was activated among group members they responded only to an instrumental leader. Yet they failed to respond to a leader with a relational power base. For social identifiers, however, it made no difference whether the leader was instrumental or relational. They were equally cooperative with a leader who simply encouraged and praised them as with a leader who would penalise them for contributing little to their group.

Insert Table 3 about here.

These results were supported by additional psychological measurements, administered after the investment task. First, across all conditions members rated a relational leader as more legitimate than an instrumental leader (e.g., more trustworthy, competent, fair, and honest; Tyler, 1997). The interactions with the group leader also influenced members' self-evaluations, in particular their specific state self-esteem. We used several items of the Rosenberg (1979)-scale and adapted them to the specific task situation ("After participating in these contribution sessions do you feel sure of yourself?" "… do you feel satisfied with yourself" "…do you feel proud of what you have accomplished?").[3] As can be seen in Table 3, the state self-esteem of social identifiers was significantly higher when being supervised by a relational leader than by an instrumental leader. Interestingly, the reverse effect was

found for personal identifiers who reported a higher state self-esteem under an instrumental leader than a relational leader. This suggests that leaders may, at least temporarily, boost the psychological well-being of a group member if they appeal to their dominant need, instrumental or relational.

Leadership Style

Impressions about the relational qualities of a group leader derive not only from their power base, but also from the perceived behavioural style, the way they treat and interact with the members of their group. Group members base their evaluation of a group leader, among other things, on the perceived fairness of their decision-making procedures (De Cremer & Van Knippenberg, in press; Tyler, 1997, 2000; Tyler & Lind, 1992). For example, do leaders keep their promises, do they treat people with dignity and respect, and do they allow them to have a say in the decision-making process? Concerns about issues of procedural fairness are believed to be largely non-instrumental. According to the group-value model (Tyler & Lind, 1992; Tyler & Smith, 1998), a fair leadership style matters because it communicates information about the quality of social relationships in a group, and, in particular, a person's standing within the group. A fair decision-making procedure signifies to individuals that they are respected and valued members of their group.

According to an instrumental perspective on leadership, whether a leader acts in a procedurally fair or unfair manner should have no or, at least, very little impact on members' cooperation as long as it does not directly influence their material outcomes. A fair or unfair procedure, such as keeping or breaking a promise, should have an impact, however, if group members are concerned with the social relationships within the group. Hence, following the logic underlying the differential-needs model we predicted that social identifiers would be more sensitive than personal identifiers to a fair or unfair leadership style.

This hypothesis was tested in a third experiment (De Cremer & Van Vugt, in press; exp. 1), using a fairly similar procedure as before. First, we induced

group members' level of identity (social, personal) with the same manipulation as in the previous studies. Thereafter, they played eight sessions of an investment game in groups of six each. For each session, the endowment was £3, any amount of which they could invest in the group. Unlike the previous studies, however, the size of the bonus was variable rather than fixed. The size of the bonus depended upon the sum of contributions from the entire group. This amount would be multiplied by two and then distributed equally among all members, regardless of how much each contributed. This investment game is known as a continuous public good dilemma (rather than the step-level good we used before), and it meets the definitions of a social dilemma (Komorita & Parks, 1994).

A second difference with the previous study was that there would be a group leader from the beginning of the task. The leader was chosen via a random selection procedure. The group leader, who did not participate in the contribution sessions, was given an instrumental power base: The leader would be able to penalise the least contributing member per session with £2.

We manipulated leadership style as follows. Before the start of the investment task, group members were told that they would get an overview of their earnings when the entire task had ended. If they did not agree with the amount they had received they would be able to discuss this matter with the leader. Subsequently, the contribution sessions started, and after each session the leader sent an email, stating which member received the penalty for that session. After the first block of four sessions, the leader made an announcement about the earlier promise.

In the fair leader style condition, the leaders reasserted that they would keep the promise to allow each of the group members the opportunity to discuss their earnings at the end of the task with them. In the unfair leader style condition, the leaders withdrew their promise by stating that they had decided against discussing the earnings with each group members. They did not give a reason for this. Subsequently, the second block of four contribution sessions started. After

the eighth session, the task ended and group members received some final questions concerning their impressions of the task and the group leader.

Insert Table 4 about here.

The contribution patterns, displayed in Table 4, confirmed our prediction about the impact of leadership style. As can be seen only social identifiers were affected by the leadership style. Their contributions were substantially higher when leaders kept their promise than when they broke it. In fact, they were substantially higher than in any other condition. For personal identifiers, however, there was no such effect. Their contributions were unaffected by leadership style.

