Effects of Valence in Decision Making

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1 INTRODUCTION

Why do we do nasty thing to one person not to another person? We suggest that in the realm of social influence, an underlying neighbour effect exists whereby people are biased towards being positive to their direct spatial neighbours. A study of voting decisions in the Weakest Link TV game show has shown that the contestants tend to avoid voting their nearest neighbour (Goddard, Hylton, Parke & Noh, 2013), presumably this is because the vote carries negative connotations. Yet, is this merely an artefact of a game show where the rules are well defined?

2 RESEARCH AIM

This study tested whether neighbour effect and vote valence affects the voting behaviour outside a rarefied atmosphere such as the TV game show.

It is hypothesised that we tend to avoid behaving more negatively to those nearest to us in order to avoid conflict while we do the opposite with those who are further from us.

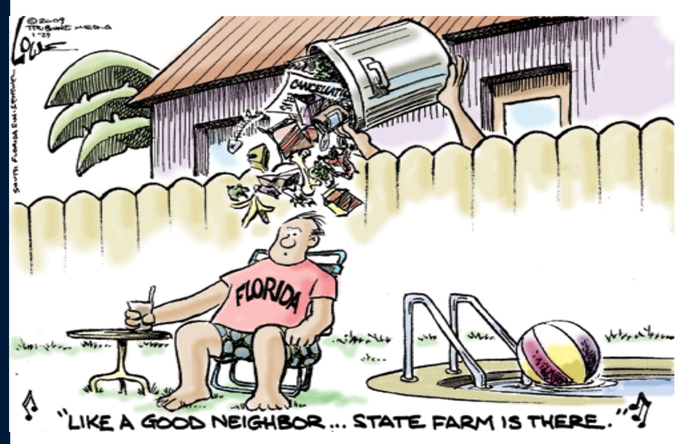
3 PROCEDURE

Undergraduate students (n=233) were recruited during their first orientation lecture. Each participant was given an individualised instruction sheet, asked to take part in a **voting activity,** and assigned unique seat number. Participants received course credits irrespective of their participation to the research and confidentiality of participants were maintained throughout the activity.

The activity required each participants to vote for a candidate that was another participant sitting in the same block of the lecture theatre and in the same row of seats. A participant receiving a positive vote (+1 or +5) increased their chances of winning the course related materials in a lottery. However, negative vote (-1 or –5) reduced their chances in the lottery. Participants were given a **response sheet** each which indicate the seating plan of the lecture theatre and valence of their specific vote (+5, +1, -1, -5) that served as ballot paper. Votes were cast by marking X on the seating plan and later participants then identified their seat number and the response sheet was sealed and given to the researchers.

4 FINDINGS

Voting performance was contrasted with a theoretical model derived by simple probability theory. The observed frequencies of votes showed a significant drop on voting the direct neighbour, $\chi^2(10) = 49.31$ $p < 0.001$ from the expected frequency. According to hypothesised valence effects, participants casting a negative valence vote (**Fig. 2)**, demonstrated a significant neighbour effect by avoiding their direct neighbour (n). Yet, those making a positive valence vote (as in **Fig. 3)** showed a reverse pattern where, they were more likely to pick their closest neighbour (n) rather than the furthest. We suggest that for our participants the **fairness norm** was stronger in negative valence to be compared with positive valence (Leviveld, Beest, Dijk & Tenbrunsel, 2009). Hence, neighbour and valence effect are robust biasing elements in decision making probably operating at unconscious, implicit level.



