

Examples of past master thesis projects

Nico Keiser (2023): The role of peer influence in shaping values underlying environmental behaviour: An analysis of young adolescents' friendship networks

Environmental protection has become an increasingly important topic, and ways to improve it is key to address the challenges, which humanity is facing. Even though peer influence has been shown to affect various characteristics of individuals, research linking it to environmental behaviour is rare. The present study does so by investigating the effect of peer influence on the specific set of biospheric, altruistic, egoistic and hedonistic values, which earlier research has found to be relevant to environmental behaviour. Thus, this study investigates the coevolution of peer interactions and the structure of human values, drawing on the widely established link between the aforementioned values and associated environmental behaviour. Using network data on friendships and value prioritization of young adolescents in 21 newly formed Polish school classes (N = 601), a stochastic actor-oriented model is estimated to study the coevolution of peer interactions and values. Results show that the analysed values are subject to peer influence, which is in line with the assumptions of the study and related research. However, friends do not primarily seem to be selected based on similarities in their prioritization of values. Furthermore, the study finds evidence for the structural ordering of values, as outlined in the introduced theory.

Sebastian Senn (2023): Individualism: The End of Social Cohesion? The effects of inequality and group identity on cooperation

Some of the biggest contemporary challenges, like pandemics or the fight against climate change, can be described as cooperation problems. Short-term individual interests are thereby often at odds with what would be best for society. This problem is amplified by an increase in economic inequality and societies getting increasingly individualistic. Inequality and Individualism are both feared to diminish social cohesion and cooperation, leading to various undesirable social outcomes. Therefore, a better understanding of how inequality and individualism affect cooperation is required. However, empirical findings about the effects of unequal resource distributions in public goods games (PGG) are somewhat mixed. This study tries to further investigate these non-converging results by showing that heterogeneity has not been deployed consistently by previous studies. A new research design is proposed which compares collectivistic and individualistic groups to study the combined effects of individualism and inequality on cooperation. The results show no significant difference between collectivistic and individualistic groups. Surprisingly, the results reveal significantly higher cooperation rates in these two inequality treatments compared to the base version. However, heterogeneous groups show a great divergence in how successful they are in establishing cooperation. Further decision analysis reveals that the willingness to reduce the inherited inequality in the beginning of the game serves as a strong signal to increase group identity and foster cooperation. For groups with high group identity, inequality seems to possess a coordinative function, which can even increase cooperation.

Nico Mutzner (2023): Evading the Algorithm: The Increased Propensity for Tax Evasion in Human-Computer Interactions

Today's modern world is characterized by an increasing shift from human-to-human interaction towards human-computer-interaction (HCI). With the implementation of artificial agents as inspectors, as can be seen in today's airports, supermarkets or most recently within the context of the COVID-19 pandemic, our everyday life is progressively shaped around interacting with automated agents. While various studies have looked at cooperative strategic interaction between humans, little is known about how HCI affects humans and their non-cooperative decision-making. Therefore, a deeper understanding of the factors influencing strategic decision-making processes within HCI situations, and how perceptions of automated agents' capabilities might influence these decisions is required. This gap is addressed by extending a non-cooperative inspection game experiment with a tax evasion frame, implementing automated agents as inspectors. Hereby a within-subject design is used to investigate (1) how HCI differs from human-to-human interactions in this context and (2) how the complexity and perceived

capabilities of automated agents affect human decision-making. The results indicate significant differences in decisions to evade taxes, with participants more likely to evade taxes when being inspected by automated agents compared to humans. Participants were also less likely to evade taxes when playing against an automated agent described to be a complex AI compared to an automated agent described to be a simple algorithm once they had experienced different agents.

Jonas Gubser (2021): Social Norms and Pro-Environmental Choices: Evaluating Social Norm Interventions in a Field Experiment to Promote Reusable Takeaway Containers.

The rising trend in the usage of single-use food containers gained more fuel during lockdowns and shutdowns due to pandemic restrictions. The fact that more people had food delivered or bought it at takeaways led to an increased amount of plastic waste, which is environmentally problematic. This article reports on a field study that was conducted to test whether injunctive norm messages printed on posters and discounts on reusable containers can increase the percent usage of reusable containers at a takeaway. To this end, two experiments with different starting conditions, one with a low (0.2 %) percentage and one with a high (10.4 %) percentage of use, were conducted in the city of Zurich. The data were subjected to ANOVA and interrupted time series analyses to measure how the interventions affect the magnitude and trend of usage. The statistical analysis revealed that both the injunctive norm messages and the discounts positively affected the usage of reusable containers, but only if there had been a low percent usage during the pre-intervention period. The social norm had a negative effect on the trend, if the initial percent usage had been high. The findings therefore indicate that the effectiveness of easily implementable measures depends on the percentage of people who already use reusable containers.

Raphael Duerr (2021): How Does Structure And Selection Mechanism Affect Tipping Points in Networks? An Extension of Centola et. al.