These results were corroborated by the effects of leadership style on group member's specific state self-esteem, for which we used the same three-item measure as in the previous experiment. The state self-esteem of social identifiers was substantially higher after a procedurally fair treatment by the group leader, whereas there was little effect of treatment on the state self-esteem of personal identifiers. Interestingly, after controlling statistically for differences in reported state self-esteem, the influence of a fair versus unfair treatment on cooperation was substantially reduced for social identifiers. One possible interpretation of this result is that the positive effect of a fair treatment on the relational needs of these members enhanced their mood, which in turn increased their willingness to contribute.

Personal Attributes of Leader

Whereas the power base and behavioural style of leaders primarily provide information about their intragroup functioning, the personal attributes of leaders yield information about both their intragroup and intergroup leadership qualities. From a stereotypical point of view on leadership (Lord & Maher, 1991), leaders are expected to possess a set of skills and abilities that are cognitively associated with good leadership. One of these stereotypical leader skills considered necessary to

achieve a group goal is to be a good communicator. Yet, when a particular intergroup context is salient the expectations concerning leadership may change. For example, members may want a leader who best fulfils the group's prototype (Hogg, 2001). Similarly they may want a leader for whom membership of the group is important and who expresses a strong group commitment.

We expected that the perceived importance of these motivational leader attributes would be influenced by how strongly members identify with their group. Consistent with the differential needs-model, when a social identity was activated group members would cooperate more with leaders who showed a strong group commitment. Conversely, personal identifiers would cooperate more with leaders with stereotypically good leadership skills, such as good communication, planning and organisation skills -- skills necessary to deal with the free-rider problem. Accordingly, we predicted that social identifiers would cooperate more with a highly committed group leader, irrespective of their specific leadership skills, whereas personal identifiers would cooperate more with a highly skilled leader, irrespective of their group commitment.

This prediction was tested in two studies. As an initial test, we examined the role of leadership commitment in the experiment we previously described (De Cremer & Van Vugt; in press**;** exp. 1). In that particular study we manipulated, in addition to the style of leadership, the personal attributes of the group leader in an orthogonal between participant design. Recall from the previous study that the experimenter selected the group leader from the six available group members (yet, the focal participant was never elected). In one condition, the leader was somebody who showed a strong group commitment. This information was based on the fictitious scores of members on a self-reported three-item commitment-scale, which we administered before the start of the task (e.g., "How committed do you feel to this group?" "To what extent do you identify with this group?" 1 = not at all, 7 = very strongly). In the high committed-condition the chosen leader was reported to have an average score of six on the seven-point commitment scale, thus showing high

group commitment. In the low committed-condition the leader had an average score of just two, showing low group commitment. Subsequently, we examined how this information affected the cooperation with leaders during the eight contribution sessions.

In accordance with the differential needs-prediction we found that only social identifiers were influenced by information about the leader's group commitment. Averaging across the contribution sessions, they contributed more with a highly committed leader – an average of £2.12 per session -- than they did with a low committed leader – an average of £1.68. For personal identifiers there was no difference in cooperation with a high committed (£1.52) or a low committed group leader (£1.62). The effect of leader commitment was independent from the impact of a fair or unfair treatment, which we discussed earlier.

In the next experiment we provided a more direct test of this prediction by contrasting a leader with high group commitment with a leader who possessed strong leadership skills. Accordingly, we conducted a fourth and final experiment (De Cremer & Van Vugt, exp. 2; in press), using the same investment task as in the third experiment, albeit with a total of six rather than eight contribution sessions. Before the start of the task, we manipulated members' level of identity using the standard procedure. Subsequently, we asked each member to select a leader from within their group of six. To facilitate the selection process, we asked each person to answer a series of questions regarding their leadership skills and group commitment.

Eight leadership skills questions were taken from an existing questionnaire (Ritchie & Moses, 1983), containing a list of established predictors of managerial success (e.g., "How well do you communicate verbally?" "How good are your organisational and planning skills?"). Thereafter, they completed an extended eight-item group commitment scale (e.g., "How committed do you feel to this group?" "How much do you identify with this group?"). On the computer screen they then saw how each group member, including themselves, was ranked on the skills and

commitment scales. This information was non-veridical and the focal participant occupied the fourth position on both scales.

