

How Markets Erode Moral Values

A pilot study of a conceptual replication

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This is a pilot study of a conceptual replication of Falk and Szech's *Morals and Markets* (2013). They hypothesised a decay of moral values in market conditions due to three features. These features were the fact that responsibility is shared when two people trade, the knowledge that people act according to the social norms they believe exist in a situation and diversion of attention. They tested their hypothesis by letting participants decide whether to trade in a market condition and kill a mouse or not trade and let the mouse live. For the conceptual replication study it was decided to use the sending and non-sending of vaccines for children with polio instead of the life of mice. The conceptual replication will also consider whether or not a social pressure effect is enough to explain the results in the original study. In order to do so, a voting treatment was introduced. The pilot study was concerned with functionally running the test of the conceptual replication and test participants individually, bilaterally and in a voting treatment. The results are based on a very small sample and are thus not representative of any group or population. The tendencies perceived from the data is that participants engaging in a market do value the donation of vaccine lower than if they are forming their judgments on their own. 50% of participants made trades resulting in them receiving 200 Swedish crowns or less and children not getting vaccines. When participants were making judgments independently or by voting for taking money or not chose taking the money less than 20% of the time.

Introduction

In Falk and Szech's *Morals and Markets* (2013), they employed a solution to study how people make moral decisions in a market condition. This by having participants decide whether to accept money and let mice die, or refuse to trade and let mice live. This was tested by three different treatments; the individual treatment,

the bilateral treatment and the multilateral treatment. However the main results highlighted a significant difference between the individual and bilateral treatments, which we kept for this study.

Comparing the performance of individual treatment and market conditions (bilateral and multilateral treatments), the original study

drew the conclusion that the market conditions eroded moral values. In particular it was shown that participants were willing to trade the life of mice for a lower price in the market conditions compared with the individual treatment. This decay of moral values seems to involve Diffusion of responsibility. This led to the introduction of a new condition with voting, in order to test whether the phenomenon would be observed without referring to a market situation.

Objective

The purpose of this study is to do a pilot study of a conceptual replication of Falk and Szech's study *Morals and Markets*. The conceptual replication study will show if the result will be the same as the original results and will examine a new treatment which involve voting. The pilot study's main purpose is to functionally run the test of the conceptual replication study.

The study differ from the original study regarding the ethical concerns along with a slightly different type of methodology and as mentioned, it also, as mentioned, present the new treatment with voting.

Theoretical background

The market is an environment for exchange of some service or good. The Seller is defined by who's endowed with the good or service in

question (Herzog, 2013). Throughout history, arguments have been raised as to what moral and amoral consequences are produced by the introduction of a market. Adam Smith saw it that the inherit self-serving incentives of the market would in the end serve the social since it would create a cooperative structure between that parties involved (Smith, 1759); (Herzog, 2013). Other famous thinkers such as Karl Marx and Aristotle, saw it that because of this very self-interested nature of the market, would erode social and moral values that concerned the community as a whole (Barnes, 1984). Although these thinkers had an idea how this would resolved, modern philosopher Michael Sandel has tried to systematize the discussion and has argued in a more empirical and relevant manner as to how market values actually can erode moral values (Sandel, 2013). Within his book he raises the final point whether we have drifted from having a market economy to a market society. Albert Bandura discussed in his study from 2002 that the decay of moral disengagement could be structured into several different mechanisms that contribute to the processing of the human mind. These disengagements may redefine dreadful actions into honourable achievements by justifying actions through moral decay such as considering an action as a service to humanity or for the greater good of the community (Bandura, 2002).

Falk and Szech hypothesized that a decay of moral values in market conditions lies behind

three features. These features involve the fact that responsibility is shared when two people trade, the knowledge that we act according to the social norms we believe exist in a situation and diversion of attention. The social psychological processes describing these features are Diffusion of responsibility, Audience inhibition and Social influences. Diffusion of responsibility explains that when an observer is aware that others are present they do not bear the full responsibility of the situation. This idea argues for some aspects of the moral decay found in the original study, however, it is not adequate to alone be stated as the reason for it. Its limitations lie in the specifications of the situation; when an observer knows others are present, but cannot see or hear them, Diffusion of responsibility occurs. In cases where an observer can observe and interact with others present, it is possible for other processes to operate. These processes could be Audience inhibition and Social influence. Audience inhibition describes the idea that an observer's unwillingness to get embarrassed in a situation influences the choice of actions and Social influence describes that an observer seeks clues on how to define a situation in others' present actions (Latané & Nida, 1981; Hewstone et al., 2012).

It was relevant to test whether or not a social pressure effect is enough to explain the results that Falk and Szech got in the original study. Therefore a new treatment with voting was tested for the replication study. In the voting

treatment a group of people interact with each other through computers, but without trading over a price. The assumption is that if the same results can be achieved with the voting treatment as the market conditions, it will lead to the conclusion that there are no market effects. The results would instead be explained by a social pressure effect that is the essential common point between two treatments.