Social coordination norms require anonymous communities to reach a consensus on decisions that has an implication for everyone, e.g. on which side of the street the traffic circulates. Single acts of deviation are extremely disadvantageous for the perpetrators in such cases. In theory, those norms can be changed, if a large enough minority (a critical mass) coordinates on the deviation and succeeds in quickly establishing a new equilibrium. This can be particularly interesting in situations, where harmful norms such as female genital cutting persist. Centola et. al. (1) estimated the minority size using a simulation of a fully connected network and an experiment with real-life participants to be at around 25 percent. This study uses the same basic assumptions but extends the simulation to larger online networks, namely LastFM, political blogs, and food-related pages. Additionally, different influence in the network was assigned to the participants by applying different algorithms for centrality detection. Using those algorithms, the minority groups consisted of more influential members. While the main result of Centola et. al. (1) could be replicated, the tipping points vary greatly for different network structures and different minority group compositions. Whereas for the political blogs network a significant reduction in minority size from 38 to 11 percent was reached using the most effective selection strategy, the tipping point for the LastFM and the food-related pages network could only be lowered marginally. Although no causal mechanism is identified, the results question the assumption that easy-to-reach critical masses exist in all human networks.

Johanna Nöbauer (2020): Das politökologische Dilemma der Demokratie

In wissenschaftlichen Debatten wird angenommen, dass die politische Lösung des Klimawandels das Vertrauen in die Demokratie schwächen könnte. Teile der Gesellschaft fordern radikale Veränderungen zur Rettung der Umwelt, auf die Politik und Wirtschaft nur mit mangelnder Reaktionsfähigkeit reagieren. Diese Misere könnte die Demokratie letztlich in eine Legitimationskrise führen. Die vorliegende Arbeit veranschaulicht das ökologische, politische und soziale Dilemma der Demokratie angesichts der Klimakrise. Erstmals wird die Debatte anhand der Einstellung der Bürgerinnen und Bürger der Europäischen Union mit univariaten und bivariaten Analysen abgebildet. Die univariaten Analysen im Längsschnitt zeigen, dass sich seit 10 Jahren ein Abwärtstrend der Zufriedenheit mit der Demokratie ablesen lässt und die Ergebnisse der bivariaten Analysen im Querschnitt verdeutlichen, dass die Lösung des Klimawandels nicht ohne gesellschaftspolitische Anpassungsprozesse geschehen kann. Diese Auswertungen bestätigen die Bedeutung der wissenschaftlichen Diskussion in einem politischen und gesellschaftlichen Kontext. Letztlich leistet diese

Masterarbeit durch ihren explorativen Charakter einen empirischen Beitrag zur Unterstützung der theoretischen Debatte über das Potential von Demokratien im politökologischen Feld.

Niccolo Giorgio Armandola (2020): Opportunity makes a thief? Analyzing the effects of poverty and relative deprivation on dishonesty

Social scientists have tried to identify the causes of dishonesty for centuries. The most important theories on the subject suggest that poor or relative deprived people are more likely to behave dishonestly than rich people. Researchers that analyzed the link between poverty and dishonesty with traditional methods (survey questions or aggregate measures of dishonesty) all seem to agree that economic wealth negatively correlates with dishonesty. However, new experimental designs lead to conflicting findings. This paper analyzes dishonesty on three different levels: (i) the participants' attitudes towards dishonesty, (ii) the participants self-reported dishonest behavior and (iii) the participants true dishonest behavior in a dice game experiment. Our findings suggest that while rich people claim not to tolerate dishonesty and to never behave dishonestly, they steal money when they are given the opportunity in an experimental setup. In fact, among non-deprived individuals, the rich steal even more than the poor. On one hand, these findings show that the traditional link between poverty and dishonesty might be untrue. On the other hand, the discrepancy between the participants' moral beliefs, their alleged actions and their true behavior speaks for the importance of including experimental designs in sociological studies. Our analyses are based on a Swiss sample of young adults between 19 and 22 years of age. The data stems from the last wave of the longitudinal z-proso study, which followed an entire cohort of children in the city of Zurich, Switzerland, throughout their childhood and early adult years.

Oliver Brägger (2019): Trust and Trustlessness in Darknet Markets: How Reputation Mechanisms and Technological Innovations Enable Cooperation in Anonymous Marketplaces for Illegal Drugs

In recent years, drug trade on darknet markets has been flourishing in spite of great risks its users face. On one hand, there is no legal system in the darknet that protects customers by ensuring honest business from vendors. On the other hand, due to the illicit nature of items being traded on such marketplaces, there is a legal system that persecutes both parties. Therefore, customers must protect themselves from fraud, and both vendors and customers alike must take efforts to remain anonymous in order to protect themselves from law enforcement agencies that are closely monitoring all market related activities. Cooperation, however, depends on trust. This paper attempts to explain why trust is possible in such a hostile environment. It does so by arguing that technological innovations either provide users with trust, or materialize trust, effectively making it unnecessary. Particularly, it argues that institutionalized reputation systems allow vendors to develop trustworthiness, and trustless technologies such as escrow payment systems, multi-signature transaction protocols and anonymous cryptocurrencies enable users to keep a certain degree of control over their funds involved in trades. In order to test this, a crawling software is developed to collect data on the darknet market Wall Street Market which stopped operating just shortly after data collection. Using this data, this paper presents evidence for positive effects of both reputation indicators of vendors and the application of technologies that mitigate trust on both the prices vendors demand for their products and how many orders they are able to complete, thus enabling cooperation.