Subsequently, in half of the conditions the experimenter asked members to elect the person they preferred to lead the group during the investment task (i.e., the leader selection would be based on a majority vote). In the other half of the conditions, the experimenter was said to appoint the group leader. Depending on the condition, either the person who ranked first on the leadership skills scale and fourth on the commitment scale (skilled leader), or the person who ranked first on the commitment scale and fourth on the skills scale (committed leader) was elected (appointed) as group leader. This leader would monitor the contributions of group members and penalise the least contributing member per session with a small fine (£0.50).

Insert Table 5 here.

The contribution patterns, which are displayed in Table 5, were in line with what we expected based on the differential needs-hypothesis. We found that the contributions made by personal identifiers were systematically lower when they were supervised by a committed leader than by a skilled leader. In contrast, social identifiers contributed more under a committed group leader than under a skilled group leader.

Finally, we examined whether there were any differences that were related to the way leaders had been assigned to the group. Overall, group members cooperated more with an elected leader (an average of £2.21) than with an appointed leader (an average of £1.76). This result was not influenced by the salience of an individual's identity.

Conclusions

These findings provide further support for a differential needs-model of leadership in social dilemmas. When leaders are in place, members are more likely to endorse them if leaders appeal to the dominant needs of group members. Leaders

who have a relational power base, a fair leadership style, and are highly committed to their group have a greater influence when a social identity activated among group members. However, when a personal identity is activated leaders must possess an instrumental power base and specific leadership skills in order to be influential.

Conclusions and Discussion

Taken together these experiments provide support for a differential needs-model of leader endorsement in social dilemmas. Group members endorse leaders either because they are perceived to be instrumental in solving the free-rider problem or because they help to establish positive social relationships within the group. Consistent with a social identity perspective (Tajfel & Turner, 1979; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987), the relative importance of these two needs for group members was influenced by the salience of their group membership. When a personal identity was salient the instrumental aspects of leadership were regarded as more important, whereas the relational aspects gained in importance when a social identity was salient.

In this chapter, we examined three stages of the leader endorsement process in social dilemmas (a) the voluntary acceptance of leadership as a viable solution (b) negotiations about the preferred type of leadership, and, finally, (c) the cooperation with leaders in trying to solve the dilemma. First, regarding the acceptance of leadership as a structural solution to public goods we found that personal identifiers were more in favour of the structural change than social identifiers. Furthermore, without a leader they contributed less to the provision of public goods than did social identifiers and they rated their fellow members as less cooperative and trustworthy.

These results suggest that there is a trade-off between social identity as an individual-psychological solution and leadership as a structural solution to social dilemmas. Group members opt for the leader solution when they perceive that the voluntary cooperative efforts of their group are insufficient to provide the common good. Yet, when due to the salience of their social identity group members have more trust in each other's voluntary contribution, they will deem a group leader as

unnecessary. Hence, our research shows that a salient social identity, at least when activated by a symbolic intergroup competition, effectively serves as a leadership substitute (Kerr & Jermier, 1978). Further research is needed to determine whether other kinds of identity manipulations, such as accentuating a common fate or a shared similarity (Haslam, 2001), can produce similar results.

Furthermore, future research should establish other factors that could serve as leadership substitutes. One candidate is members' social value orientation (De Cremer & Van Vugt, 1999; Van Lange, in press). This personality variable distinguishes between people who are either more focused on their personal outcomes (proselves) or on the outcomes of the group (prosocials) in social dilemmas. It may well be that a prosocial orientation operates in the same manner as a salient social identity, with prosocial people exhibiting a weaker preference for adopting a group leader than proself people.

Second, we examined the influence of members' level of identity on their preferences for particular leader prototypes. In accordance with the differential needs model we found that when a social identity was salient group members concentrated more on the relational attributes of a leader. That is, more than personal identifiers social identifiers preferred a leader from inside the group as well as a leader who was elected by the members rather than appointed by the experimenter. This suggests that social identifiers cared more about the fit between the characteristics of the leader and those of the group, which is important for maintaining a positive group distinctiveness (Hogg, 2001).

An alternative, instrumental explanation is that social identifiers were more concerned than personal identifiers with exercising control over the leader, hence their preference for an elected and an ingroup leader. Yet, if this were true we would also expect them to have a greater preference for a democratic leader. In fact, both personal and social identifiers displayed a strong preference for democratic leadership above autocratic leadership. There may well be relational as well as instrumental motives behind the preference for a leader who would allow members to have a voice

in the decision-making process. Following the differential needs-model, personal identifiers may prefer to have voice, mainly because they can control their personal outcomes. Conversely, having voice may also serve a relational function for social identifiers, because it communicates a symbolic message of respect and acceptance by the group (group-value model; Tyler & Lind, 1992).

