

Experiments on Emergence of Leadership in Teams*

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Abstract

In a team production game in which agents choose their effort at timings they prefer, we theoretically and experimentally investigate emergence of leadership. In the theoretical part of this paper, we derive a condition under which leadership emerges as a sequential equilibrium. We identify three kinds of leadership under the condition. In addition, we show that “no leadership” is always a sequential equilibrium. In the experimental part of this paper, we show the following findings. First, the data shows that only a particular kind of leadership emerges; an agent who holds more confidence about team productivity becomes a leader and an agent who holds less confidence becomes a follower. Second, the data verifies that the mechanism of this leadership is endogenous signaling, that is, a sender-receiver relation is formed endogenously by agents’ different confidences. These results imply that leadership emerges endogenously, and that it enhances production efficiency.

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