Keywords: Trust, darknet, cooperation, reputation mechanism

Giorgio Cassina (2019): The Actual Effect of the Representative Role: A Methodological Clarification for Representation Studies

Previous studies on the representative role compare representatives' behaviors with individuals' behaviors. Nevertheless, since representatives are a particular type of group members, previous designs inevitably did not distinguish between in-group favoritism effects and the actual effect of the representative role. Carrying on this methodological criticism, the present thesis suggests a new experimental design aimed at disentangling the two effects. Specifically, this study's aim is to causally determine the effect of the representative role on individuals' cooperation and understand which mechanisms foster the representation effect. To do so, an online experiment was conducted on Amazon Mechanical Turk. The results show that neither the in-group favoritism effect nor the effect of the representative role alone seem to have any significant influence on participants' cooperative behaviors, but by conducting the same analysis done by previous studies a decrease in cooperation for representatives can be detected. However, previous interpretations are criticized and the decrease in cooperation is attributed to the interaction between the representation effect and the in-group favoritism effect and not to the representation effect alone. Additionally, self-reported data collected in the post-experimental survey displays that representatives do feel

accountable for the represented group mates and, therefore, are willing to equally share their payoff. Finally, for future studies, this research suggests the use of more efficient minimal group procedures to better understand the isolated representation effect and the use of actual behaviors to investigate the mechanisms that lie at the basis of the representative role.

Keywords: representative role, in-group favoritism, Amazon Mechanical Turk (MTurk), responsibility, accountability, implicit justification, minimal group, intergroup interaction, imagination procedure, cooperation.

Antonia Velicu (2019): Underestimating the Instruction - A Meta-analysis on Item Count Technique and Crosswise Model

Survey respondents tend to present themselves in a more favorable light, especially when being asked unpleasant questions. This so-called social desirability bias introduced by sensitive questions often distorts survey responses. As a remedy research draws on indirect questioning formats that aim to protect respondents' privacy and ensure their anonymity. Two prominent examples of such techniques are the Crosswise Model (CM) and the Item Count Technique (ICT). Both methods follow unconventional structures using group answers or known distributions to mask individual answer but that also require long, complex and dense instructions. Previous research has suggested that ICT and CM produce more truthful answers, however they impose a higher cognitive burden on respondents. Although, it is commonly believed that respondents fully understand and follow these more demanding instructions, recent research suggests that this is not always the case. To further investigate this notion, I conduct a meta-analysis of the ICT and CM and analyze the instructions of these methods to answer two core questions: First, how do the implementations of the Item Count Technique and the Crosswise Model differ across studies? Second, how do specific characteristics (i.e., the instruction) of the techniques affect their performance? The meta-analysis indicates mixed results on the performance of the techniques. The CM tends to perform better than the ICT. ICT works best when asked in face-to-face interviews, the sensitive item phrased as a socially undesirable one, and the non-sensitive items chosen from the same contextual background. ICT instructions with too many words and not many word repetitions appear to have a negative influence on its outcome. The results of this research have implications for researchers and practitioners working with these techniques, but also for the broader field measuring and analyzing sensitive characteristics in surveys.

Keywords: Item Count Technique; Crosswise Model; Meta-Analysis; Cognitive Burden; Survey Methodology; Instructions

Tobias Ackermann (2019): Are norm enforcers violent?

Public goods such as a clean environment require cooperation and significant effort from all involved parties and thus can be seen as a basic cooperation problem. As cooperation is costly, the incentive to deviate and not to contribute to a clean environment leads to defectors. Due to the fact that people monitor each other and will recognize deviation, it is also possible to punish or admonish the defectors, but the question is: who will enforce the norm? Prominent studies have highlighted the importance of punishment for cooperation to sustain over time in laboratory games. Hence, punishment, even when it stems from anger or the desire for revenge, still can be of valid use for society. Not much is known about those individuals that enforce norms and punish others. As there is reason to think of them as pro-social individuals, theory and research also suggest that they may be selfish, unkind and maybe even violent. Using data from a survey and behavioral games, the results from multivariate regressions show that norm enforcers morally neutralize their actions, tend to think of violence as a legitimate form of behavior, see themselves in a good position in society and even tend to show aggressive behavior more often than others. While these constructs are all linked to criminal behavior, no such correlation is found in the data used in this paper. Furthermore, self-control has no effect on punishment, contrary to the idea that self-control would e.g. mediate anger towards unfair behavior. The results suggest that norm enforcers are not pro-social nor criminal or violent, but they clearly show a propensity for violence. Hence, pointing towards such persons being the ones that will admonish others in situations where other people would tolerate the violation of the norm.

Keywords: Social Norms; Norm Enforcement; Punishment; Behavioral Games