

Partner Selection and Person Perception in Social Interactions

Tiffany Matej Hrkalovic, Bernd Dudzik, Hayley Hung & Daniel Balliet

VU Amsterdam & TU Delft

1 Introduction

Selecting whom to collaborate with is an important task that humans are faced with on a daily basis. Formally, partner selection is leveraging on the individual's ability to autonomously identify and preferentially interact with social partners that are seen as valuable, creating an emerging phenomena of biological markets (Noe & Hammerstein, 1995), where individuals who are willing (i.e. warmth) and able (i.e. competence) to work towards a mutual benefit are seen as most valuable, and thus chosen as partners (Barclay, 2013; 2016; Dhaliwal et al., 2022). However, this decision does not happen in a vacuum. Thus, partner selection can be seen as a *multiple evaluation criteria decision making process*, where context, impressions, interlocutors' behavior have a role in guiding one's decisions. Despite the multiple criteria and potential noise, if informed by well-calibrated information, gives individuals advantage of creating a (local) niche of highly valuable (i.e. cooperative) individuals, where cooperation is fostered while keeping the risk of exploitation at a minimum. Despite recognizing the importance of partner selection, little is known about if we can use (and which) behavioral cues to predict person perceptions and partner selection, whether inferred perceptions correspond to how other see themselves, as well as the interdependencies between partner selection, person perceptions and cooperative behavior. Thus, the goal of this paper is to address these gaps.

2 Objective

The aim of this paper is to investigate:

- Is there a relationship between partner selection, person perception and cooperative behavior and does Task Type moderate this relationship?
- Is there a relationship between how people see themselves and how they are seen by others?
- Can we use automatically extracted social cues from initial social interactions to predict person perception and partner selection?

3 Methodology

Participants

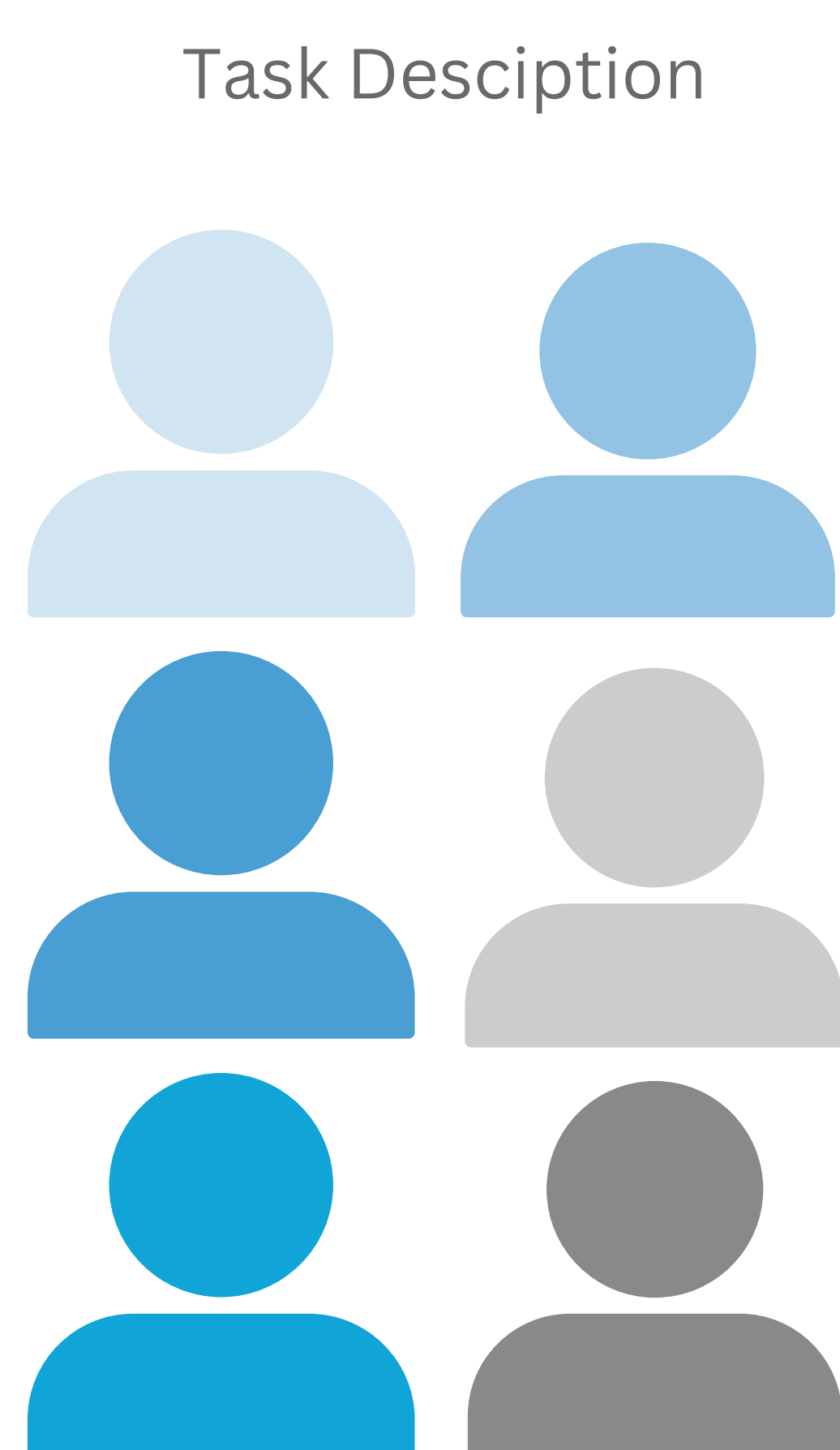
- N = 279 participant (154 females; $M = 36.64$; $SD = 11.05$)
- 596 dyads. 3387 observations

