Is there a dark side to moving in sync?

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Moving in harmony can make people feel more connected to one another and, as a result, lead to positive collective action. Think of those feel-good vibes created in a yoga class as students move in unison through their downward-facing dogs. Yet given that synchronized physical activities are also a cornerstone of military training and are the highlights of military propaganda reels, could the interconnectedness created by coordinated action be mined to make people behave destructively instead? According to two studies conducted by Scott Wiltermuth, assistant professor of management and organization at the USC Marshall School of Business, the cohesiveness synchronized action fosters can, indeed, be manipulated for less than ideal ends.

Wiltermuth's first study, "Synchronous Activity Boosts Compliance with Requests to Aggress," which will be published in the January issue of the Journal of Experimental Social Psychology, examined whether aligned action primed participants to act aggressively to others outside their designated teams.

In the experiment, 155 participants were divided into teams of three and trained to move plastic cups in a specified sequence to music in either a synchronized or unsynchronized way, while some in a control group merely held their cups above the table. Participants had three minutes to memorize a list of cities and were told that those scoring in the top 25 percent would be entered in a lottery to win $50, thus creating a competitive environment. After their three minutes elapsed, participants were asked to begin moving their cups in time to instrumental music heard through headphones. They were then informed before they took

the memory test that they could chose the sounds the next group of participants would hear during their cup exercise. The choices included a selection called "Noise Blast," described as an "aggravating" choice consisting of "90 seconds of static played at a very high volume." In about half of the teams, an insider was planted who would try to persuade teammates to select "Noise Blast."

As anticipated, the study showed that those who moved their cups in synchrony felt more connected to those in their group and were more likely to choose the noise blast option at the request of their teammate than participants who performed actions out of sync with one another or as part of the control group. They identified with the interests of their own group over that of the whole.

In the complementary study, "Synchrony and Destructive Obedience" slated for an upcoming issue of Social Influence, Wiltermuth examined whether synchronized action could be used as a tool to heighten people's obedience to kill insects at the directive of the authority figure.

In the study, 70 participants were randomly assigned either to walk in step behind an experimenter, out-of-step with the experimenter or to simply walk with the experimenter in the control condition. As expected, those who were in sync with the recognized authority figure indicated that they made more of an effort to walk in-step and felt closer to him or her than did those in the coordinated but asynchronous or control condition.

Next, 89 participants repeated the walking experiment before engaging in a second portion in which they were asked to exterminate sow bugs by funneling as many as possible into a device within 30 seconds. (Participants did not actually kill the bugs.) Those participants who walked in step with the same experimenter who later instructed them to kill the bugs put approximately 54 percent more bugs into the device

than did those in the control condition. They also put 38 percent more bugs into the funnel than did participants in the coordinated but asynchronous condition and twice as many bugs into the funnel as did participants who walked in synchrony with a different experimenter than the one who instructed them to terminate the insects.

Wiltermuth, an expert on group dynamics, says the findings are the first to indicate that synchronous activities may be used to influence leader-follower relations and are especially pertinent, as synchronized action like marching and chanting are still used in political and religious rallies to influence people throughout the world. Wiltermuth notes, "The findings suggest that synchrony cannot only be used for good, but also as a tool to promote evil."

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