

Autocratic leadership in social dilemmas: A threat to group stability

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Journal of Experimental Social Psychology Elsevier Science (USA), Volume 40, Issue 1, January 2004, Pages 1-13

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This paper expands previous research on leadership in social dilemmas by examining the role of leadership in public goods dilemmas with open group settings. Specifically the research uses step-level public goods (those that require a minimum number of investors or amount of investment in the group) to test the frequency of group members choosing to leave under laissez-faire, democratic, and autocratic leadership styles. The paper proposes that autocratic leadership may not be an effective long-term solution to public goods dilemmas if group members are allowed to make a stay/ exit decision. More people exited groups with autocratic leadership styles than both of the other leadership styles combined. Their exiting removed valuable resources from groups that needed a minimum commitment to be successful and thus threatened group stability. The research in this paper also examines why leadership style matters in stay/ exit decisions. Group members' motivations for exiting autocratic groups were classified into two categories: outcome concern (lack of opportunity to free ride) and procedural control (lack of individual's procedural control).

The research consisted of two experiments. The first experiment compared the effects of autocratic, democratic, and laissez-faire leadership styles. The Participants arrived at their sessions in groups of six or, in cases where only five participants showed up, they were made to believe that a sixth member showed up late. No participants expressed suspicion of the sixth member in the debriefing sessions. Participants were told that there would be two tasks consisting of five trials each, though there were fewer trials this number was given to avoid "endplay" effects. Each group member received £3 to keep or invest in a collective good each trial. If a minimum of four out of six group members invested the group would receive a bonus of £5 per member. If the bonus level was reached all members, regardless of their contribution, would receive the bonus. If fewer than four members invested the investments were lost. A short quiz was given to make sure that participants understood the risks and payoffs; each question on the quiz was repeated until that participant answered it correctly. All instructions were given on the computer.

After the process was clear, participants in the first experiment were told that a leader would be assigned so that the researchers could study leaders helping groups to solve investment problems. The participants (psychology undergraduates) were told that a graduate student would be the leader and would monitor investment by the computer to

ensure that the group did well. One of three email greetings (laissez-faire, democratic, or autocratic) was sent to the group depending on which style the group was testing. Autocratic style leaders did whatever they felt was necessary to provide for the common good. They decided which group members should contribute how much without asking anyone for input. Democratic style leaders involved group members in the decision-making process and laissez-faire style leaders did not seek control over group members, so the group was free to decide for themselves what to do. Three trials were performed and group feedback was standardized across the autocratic and democratic conditions. After the third trial participants received an email from the experimenter, not the leader, alerting them of the completion of the first task and giving them the opportunity to stay in the same group or join another group with a different leader. It was made clear that leaving the group would harm the group's chances of securing the bonus because a minimum of four investors was still needed. After participants decided whether to stay or exit the group the experiment was terminated and a thorough debriefing followed.

The second experiment consisted of a very similar set-up with the additional intention to investigate possible explanations (outcome and procedural concerns) for the destabilizing effect of autocratic leadership. The number of trials was extended from three to eight and participants were told from the start that there was another group working on a similar project. Participants still arrived in sets of six but the six were randomly formed into two groups of three. To maintain comparability between the two experiments, the size of the bonus and the two-thirds rate of investment to gain it were retained. The experiment was run in the same manner but, to test the reasons for leaving a group, individual's investment funds were used either very frequently (low outcome favorability) or very rarely (high outcome favorability) under the autocratic and democratic styles. The laissez faire style was used as a control condition due to the difficulty of manipulating outcome favorability. All groups were given the same bogus outcome feedback that on every trial, every group reached the level of investment necessary to win the bonus.

The exit percentage in experiment one was 17.2 percent; in experiment two it was 25.4 percent. There was a significant association between exit and leadership style in both experiments. Three comparisons were conducted across the leadership styles. The first comparison contrasted the autocratic style against a combination of the other two styles, the second contrasted autocratic and democratic, and the third contrasted democratic and laissez faire. In the first experiment the first contrast showed a much greater percentage of exiting from the autocratic group (36.7 percent versus 7 percent). The second contrast was also significant (36.7 percent and 11 percent), but the third contrast was not (11 percent versus 3.4 percent). The contrasts in the second experiment followed the same lines. In both experiments the levels of exiting, if transferred to real group decisions, would have only affected autocratic-led groups. These groups would have lost more than one-third of their members, on average, making it impossible for a successful two-thirds investment. The research found no gender differences in exiting behavior in either experiment.

The second experiment found a marginally significant main effect for outcome favorability in exiting choices. 36.5 percent of those with low outcome favorability

exited compared to 20.4 percent of those with high outcome favorability. But, the leadership style and outcome favorability interaction was not significant, leading to the conclusion that the effect of leadership style was not dependent upon whether group members received favorable or unfavorable personal outcomes. Though all groups were told they invested enough to achieve the bonus, a more favorable personal outcome was if your original investment money £3 was not used to secure the bonus (netting you £8 to other member's £5).

At the conclusion of the second experiment participants rated eight reasons for their decisions to stay or leave. Four reasons formed a scale for outcome satisfaction and four reasons formed a scale for procedural satisfaction. There was a clear difference on both scales depending on the stay/ leave decision the individual made. Exiters were less satisfied than stayers with both the outcomes and procedures. Group members were more dissatisfied when their outcomes were unfavorable, though satisfaction under both outcome conditions was reasonably high compared to the scale's midpoint. Participants were also more dissatisfied with procedures under the autocratic leadership style than the democratic leadership style. An analysis of the ability of procedural satisfaction to mediate the effects of leadership style found a significant effect on procedural satisfaction on stay/ exit decisions, but the main effect of leadership style was no longer significant. These results were consistent with the idea that procedural concerns underlie the effects of leadership style. But the rating of the reasons after stay/ exit choice means that the results should be interpreted with caution.

The findings of experiments one and two show that autocratic leadership is not a viable solution to the provision and maintenance of step-level public goods in groups with fluid boundaries. However, only only experimenting in Western democratic societies, the unclear reasons for assigning group leaders, the extreme nature of the leadership styles and the exclusive focus on the effects of members exiting their groups limit the research findings. The strength of the research is its focus on membership stability within a social dilemma.