First part: Intake Session



One week break

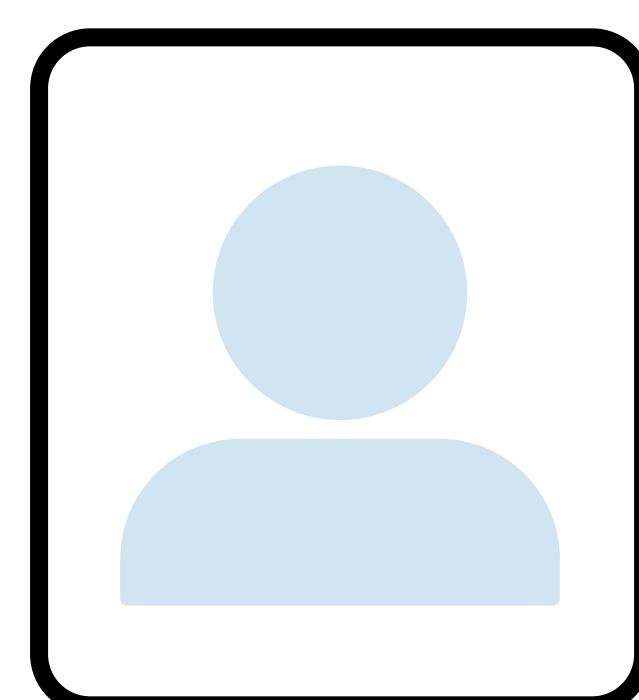
Personality
Social Anxiety
Trust
Partner Preferences
SVO
Intelligence



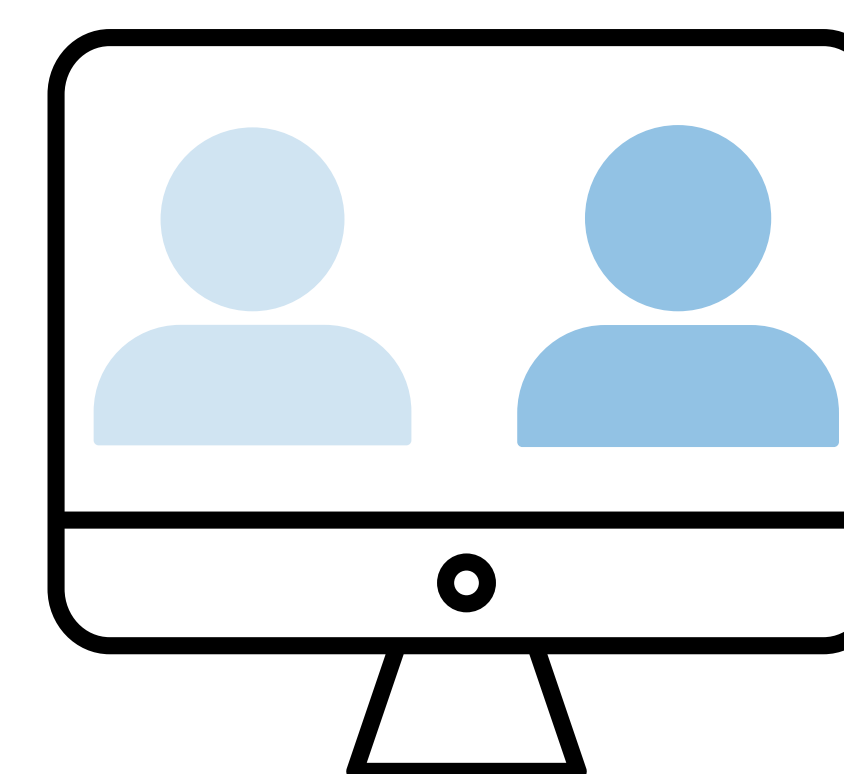
Joint Trust task vs. Joint Competence task