As a third stage in the leader endorsement process we examined the extent to which group members cooperated with the group leader in solving the social dilemma. To test predictions derived from the differential needs-model we investigated the influence of members' identity on their cooperation with various group leaders, who differed in (a) their power base, (b) style of leadership, and (c) personal attributes. These leader manipulations enabled us to distinguish quite clearly between instrumental and relational motives for leader endorsement.

First, we found that when a personal identity was salient group members responded more strongly to leaders with an instrumental power base -- who penalised the least-contributing member -- than leaders with a relational power base -- who could only offer praise and support (French & Raven, 1959). Yet, when a social identity was salient a relational leader was at least as influential. Second, when a social identity was salient group members responded more strongly to a leader who was procedurally fair by keeping an earlier promise. Yet, a consistent, fair leadership style had no influence when a personal identity was salient among group members.

These two findings extend and complement research on the group-value model (Tyler, 1997; 2000; Tyler & Lind, 1992; Tyler & Smith, 1998). The group-value model postulates that the quality of treatment by a leader or authority provides important relational information to individuals. A fair and considerate treatment signifies to individuals that they are respected members of their group. This strengthens an individual's identification with their group, which, in turn, affects their self-esteem. Our results are consistent with this model by showing that a high quality treatment more strongly affected the feelings and behaviours of members for whom group membership was actually important to their self-definition (i.e., social

identifiers). They cooperated more with a leader who communicated relational information and they reported a higher situation-specific self-esteem after interacting with this leader. Conversely, when group membership was not all that important to members' self-definition (i.e., personal identifiers) the quality of treatment they received had little influence on their feelings and behaviours. As predicted by the differential needs-model they were influenced more strongly by a leader who could directly influence their outcomes in the dilemma.

In addition to their power base and leadership style we found that the personal attributes of a group leader also mattered in the decision whether to cooperate with a leader or not. For personal identifiers a group leader was more influential if they were believed to possess strong leadership skills. In contrast, social identifiers cooperated more with a leader who showed a strong group commitment. This provides further evidence for a differential needs model, because it suggests that members' expectations about what constitutes good leadership varies with the salience of their identity. When their social identity is activated members are less influenced by a leader who possesses stereotypical leadership skills than a leader who shows a strong desire to belong to the group.

This suggests that relational impressions about group leaders are not just shaped by their intragroup functioning (in terms of power base and leadership style), but also by their intergroup functioning. Does the leader play a role in establishing a positive between-group identity? In this regard, this result fits nicely with recently developed social identity perspectives on leadership (Hogg, 2001; Turner & Haslam, 2000). These models postulate that leadership influence is a function of the cognitive fit between the characteristics of the leader and the characteristics of the group, in other words, their prototypicality. The most prototypical member of a group with high identifying members is indeed more likely to be someone who exhibits a strong group commitment than in a group with low identifying members.

How do our findings contribute to the broader leadership literature? The distinction we made between the instrumental and relational functions of leadership is

reminiscent of a large body of theory and research on leadership. For example, the classic Ohio State studies on leadership, conducted in the 1940s and '50s (Hemphill, 1961), showed that the two primary leadership functions in small groups are task orientation (i.e., initiating structure) and relationship orientation (i.e., consideration). Other researchers have made essentially the same distinction, but with the use of slightly different labels. For example, Cartwright and Zander (1968) differentiated between goal achievement and group maintenance as the two basic functions of leadership.

Our findings suggest that these functions are not entirely independent from each other. Leaders can solve social dilemmas either through a focus on the completion of the specific task or on the strengthening of the group. The extent of their influence, however, depends upon the match between their primary objective and the dominant needs within the group. If group members perceive an intense conflict between the personal interests of group members and the broader group interest the leader must concentrate on the dilemma task at hand, solving the free-rider problem, to be influential. Yet, if group members perceive little or no conflict between personal and group interests the group leader's primary objective is to foster and maintain pleasant social relationships between group members.

This group-based view on leadership is consistent with the work of other leadership theorists. For example in his work on followership Hollander (1964) argues that the analysis of leaders must include a careful consideration of the group that they represent: "It is therefore important that the leader, by his behaviour manifest a loyalty to the needs and aspirations of group members. These things must matter to him in ways that are accessible to view because such evidence of good faith and sincere interest serve to elicit greater acceptance of influence (Hollander, 1964, p. 231)."

