

# Research Statement

Tse-Min Wang  
Tilburg School of Economics and Management

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I am an interdisciplinary economist interested in Public Economics, Public Administration, Behavior Economics and Social Psychology. My research projects focus on the prosocial motivations in different social contexts, applying conceptual, experimental, and survey methodologies to investigate how the complex and diverse interaction between psychological attributes and the social environment shapes prosocial behaviors. My research interests are:

1. the psychological antecedents of prosocial behaviors such as public service motivation, volunteering, and collaboration
2. how institutions (e.g. monetary rewards, regulations, and cultural norms) influence the altruistic, cooperative, and collaborative behaviors.
3. public policy and strategy to achieve public goals and create public value (e.g. open innovation, network governance, and nudging).

My job market paper studies the volunteer behavior under risk and intergroup competition in a laboratory experiment. My second paper further utilizes the experimental design to study the crowding effect of competition on prosocial motivation. In the third and fourth paper, I develop and validate, using survey data, a conceptual model to explore the moral plurality of Public Service Motivation. Below I will provide a detailed summary of the four studies.

**Prosocial Risk Taking and Intergroup Conflicts: Investigating in a Volunteer's Dilemma Experiment** with Arjen van Witteloostuijn and Florian Heine (Job Market Paper)

Intergroup conflicts often involve individuals who voluntarily make a personal sacrifice and take a great risk to provide public goods. We investigate prosocial risk-taking and intergroup conflicts by extending the volunteer's dilemma along two dimensions: risk-taking and intergroup competition.

Firstly, we explore pro-social risk-taking behavior, which involves the act of engaging in a risky decision to provide public goods. For instance, helping a victim in case of an emergency could turn out to be unsuccessful, or wrongdoing could be covered up even if a whistle-blower risks her career and reputation.

Under expected utility theory, risk aversion should encourage individuals to perform safe volunteering in order to avoid the consequence of collective inaction (no one volunteers), while it would discourage risk averse individuals from performing risky volunteering. Since individuals need to trade off both risk of collective inaction and risk of unsuccessful volunteering, the relationship between risk aversion and risky volunteering is an inverted-U shaped curve.

Secondly, we argue that intergroup competition engenders a sense of group identity and motivates group members to contribute to public goods in the absence of leadership. To identify such motivational change, we come up with the group competition treatment, where two groups compete for a public good in a sequential move. Sequential moves make it possible to set up corresponding treatments that are identical to the subgame of the second stage (the decision node for the group of the second movers). Hence, we can investigate the effect of intergroup competition without having to operate with multiple payoff matrices resulted from intergroup competition, as previous experiments often link additional monetary incentives to competition.

We conducted the experiment in the CentERlab at Tilburg University, in the Netherlands, inviting 126 participants. Inconsistent with expected utility theory, our experimental data reveal a positive relationship between risk aversion and risky volunteering. Although no single explanation can account for the entire pattern of the relationship across all treatments, the bias toward attending to the collective risk could mitigate the negative effect of risk of failure, and hence increase the tendency to take risk and volunteer. On the other hand, we find experimental evidence that intergroup competition significantly increases the volunteering rate of providing a public good and can mitigate the negative impact of risk on intra-group cooperation.

Gender differences are another prominent aspect of investigating risk attitudes, cooperation and competition in the economics and psychology literature. We find that, in response to intergroup competition, males are more likely to volunteer when volunteering involves a risk of failure, while females are responsive only if volunteering guarantees the success of public goods production. Risk aversion influences volunteering in ways that are inconsistent with the expected utility theory. We attribute the presence of gender-heterogeneous treatment effects to three possible sources of differences: i.e., gender differences regarding (i) preference for risky investment, (ii) competitiveness, and (iii) attitudes toward outgroup members.

Overall, our main contribution is to extend the volunteer's dilemma in order to examine the role of risk-taking and intergroup competition. In particular, the experimental design allows us to show that intergroup competition can act as a payoff-irrelevant focal point that increases the salience of group identity and the tendency to contribute to public goods. Our study also discusses the observed heterogeneous treatment effects of risk aversion and gender, adding to understanding the role which individual heterogeneity may play in the evolution of parochial altruism.

**An Experimental Examination of Public Service Motivation and Self-Sacrifice** with Arjen van Witteloostuijn and Florian Heine

With an incentivized laboratory experiment of a volunteer’s dilemma game, we explore the association between self-reported Public Service Motivation (PSM) and prosocial behavior under different task characteristics and social contexts. By investigating the effect of PSM across a series of treatments, we demonstrate how task characteristics and social contexts can affect the role of PSM in stimulating self-sacrifice behavior. A positive relationship is found between PSM and volunteering, which is moderated by the risk of the performed task and competition with another team. High-PSM people are less likely to volunteer more if the performed task requires risk-taking or if competition with another team is involved. The theoretical rationale for this crowding-out effect is discussed by incorporating insights from self-determination theory. Competition serves as a performance-related incentive, diverting attention from intrinsically motivated motives to a performance target that is being evaluated, which could compromise the role of PSM in stimulating desirable behaviors.

**A Moral Theory of Public Service Motivation** with Arjen van Witteloostuijn and Florian Heine (*Frontiers in Psychology*, 11, 517763. doi: 10.3389/fpsyg.2020.517763)

Morality constructs the relationship between the self and others, providing a sense of appropriateness that facilitates and coordinates social behaviors. We start from Moral Foundation Theory (MFT), and argue that multiple moral domains can shape the meaning of public service and engender Public Service Motivation (PSM). From the lens of cognitive science, we develop a causal map for PSM by understanding the social cognition process underlying PSM, focusing on five innate moralities as the potential antecedents of PSM: Care, Fairness, Authority, Loyalty, and Sanctity. Extending moral domains beyond compassion and justice can provide a disaggregated view of PSM, which may help to identify institutional and cultural variation in the meaning of PSM. We discuss the theoretical implications of synthesizing MFT and PSM literatures, and provide directions for future research that could improve our understanding of PSM.

**Morally Motivated Public Service: An Empirical Examination of the Moral Theory of PSM** with Arjen van Witteloostuijn and Florian Heine

We empirically examine the Moral Theory of Public Service Motivation (PSM) with data from a large online Dutch household panel. We develop and test several hypotheses on the role of moral foundations in shaping PSM, as well as the behavioral implications regarding the participation in social organizations. The individualizing foundations of Care and Fairness (jointly referred to as INDV) are found to positively relate to all four dimensions of PSM — Compassion (COM), Self-Sacrifice (SS), Attraction to Public Services (APS), and Commitment to Public Values (CPV). Moreover, PSM mediates the positive

relationship between INDV and participation in humanitarian and environmental organizations. Sanctity is positively correlated with SS and APS, mediating the often-observed relationship between PSM and religious activities. Loyalty is significantly and positively associated with SS, with the correlations with other PSM dimensions being gender-specific. Finally, Authority is significantly and negatively related to COM, SS, and APS.