Second part: Interaction Study - Round Robin

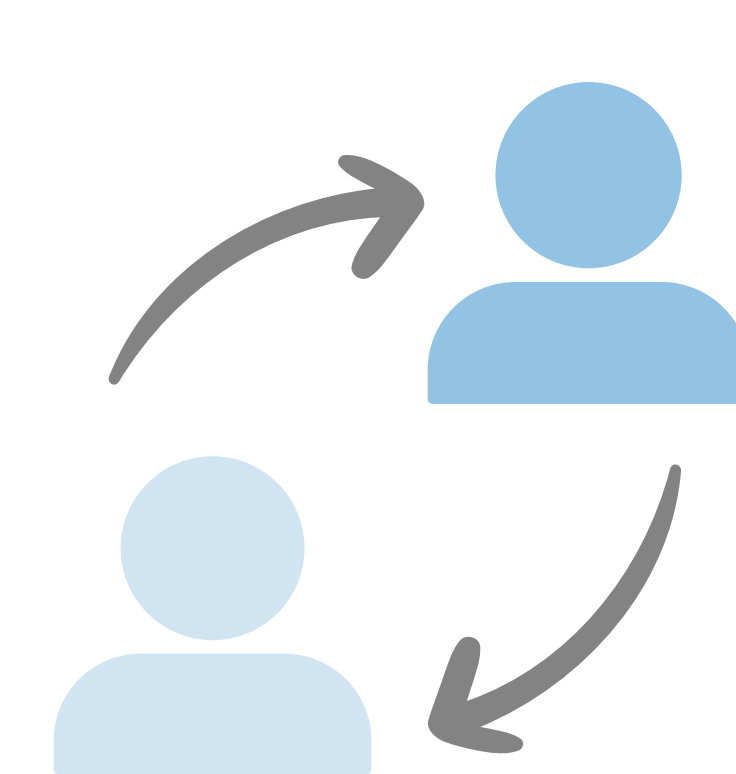
Photography



Conversations



Cooperation Task



Collaboration Task

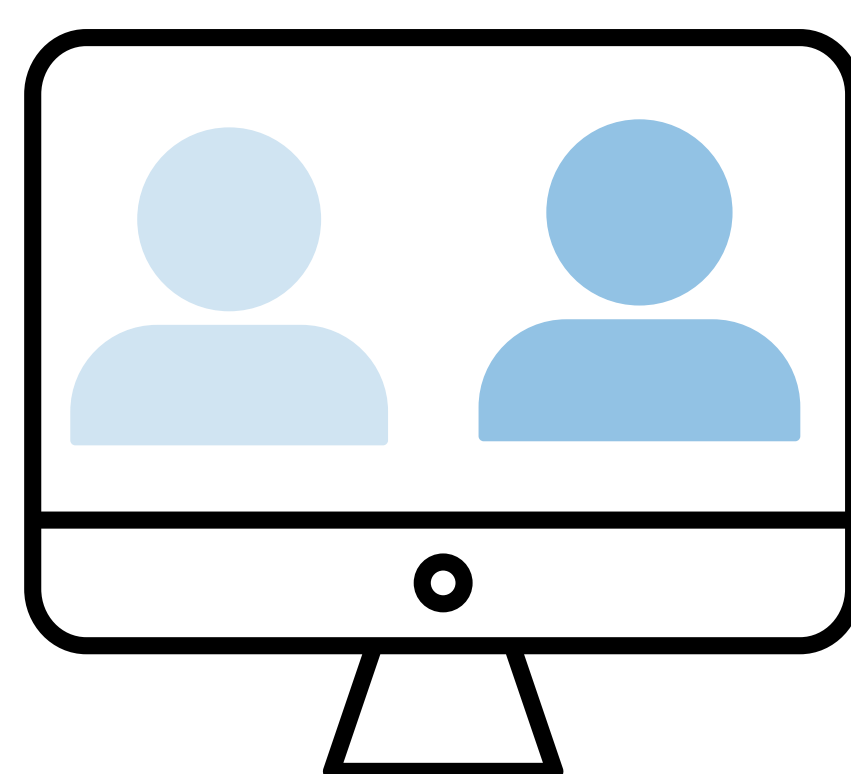