The social dilemma paradigm proved to be a suitable environment for investigating the different functions of leadership in groups. In a social dilemma there is a conflict between the material needs and the relational needs of group members.

Members who try to maximise their personal outcomes will harm the interests of the group to which they belong. Relational concerns thus play a role in restricting the relentless pursuit of self-interest and they promote the viability of the group. Leaders can solve this conflict of needs either by appealing directly to member's self-interest, for example, by introducing reward and punishments, or by an appeal to the overarching group interest. The latter suggests a more constructive way to solve social dilemmas, but will only be effective if group members care enough about their group membership.

Our research has so far concentrated on the role of leaders in fulfilling the instrumental and relational needs of group members. Although these two needs are clearly important in shaping leader endorsement, there are probably other needs that leaders should also fulfil in order to be endorsed. An alternative need for individuals of most groups is the desire for personal autonomy and control (Deci & Ryan, 2000). These autonomy needs could explain why group members are quite reluctant to endorse autocratic forms of leadership in social dilemmas, although they are potentially highly effective structural solutions (see also Rutte & Wilke, 1985). In addition, individuals may wish to fulfil their intellectual and competence needs in groups, which may require a more transformational leadership style (Bass, 1990) -- a leader who challenges members with high standards and stimulates the expression of ideas. Cooperation in social dilemmas presumably results from the satisfaction of a multitude of different needs, which can be more or less salient in any particular group context. Future research should investigate when particular needs are more salient than others so that leaders can try to satisfy these needs, and thus exercise influence in groups.

References

Bass, B. M. (1990). Handbook of Leadership. New York: The Free Press

Bass, B.M. (1997). Does the transactional-transformational leadership paradigm transcend organisational and national boundaries? American Psychologist, 52, 130-139.

Baumeister, R. F., & Leary, M. R. (1995). The need to belong: Desire for interpersonal attachments as a fundamental human motivation. Psychological Bulletin, 117, 497-529.

Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. Psychological Bulletin, 86, 307-324.

Cartwright, D., & Zander, A. (1968). Group dynamics. New York: Harper and Row.

Chemers, M. (2001). Leadership effectiveness: An integrative review. In .M. A. Hogg & R. S. Tindale (Eds.), Blackwell handbook of social psychology: Group processes (pp. 376-399). Oxford, UK: Blackwell

Dawes, R. M. (1980). Social dilemmas. Annual Review of Psychology, 31, 169-193.

Deci, E. L., & Ryan, R. M. (2000). The what and why of goal pursuits: Human needs and the self-determination of behaviour. Psychological Inquiry, 11, 227-268

De Cremer, D. (2000). Leadership selection in social dilemmas – Not all prefer it: The moderating effect of social value orientation. Group Dynamics: Theory, Research and Practice, 4, 330-337.

De Cremer, D., & van Knippenberg, D. (in press). How do leaders promote cooperation? The effects of charisma and procedural fairness. Journal of Applied Psychology.

De Cremer, D., & Van Vugt, M. (1999). Social identification effects in social dilemmas: A transformation of motives. European Journal of Social Psychology, 29, 871-893.

De Cremer, D. & Van Vugt, M. (in press). Intergroup and intragroup

dynamics of leadership in social dilemmas. Journal of Experimental Social Psychology

Foddy, M., & Crettenden, A. (1994). Leadership and group identity as determinants of resource consumption in a social dilemma. In U. Schulz, W. Albers, & U. Mueller (Eds.). Social dilemmas and cooperation (pp. 207-232), Berlin: Springer-Verlag.

Foddy, M., & Hogg, M. (1999). Impact of leaders on resource consumption in social dilemmas: The intergroup context. In M. Foddy, M. Smithson, S. Schneider, & M.A. Hogg (Eds.), Resolving social dilemmas: Dynamic, structural, and intergroup aspects. Philadelphia, PA: Psychology Press.

French, J.R.P., & Raven, B. (1959). The bases of social power. In D. Cartwright (Ed.), Studies in social power (pp. 118-149). Ann Arbor: University of Michigan, Research Center Group.

Hains, S. C, Hogg, M. A., & Duck, J. (1997). Self-categorization and leadership: Effects of group prototypicality and leader stereotypicality. Personality and Social Psychology Bulletin, 23, 1087-1100.

Hardin, G. (1968). The tragedy of the commons. Science, 162, 1243-1248.

