Social Preferences: An Introduction to Behavioural Economics and Experimental Research

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Notes

1. More subtly, a statement like 'the Riemann Hypothesis is either True of False' is tautological, and so standard models of knowledge or belief would require that a rational agent knows this statement (or knows the event to which it corresponds).
2. Viewing {**True**, **False**} as the canonical Boolean algebra, and $\mathcal{F}_\mathbf{X}$ as the Boolean algebra generated by closing **X** off under negation and conjunction, there is a unique Boolean homomorphism from $\mathcal{F}_\mathbf{X}$ to {**True**, **False**} coinciding with ω on **X**.
3. There is an alternative viewpoint that rejects the idea of expansions altogether, see for example Heifetz et al. (2006) or Halpern and Rêgo (2009). The latter allows quantification in the language to allow for statements of the form 'there exists something I am unaware of,' that serves as a *catchall* statement, that gets refined independent of what gets discovered.
4. In a minor abuse of notation, $P(\varphi) = P(\omega \mid \omega(\varphi) = \mathbf{True})$ indicates the probability of the set of states where φ is true.
5. There is an implicit qualification here, not mentioned in the book, that all of this is *conditional on becoming more aware*. For example, consider α and α^{neg} from the prior section. Clearly, for any expanded awareness context, $P^+(\alpha^{neg}) = 1$, but this clearly should not entail that $P(\alpha^{neg}) = 1$.

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This article has been corrected with minor changes. These changes do not impact the academic content of the article.

Social Preferences: An Introduction to Behavioural Economics and Experimental Research by M. Drouvelis, Newcastle upon Tyne, the UK, Agenda Publishing, 2021, 210 p., £22.99, ISBN 9781788214179 (paperback)

For the last few decades, the topic of social preferences has been a crucial one in economics. Though the relevant share of the papers in the so-called top-5 general interest economic journals that can be

labelled as ones on social preferences is slowly decreasing – from around 30% of all papers published in the first decade of the twenty-first century to about 20% in the last seven-eight years – it still constitutes a significant branch of researchers' interest.

Despite the presence of debates on the strictness of the social (or other-regarding) preferences definition, we can highlight one of its major characteristics: the absence of pure monetary (standard-economics) maximizing behaviour. Hence, we can describe social preferences as an individual tendency to trade off their resources (firstly monetary ones but not limited to them only) in order to achieve societal impact (i.e. to help or to please one or, on the contrary, to punish or to revenge someone).

A recent book *Social Preferences: An Introduction to Behavioural Economics and Experimental Research* by Michalis Drouvelis, Professor of Behavioural Economics at the Department of Economics at the University of Birmingham, gives a convenient map for those who are just making the first steps in the domain of Behavioural Economics in general and in the topics of social preferences in particular.

The book consists of nine chapters, each approximately twenty-thirty pages long with a short bullet-point list at the end to make it even easier for the readers (predominantly students) to read and to remember the most important details.

In the first chapter, Drouvelis briefly introduces the concepts of the economic experiment as well as the difference from the psychological framework (the presence of explicit incentives and no deception in economic experiments), randomization (necessary to claim causality) and the types of the experiments (laboratory, laboratory-in-the-field, field).

Chapter two focuses on two most standard experimental games: Dictator and Ultimatum. The basic version of the Ultimatum game looks as follows (Güth et al., 1982). There are two roles of players (that are randomly assigned to the subjects): the first player has an endowment of X experimental currency units (ECU) and the second player has nothing. The first player has to decide how many of the initial X ECU he or she is going to give to the second player, and the second player has to either agree on the proposal or reject it. If the second player accepts it, both players receive money by the split proposed by the first player, however, if the second player rejects the proposal, both receive nothing. Introduced by Güth et al. (1982) and becoming popular in Forsythe et al. (1994) version, the Dictator game is a reduced version of the Ultimatum game, in which the second player has no actions, so whatever the first player decides to give to the second player, both get money according to this division. In the standard approach, the decisions that should be made by the agent are giving the minimum possible amount for the second player in the Ultimatum game and giving nothing in the Dictator game. However, this is not what is observed in the experiments. For instance, in a meta-study on Dictator games Engel (2011) observes that while the average dictators' transfers is 28.4%, the modal decision is 0 (36.1% of participants) and 'second-modal' decision is to send 50% of the endowment (16.7% of participants). Arguing the social factors that are impactful to promote other-regarding behaviour in the Ultimatum game, Drouvelis explains in what way and why the first players' intentions, social distance, and emotions are significant. Turning to monetary factors (e.g. stakes; sizes), the research reports the mixed evidence of the findings.

