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Using behavioral experiments to understand preferences with regard to risk, patience, and cooperation in Norwegian Fisheries.

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"Managing fisheries is managing people" is a cliché, yet very little is actually known about fishermen behavior. In marine science, it is often ignored or described as rationally optimizing behavior – overlooking the complexity of human behavior.

In this study we perform behavioral experiments with about 300 fishermen from all over Norway and a control group of similar size to look at behavior under risk, which is ubiquitous in fisheries. Fishermen are exposed to large income fluctuations, and also the physical risk is typically higher than in other professions. On top of that, uncertainties about the future, notably fluctuations in stock abundances, TAC and regulatory changes are affecting decisions taken by fishers.

We use behavioral experiments and a questionnaire to elicit willingness to take risk, willingness to accept losses, and willingness to make sacrifices now for higher gains in the future. We correlate this with the tendency to cooperate (measured by a willingness to share money), and questions about expectations about how the future of the fishery will develop. This is particularly important because risk and uncertainty are not constant, but constantly changing due to climatic changes and regulatory interventions. Insights on how fishermen respond to risk and uncertainty are therefore important to design effective and efficient regulations.

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