Haslam, A. (2001). Psychology in organizations: The social identity approach. London: Sage.

Hemphill, J.K. (1961). Why people attempt to lead. In L. Petrullo & B.M. Bass (Eds.), Leadership and interpersonal behaviour (pp. 201-215). New York: Holt.

Hogg, M. A. (2001). A social identity theory of leadership. Personality and Social Psychology Review, 5, 184-200.

Hogg, M. A., & Abrams, D. (1988). Social identifications: A social psychology of intergroup relations and group processes. London: Routledge.

Hollander, E. P. (1964). Leaders, groups, and influence. New York: Oxford University Press

Hollander, E. P. (1985). Leadership and power. In G. Lindzey & E. Aronson (Eds.), The handbook of social psychology (pp. 485-537). New York: Random House.

Kerr, N. L. (1983). Motivation losses in small groups: A social dilemma analysis. Journal of Personality and Social Psychology, 45, 819-828.

Kerr, N. L. (1999). Anonymity and social control in social dilemmas. In M. Foddy, M. Smithson, S. Schneider, & M.A. Hogg (Eds.), Resolving social dilemmas: Dynamic, structural, and intergroup aspects (pp. 103-120.). Philadelphia, PA: Psychology Press.

Kerr, S., & Jermier, J. M. (1978). Substitutes for leadership: Their meaning and measurement. Organisational Behaviour and Human Performance, 22, 375-403.

Komorita, S.S., & Parks, C.D. (1994). Social Dilemmas. Dubuque, IA: Brown & Benchmark.

Komorita, S. S., Parks, C.D., & Hulbert, L. (1992). Reciprocity and the induction of cooperation in social dilemmas. Journal of Personality and Social Psychology, 62, 607-617.

Kramer, R. M., & Brewer, M. B. (1984). Effects of group identity on resource use in a simulated commons dilemma. Journal of Personality and Social Psychology, 46, 1044-1057.

Levine, J. M., & Moreland, R. L. (1998). Small groups. In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds). The Handbook of Social Psychology (pp. 415-469). New York: McGraw Hill.

Lind, E.A., & Tyler, T.R. (1988). The social psychology of procedural justice. New York: Plenum Press.

Lippitt, R. & White, R.K. (1968). Leader behaviour and member reaction in three social climates. In D. Cartwright, & A. Zander. Group dynamics. New York: Harper and Row.

Lord, R. G., & Maher, K. J. (1991). Leadership and information processing: Linking perceptions and performance. Winchester, MA: Unwin Hyman.

Luce, R.D., & Raiffa, H. (1957). Games and decisions: Introduction and critical survey. London: John Wiley and Sons.

Messick, D. M., & Brewer, M. B. (1983). Solving social dilemmas: A review.

In L. Wheeler & P. Shaver (Eds.), Review of personality and social psychology (Vol. 4, pp. 11 - 44). Beverly Hills, CA: Sage.

Messick, D. M., Wilke, H., Brewer, M. B., Kramer, R. M., Zemke, P. E., & Lui, L. (1983). Individual adaptations and structural change as solution to social dilemmas. Journal of Personality and Social Psychology, 44, 294-309.

Olson, M. (1965). The logic of collective action. Cambridge, MA: Harvard U. Press.

Ritchie, R. J., & Moses, J. L. (1983). Assessment center correlates of women's advancement into middle-management. Journal of Applied Psychology, 68, 227-231.

Rosenberg, M. (1979). Conceiving the self. New York: Basic Books.

Rubin, M., & Hewstone, M. (1998). Social identity theory's self-esteem hypothesis: A review and some suggestions for clarification. . Personality and Social Psychology Review, 2, 40-62.

Rutte,C.G., & Wilke, H.A.M. (1984). Social dilemmas and leadership. European Journal of Social Psychology, 14, 105-121.

Rutte, C.G, & Wilke, H.A.M. (1985). Preference for decision structures in a social dilemma situation. European Journal of Social Psychology, 15, 367, 367-370.

Samuelson, C.D. (1993). A multi-attribute approach to structural change in resource dilemmas. Organisational Behaviour and Human Decision Processes, 55, 298-324.

Samuelson, C.D., & Messick, D.M. (1986). Inequities in access to and use of shared resources in social dilemmas. Journal of Personality and Social Psychology, 51, 960-967.