The third chapter presents a trust game to the readers. Introduced by Camerer and Weigelt (1988) and popularized by Berg et al. (1995), the game goes as follows. There are two (randomly assigned to the subjects) roles of players in the basic settings of the game: the first player (also known as a truster) has an initial endowment of X ECU and has to decide which amount to send to the second player (also known as the trustee) given that whatever he or she is going to send will be multiplied by k (which usually equals to three) by the experimenter. If the transfer of the trustor is non-zero, the second player has to decide which amount to send back to the first player. In the standard approach, nothing should be sent by the trustor. Drouvelis first describes some experimental results, and then factors relevant to the explanations of the heterogeneity of the deviations from standard predictions. He pays special attention to distinguishing unconditional versus conditional motives as well as pure outcomes versus intentions-dependent outcomes. Additionally, Drouvelis sheds light on

the contribution of such factors as social distance, reputation, framing, and individual characteristics (e.g. age, gender, etc.) to reciprocal behaviour.

In chapters four and five the author deals with public good games. A public good game consists of n players (four in the most standard version), each of which has an endowment of X ECU and an option to contribute to the public pool with the marginal per capita return α. The game represents a social dilemma since there is a choice between allocating the endowment between personal (selfish) and public (pro-social) accounts. In standard predictions, when $\alpha<1$ player should contribute nothing and when $\alpha n >1$ player should contribute the whole endowment. The author depicts how the decisions are affected by factors such as the marginal per capita return, the size of the group, motivation and learning specifics (in chapter four), and by communication, (un)equality of endowments, and group identities (in chapter five). Drouvelis concludes that though the hypothesis about conditional cooperation has enough supportive evidence, there is a high variation across different cultural contexts. He explains the positive role of communication (especially, face-to-face one) and the equality of endowments (in contrast to endowment heterogeneity). Finally, the author considers the impact of identities: its salience enforces the contributions, however, its heterogeneity decreases the pro-sociality of decisions.

The sixth chapter is devoted to leadership. Though the evidence on this phenomenon is mixed, there are several worse-mentioning points. Firstly, a positive and salient example of cooperation (as conditional cooperation) appears to be crucial in achieving cooperative behaviour. Secondly, the mechanism through which a subject becomes a leader is important: fair (democratic) elections of the leaders result in higher efficiency (in contrast to random assignment of the role). Thirdly, (higher) status, cooperative attitudes, and social transparency enhance pro-social contributions.

In chapters seven and eight Drouvelis introduces the sanctions in the public good games. Introduced by Fehr and Gächter (2002), the standard public good game is enriched by enabling players to realize (costly) punishments of other players in the group. While in the standard game-theoretical approach punishing others would not make any sense, in the experimental behaviour it was exhibited extensively. As soon as the punishment (monetary, non-monetary, and centralized) is introduced, the contributions go up significantly. Though dependent on specifics of cost-benefit arithmetics, a system of punishment is documented to result in higher rates of public good contribution than a system of rewards. Induced negative emotions (e.g. anger), one source of punishment, result in the reduction of contributions to the public good.

