A Little Knowledge Can Lead to Polarization: 
The Consequence of Misunderstanding Payoff Structure※

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Abstract
This paper explores how belief polarization, which refers to the phenomenon where individuals' beliefs become more extreme and diametrically opposed even when they have access to the same information, can lead to actual polarization of behavior through laboratory experiments. Especially, we test whether people's perception of the payoff structure reduces polarization. The results show that belief polarization leads polarized actions when subjects need to calculate the final earnings on their own. On the other hand, when people know payoffs of all possible consequences, then polarization still emerges, but its magnitude dramatically decreases. Comprehension level is also improved by understanding the payoff structure.

Keywords: belief polarization, laboratory experiments, payoff structure, comprehension level, the effect of instructions

JEL classification: C92, D72, D82, D83

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