Samuelson, C.D., & Messick, D.M. (1995). When do people want to change the rules for allocating shared resources? In D. Schroeder (Ed.), Social dilemmas: Perspectives on individuals and groups (pp. 143-162). New York: Praeger.

Samuelson, C.D., Messick, D.M., Rutte, C.G., Wilke, H.A.M. (1984). Individual and structural solutions to resource dilemmas in two cultures. Journal of Personality and Social Psychology, 47, 94-104.

Sato, K. (1987). Distribution of the cost of maintaining common resources. Journal of Experimental Social Psychology, 23, 19-31.

Schroeder, D. A. (1995). Social dilemmas: Perspectives on individuals and groups. London: Praeger.

Spears, R., Oakes, P. J., Ellemers, N., & Haslam, A. (2000). The social psychology of stereotyping and group life. Oxford: Blackwell

Stroebe, W., & Frey, B. S. (1982). Self-interest and collective action: The economics and psychology of public goods. British Journal of Social Psychology, 21, 121-137.

Tajfel, H. (1972). La categorisation sociale (social categorization). In S. Moscovici (Ed.), Introduction a la psychologie sociale (pp. 272-302). Paris: Larouse.

Tajfel, H., & Turner, J.C. (1979). An integrative theory of intergroup conflict. In W.G. Austin & S. Worchel (Eds.), The social psychology of intergroup relations (pp. 33-48). Monterey, California, Brooks/Cole.

Tenbrunsel, A., & Messick, D. M. (1999). Sanctioning systems, decisions frames, and cooperation. Administrative Science Quarterly, 44, 684-707.

Thibaut, J., & Kelley, H.H. (1959). The social psychology of groups. New York: John Wiley.

Turner, J. C. (1975). Social comparison and social identity: Some prospects for intergroup behaviour. European Journal of Social Psychology, 5, 5-34.

Turner, J. C. & Haslam, A. (2000). Social identity, organizations, and leadership. In M. E. Turner (Ed.), Groups at work: Advances in theory and research. Hillsdale, N. J: Erlbaum.

Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. (1987). Rediscovering the social group: A self-categorization theory. Oxford: Blackwell.

Tyler, T.R. (1997). The psychology of legitimacy: A relational perspective on voluntary deference to authorities. Personality and Social Psychology Review, 1, 323-345.

Tyler, T. (2000). Why do people cooperate with groups? Support for structural solutions to social dilemma problems. In M. Van Vugt, M. Snyder, T.R. Tyler, & A. Biel (Eds.), Cooperation in modern society: Promoting the welfare of communities, states, and organisations (pp. 64-82). London, UK: Routledge.

Tyler, T.R., & Degoey, P. (1995). Collective restraint in social dilemmas: Procedural justice and social identification effects on support for authorities. Journal of Personality and Social Psychology, 69, 482-497.

Tyler, T. R., & Lind, E. A. (1992). A relational model of authority in groups. In M. Zanna (Ed.), Advances in experimental social psychology (Vol. 25, pp. 115-191). New York: Academic Press.

Tyler, T., & Smith, H. J. (1998). Social justice and social movements. In D. Gilbert, S. T. Fiske, & G. Lindzey (Eds). The Handbook of Social Psychology (pp. 595-632). New York: McGraw Hill.

Van de Kragt, A.J.C., Orbell, J.M., & Dawes, R.M. (1983). The minimal contribution set as a solution to public goods problems. American Political Science Review, 77,112-122.

Van Lange, P. A. M. (in press). Beyond self-interest: A set of propositions relevant to interpersonal orientations. In W. Stroebe & M. Hewstone (Eds.), European Review of Social psychology (Vol. 11). London: Wiley

Van Vugt, M. (1997). When the privatization of public goods may fail: A social dilemma approach. Social Psychology Quarterly, 60, 355-367.

Van Vugt, M., & De Cremer, D. (1999). Leadership in social dilemmas: The effects of group identification on collective actions to provide public goods. Journal of Personality and Social Psychology, 76, 587-599.

Van Vugt, M., Jepson, S. F. & De Cremer, D. (2001). Why autocratic leadership might fail in solving public good dilemmas: The importance of group stability. University of Southampton: Unpublished manuscript.

Van Vugt, M., Snyder, M., Tyler, T., & Biel A. (2000) Cooperation in modern society: Promoting the welfare of communities, states, and organisations. London,

UK: Routledge.

Wilke, H.A.M. (1991). Greed, efficiency and fairness in resource management situations. European Review of Social Psychology, 2, 165-187.