Method

The method description contains five parts; participants, treatment, the environment and procedure, translation and programming.

Participants

The participants of the study were students of mixed gender, age 21-27 (average age 23). The participants were chosen by accessibility selection at Linköping University, Sweden.

Treatments

The participants were encountered in total four treatments during the experiment: market treatment as buyer, market treatment as seller, individual treatment and a voting treatment. The participants were for every one of ten market periods randomly set as either seller or buyer, and at the same time paired with one of the other participants for that round. This was so that the participants could be reused for all treatments.

Test environment and procedure
Since this was a pilot study, only twelve people were gathered in total. They were all insured anonymity and were informed that the test was about decision making but were not given any

additional information about the study. This was to make sure that they were not affected by their own expectations. The test was accomplished by six participants at the same time in a computer room with eight PC-computers placed so that they could not see each other's screens. This was to minimize the risk that they could see each other's decisions. Two experiment leaders were as well in the room to start the treatment followed by the individual treatment. Only the second group did the voting treatment.

Translation

The original instructions were in German and it had to be translated into Swedish. Great emphasis was placed on making sure that the language in the translation became as close to the original as possible.

Programming

The original Moral and market study by Falk and Szech used a program named zTree developed by the Department of Economics, University of Zurich. zTree stands for Zurich Toolbox for Readymade Economic Experiments and is a software designed for experimental economics (Fischbacher, 2013). The software is used for creating a functional interface coupled with functionality for creating and storing variables and other data in spreadsheets. The software is also used for the actual experiment where clients or nodes is used on the participants computers and they get to interact with the created interface and answer questions and do the bidding.

In this study we adapted the program used in the original study to our purposes. This included translating it but mostly making the bilateral treatment from the multilateral program in the original study. This meant dividing participants into pairs and randomly dividing people into the roles sellers and buyers before each period. This functionality required a full understanding of the program and took much "reverse-engineering" with the only partially documented program.

Some quizzes of the original script was left out (see discussion for more information on this) though a short quiz was replicated in which participants were asked how much money they would receive if they choose one or the other alternative and what their choice would mean for needing children. This had to be answered correctly before moving on and participating in the trading periods in order to ensure that the participants would be fully aware of the hypothetical consequences of their choices and to give them the opportunity to ask any questions that may arise during trading.

Results

The results are based on a very small sample and are thus not representative of any group or population. The tendencies perceived from the data is that participants engaging in trading do value the donation of vaccines less than participants making value judgements independently or when instructed to vote on the perceived value. Participants partaking in a bilateral market chose to accept a sum of

money less than 200 Swedish crowns instead of donating vaccines to children. The same percentage in the individual and voting treatment was below 20%.

In the bilateral treatment 120 answers were recorded over 10 periods in which they could trade. 42% of these answers were participants accepting bids while the rest where participants choosing not to partake in the trading (21%) or not answering (37%).

A Wilcoxon test was made to see whether or not the participants influenced each other by comparing the accepted sums. The first group accepted $n=28$ trades with a mean value of 38,42 (SD=19,14) while the second group accepted $n=22$ trades with a mean value of 112,63 (SD=37,93) where $Z=-4,02$ and $P<0,00$.

In the individual treatment 17% of participants choose to take money rather than donating vaccine. They were then asked questions about their conscience and were asked to motivate their choice where one said:

“Jag är oerhört fattig såhär precis innan CSN. No shame.”

The participants choosing to donate money were asked if there was a sum at which they would take the money instead and the answers varied between 110 and 360000000 Swedish crowns.

A statistical comparison was made between the results from the bilateral treatment and the results from the individual by taking the sums

accepted by both parts (200 Swedish crowns for the individual treatment along with the agreed upon sum in the bilateral). This yielded $n=12$ and a mean of 48,17 (SD=35,43) in the bilateral group while for the individual group $n=12$ and a mean of 33,33 (SD=77,85). A Wilcoxon test gave $Z=-1,41$ and $P<0,00$.

In the voting treatment 17% of participants voted for taking the money and 4 individuals donating vaccine said they would take money if given a sum where their sum ranged between 110 and 10000 Swedish crowns. No statistical analyses where made on this data since the sample size was too small.

Discussion

Perhaps the largest influencing factor of the result is that this pilot was hypothetical. If the participants were in an actual market and were trading with real vaccines and actual money the results might have been different.

It was described throughout the instructions that a market condition would occur and it was defined how the trading works. The instructions also mention that the participation was optional. By this a mere-exposure effect might have occurred and if a participant were to participate in a trade the vaccine would not be donated and therefore be a risk to the results.

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