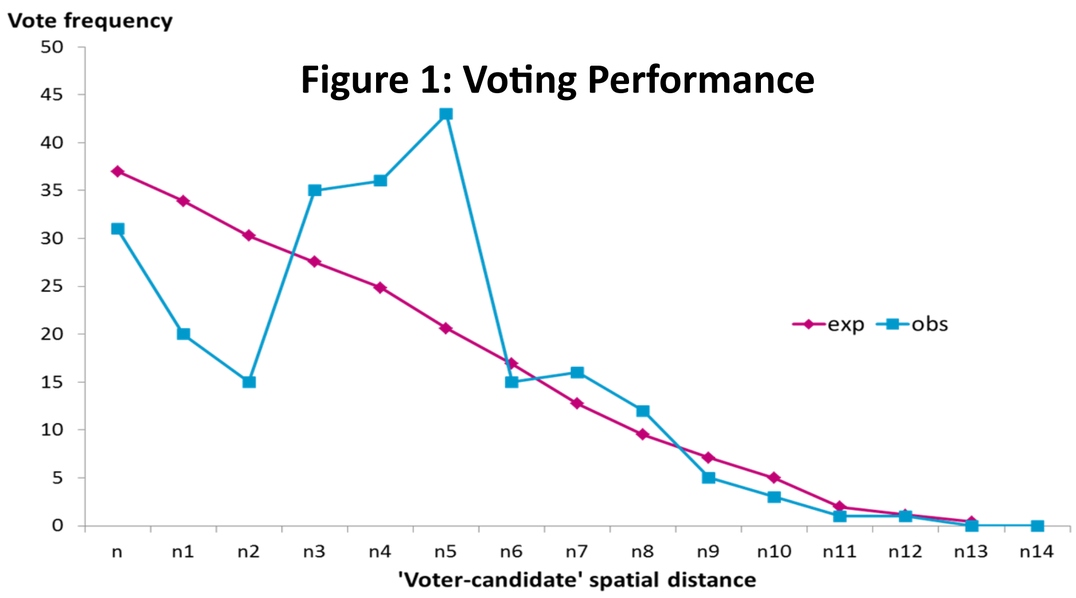


Figure 1: Voting Performance

5 IMPACT AND FUTURE RESEARCH

It was suggested that neighbour effect is a significant psychological effect in a strategic decision making setting, with the possibility to be categorised as one of the cognitive and behavioural biases.

As for future research, cultural effect, spatial proximity and neighbourliness will be considered to test the neighbour and valence effects in a wider setting such as in a neighbourhood context.

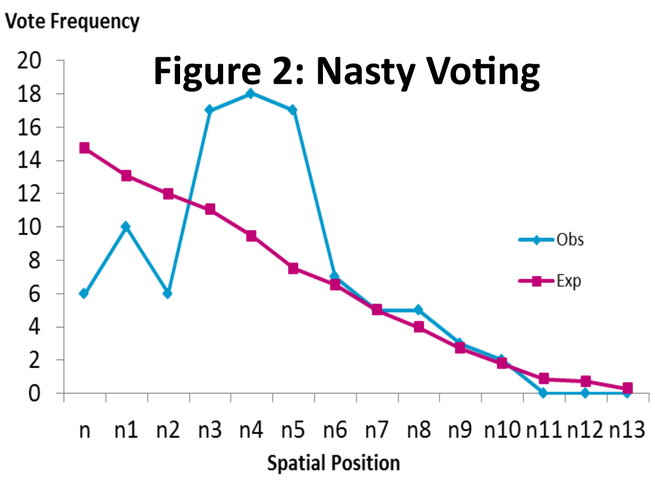


Figure 2: Nasty Voting

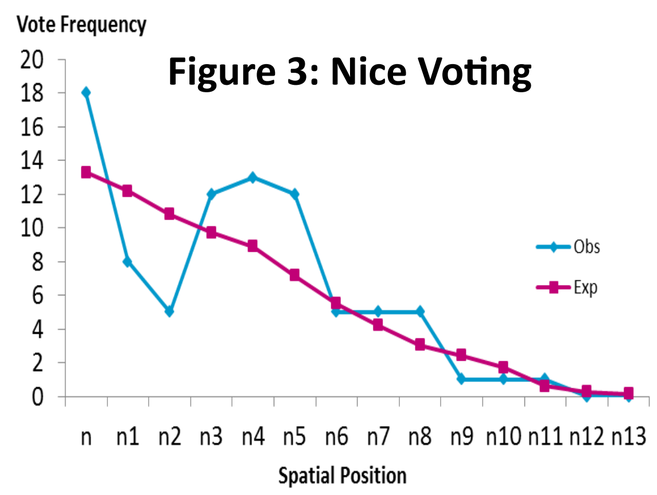


Figure 3: Nice Voting