Wit, A.P., & Wilke, H.A.M., & Van Dijk, E. (1989). Attribution of leadership in a resource managment situation. European Journal of Social Psychology, 19, 327-338.

Yamagishi, T. (1986). The structural goal/expectation theory of cooperation in social dilemmas. In E. Lawler (Ed.), Advances in Group Processes (Vol. 3, pp. 51-87). Greenwich: JAI Press.

Yukl, G. A. (1989). Leadership in organisations. Engelwood Cliffs, NJ: Prentice Hall.

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Footnotes

[1] There are two types of public goods, the step-level and continuous public good (Komorita & Parks, 1994). Unlike in a step-level good, in a continuous public good the size of the good is variable and depends on the total amount of contributions received from group members. In this research we studies both types of public good tasks.

[2] We also manipulated task difficulty by telling half of the group members that their group would need at least five contributors to reach the bonus (difficult task), whereas in the other half of conditions the group needed just two contributors (easy task). Because there were no predictions regarding the impact of this variable on leader endorsement and it did not influence any of the results we will not discuss it here.

[3] Meta-analytic research has found evidence that when measuring temporary changes in self-esteem, specific state-measures are better predictors than global trait self-esteem scales (Rubin & Hewstone, 1998).

Table 1. Preferences for Different Leader Types in Social Dilemmas as a Function of Member's Identity

			Level of identity			
Leader types	Overall		Personal		Social	
	M	SD	M	SD	M	SD
Democratic leader	5.51	1.46	5.61_a	1.31	5.40_a	1.59
Elected leader	5.15	1.36	4.85_a	1.58	5.42_b	1.04
Internal leader	4.94	1.28	4.72_a	1.26	5.14_b	1.27
Appointed leader	3.22	1.63	3.63_a	1.74	2.81_b	1.40
External leader	3.08	1.37	3.27_a	1.29	2.89_b	1.41
Autocratic leader	2.55	1.62	2.46_a	1.63	2.63_a	1.61

Notes. Ratings were made on a 7-point scale (1 = no preference for leader; 7 = very strong preference). Means with a different subscript differ significantly at $p < .01$ in a row-wise comparison. From Van Vugt & De Cremer, 1999, Exp. 1 with permission © 1999 American Psychological Association

Table 2. Contributions as a Function of Members' Identity and the Power Base of the Leader

	Block				
	Without leader		With leader		
Level of identity	M	SD	Power base of leader	M	SD
Personal	1.78_a	0.56	Instrumental	2.28_c	0.62
			Relational	1.68_a	0.66
Social	2.09_b	0.51	Instrumental	2.27_c	0.35
			Relational	2.18_c	0.50

Notes. The range of possible contributions varies from 0 to £3. Means with a different subscript differ significantly at $p < .01$. From Van Vugt & De Cremer, 1999, Exp. 2, with permission

Table 3. Differences in State-Specific Self-Esteem as a Function of Members' Identity and the Power Base of the Leader

Level of identity	Power base of leader: Instrumental M	Instrumental SD	Relational M	Relational SD
Personal	4.97_a	0.96	4.42_b	0.94
Social	4.51_b	0.94	4.95_a	1.22

Note. Higher scores indicate a higher state-specific self-esteem (1-7). Means with a different subscript differ significantly at $p < .05$. Adapted from Van Vugt & De Cremer, 1999, Exp. 2.

Table 4. Contributions as a Function of Members' Identity and Leadership Style

Level of identity	Sessions 1-4		Sessions	Sessions 5-8	
			Leadership style		
	M	SD		M	SD
Personal	1.51_a	0.57	Fair leader	1.60_a	0.70
			Unfair leader	1.66_a	0.69
Social	1.87_b	0.69	Fair leader	2.26_c	0.65
			Unfair leader	1.64_a	0.61

Note. The range of possible contributions varies from £0 to £3. Means with a different subscript differ significantly at $p < .01$. From De Cremer & Van Vugt, Exp. 1, in press, with permission

Table 5. Contributions as a result of Members' Identity and the Personal Attributes of the Leader

Level of identity	Attributes of leader	M	SD
Personal	Skilled	242.42_a	48.75
	Committed	154.74_b	68.98
Social	Skilled	181.61_b	41.93
	Committed	210.07_a	64.87

Note. The range of possible contributions varies from £0 to £3. Means with a different subscript differ significantly at $p < .01$. From De Cremer & Van Vugt, Exp. 2, in press, with permission, © 2001 Academic Press