In the last chapter, Drouvelis starts with a powerful and well-known literature critique regarding WEIRD (i.e. from Western, educated, industrialized, rich, and democratic societies) samples (Henrich et al., 2010). He discusses several factors that are the current challenges for behavioural experimentalists: effects of language, effects of currency, the experimenter demand, communication spill-overs and issues of subject recruiting. Next, the author discusses particular examples – bargaining games, social dilemmas, games on social institutions implementation – of how experimental studies across different cultures or countries vary in their outcomes. Specifically, he makes several conclusions. Behaviour in such games as Dictator and Ultimatum differs significantly: the less economically advanced societies, the more pro-egalitarian the outcomes. Betrayal aversion turns out to be a robust phenomenon across cultures. Remarkably, cross-cultural studies enable researchers to distinguish pro-social and anti-social behaviour in public good games.

In addition, the book has supplementary material introducing the conventional experimental instructions (Appendix A) and the basics of the experimental design (Appendix B).

Obviously, the book has several advantages. First of all, it is a relative brevity of the book. Of course, there is often a trade-off between the depth of the book (and, hence, its length) and newcomers' costs to achieve an understanding of the topics (both in terms of the time and intellectual efforts spent). Having a particular audience in mind (i.e. beginners in the field) Drouvelis manages to be as precise as possible but also not delving into too many technical details.

Second, the in-depth discussion of the basic topics. Reviewing not only the classical papers in Behavioural and Experimental Economics but also the (relatively) recent ones, Drouvelis succeeds in describing the current state of the field in a comprehensive and detailed way.

Finally, it is a low barrier to entry. This enables everyone interested in the field of Behavioural Economics to start getting acquainted with the topics disregarding their previous (academic) background. The book is a great text for both one-or-two-modules-length academic introductory courses and extra-curriculum reading.

Turning to points that can be considered less advantageous, at least one can be mentioned. It is a relative lack of methodological discussion. Though several points are present in the book (e.g. robustness, specifics of samples), not a lot of attention is devoted to the fragility of the experimental approach. However, at the same time, providing such a discussion might be difficult without the introduction of a basic set of statistics toolkit which is beyond the primary intentions of *Social Preferences*.

Another slightly disappointing point is a lack of meta-studies usage (e.g. Oosterbeek et al. [2004] for Ultimatum games, Johnson & Mislin [2011] for Trust games, or Larney et al. [2019] for stakes' sizes in Dictator and Ultimatum games, etc.). Although the way Drouvelis chose to present many papers in the book might have a slight taste of the zoo of different contexts, it is also a challenge for the field, namely, to find out the way in which the existing knowledge can be generalized and united.

Speaking about the position of *Social Preferences* among the existing books, it has its own niche. The first book that appear to be close to the work by Drouvelis is *An Introduction to Behavioural Economics* (Wilkinson & Klaes, 2017) or *Principles of Behavioural Economics* (Earl, 2022), however, these are majorly long student books which are overall much longer than *Social Preferences* but necessarily more detailed in dealing with the question of other-regarding preferences. Perhaps, the closest one is *A Course In Behavioural Economics* by Angner (2020) which is still broader in topics than just the discussion of social preferences per se. Indirectly, this highlights an interesting trend in the literature – a slow but confident convergence of Behavioural and Standard Economics. Sooner or later that will finally happen resulting in a deeper understanding and more accurate prediction of social interactions not only in a prescriptive but also – and more reasonably – in a descriptive way.

Despite the seeming simplicity of the book, a deep(er) reading of the book might result in new and thorough questions that are still relevant to the literature. For instance, a variety of the factors that might cause different individual behaviour in an other-regarding way might lead to an investigation of new determinants of social preferences. Surprisingly, in many dimensions these are still relevant and far from being exhaustingly researched questions: for instance, investigation of the extent and the mechanism to which social preferences are shaped or even predetermined by childhood (e.g. Kosse et al., 2020; List et al., 2023), or the role of the existing institutions in different political regimes in other-regarding preferences formation (e.g. Cappelen et al., 2022; Cassar et al., 2022).

Overall, *Social Preferences* gives a short but broad well-written introduction to what is now known as the basic part of Behavioural Economics. Though it might appear to be a bit short, it is definitely a great help for those doing the first steps in this field both inside and outside of academia.

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