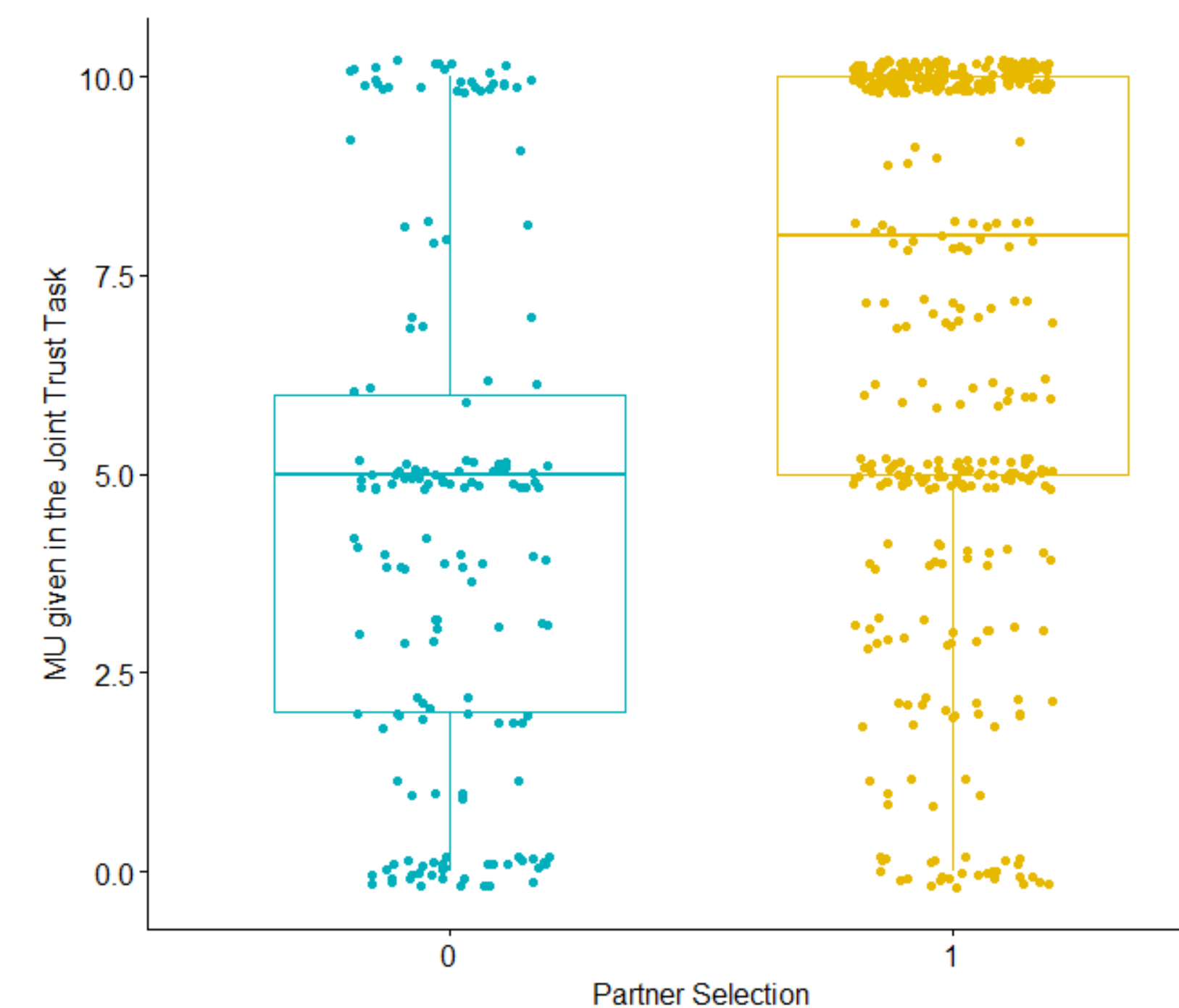


Figure 1. Overview of the experimental design of the PACO dataset collected on Prolific

4 Analysis

The general results of this paper, indicate that:

- Likelihood of being selected was higher for individuals that were perceived to be as higher on warmth and competence
- Task type moderated this effect, where perceived competence was more strongly related to one's odds to be selected as a partner in the JCT, compared to JTT
- Self-reports of Extraversion were predictive of other's perception of warmth
- Intelligence scores were predictive of other's perception of competence



- Individuals showed more trust in selected participants, compared to un-selected participants

5 Future work (Behavioral cues)

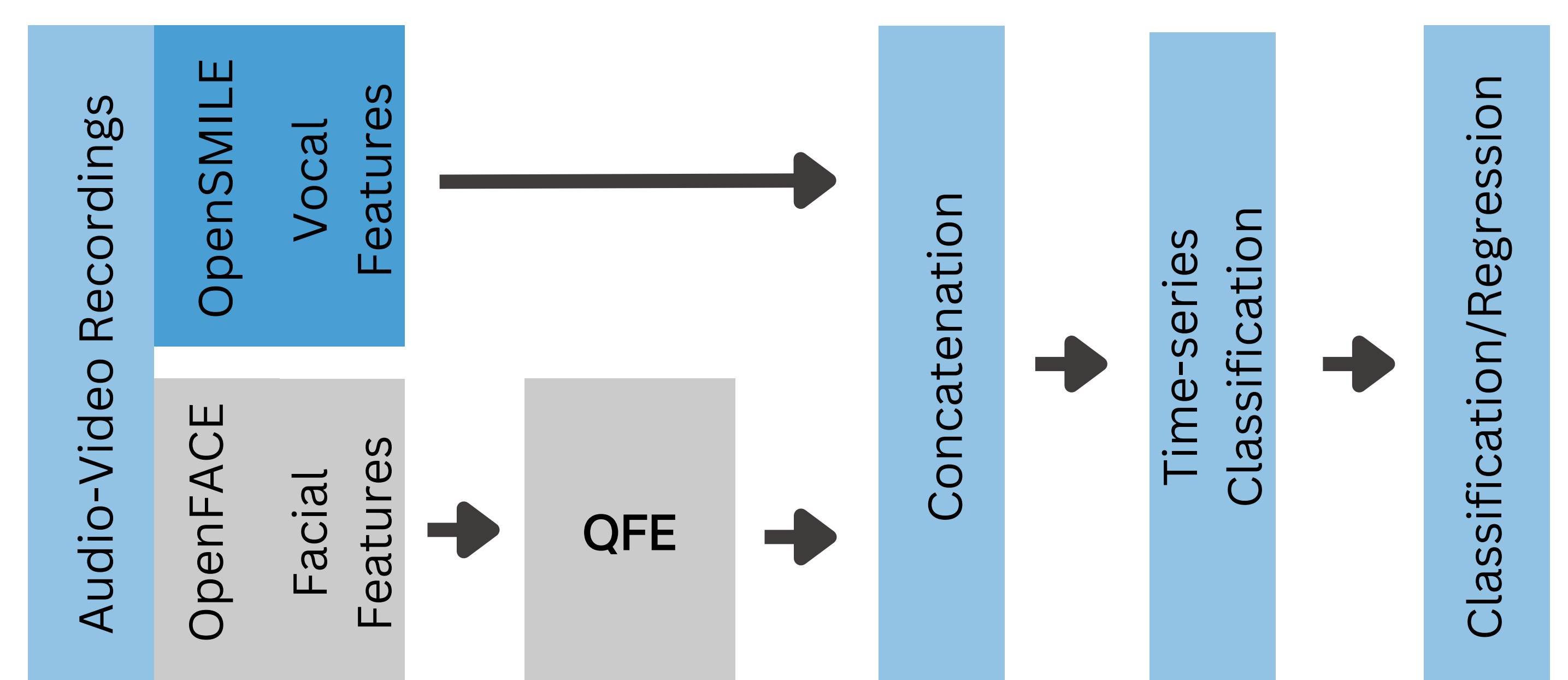


Figure 2. Overview of the predictive modelling pipeline

References

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- Noë, R., & Hammerstein, P. (1995). Biological markets. *Trends in Ecology & Evolution*, 10(8), 336-339.
- Barclay, P. (2016). Biological markets and the effects of partner choice on cooperation and friendship. *Current opinion in psychology*, 7, 33-38.
- Barclay, P. (2013). Strategies for cooperation in biological markets, especially for humans. *Evolution and Human Behavior*, 34(3), 164-175.