

# Experimental Study of Reversal Incentives in the Form of a Sequential Game: The Application of Behavioral Economics

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## Abstract:

A group is an organized unit whose members have a common goal, work together, and mutually exchange information and experiences. One of the key issues for any organization is finding ways to encourage them to perform better. Businesses constantly need to motivate the workforce to be more flexible, respond more quickly, provide reliable solutions to complex issues, and increase production, generally.

According to conventional economics, increasing monetary rewards will increase the efforts of the workforce. In other words, more monetary rewards mean stronger incentives and vice versa. This simplification is used in many economic situations; however, it does not necessarily apply to environments where the workforce is part of a group and their rewards are affected by the work of the other group members. In fact, it may be that the economic theory claiming that more rewards lead to more effort by the labor force does not apply under certain conditions, and a situation contrary to it occurs. Actually, in such circumstances, some members of the group might take advantage of the other members of the group, and will get more rewards while doing less work, which has been described by Winter (2009) and McClure et al. (2014) as incentive reversal. Incentive reversal indicates a situation in which an increase in rewards for all the members of a group will only lead to an effort made by a fraction of the agents.

The main objective of this study is an experimental survey of incentive reversal in the framework of a sequential game. In this regard, 135 students from Ayatollah Haeri University of Meybod participated in a two-stage game consisting of three-person teams. The results showed that: first, with regards to incentive reversal, the increase in the cost of effort results in more effort and thus more production. Second, when the

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cost of effort is high, each player will attempt to exert his/her effort, if and only if he/she observed that all the agents before him/her have attempted to exert their efforts. Third, based on incentive reversal theory predictions, the first participants exert less effort at low costs.

The findings of the present study on incentive reversals indicate the important conclusion that large monetary incentives may lose their effectiveness if the validity of this potential threat is devalued. Also, the explicit and complete introduction of rewards may sometimes not have the desired results. For example, guaranteeing increased pay to employees or providing better job opportunities that reduce effort costs does not always lead to increased performance. Rather, they may even lead to incentive reversals .

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