2012

The study of human interaction when playing rock-paper-scissors

Drew, N.

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Appendices

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Appendix 1

University of Plymouth
Faculty of Science and Technology
Research Information Sheet

Name of Principle Investigator
Neil Drew

Title of research:
The study of human interaction, when playing rock, paper, scissors.

Aim of research
This experiment will investigate the degree of our interactions when participating in a number of games of rock, paper, scissors, and whether winning and losing frequencies occur.

Description of procedure
The procedure will first consist of you completing a personality questionnaire, and then playing 3 rounds of rock, paper, scissors, with 5 games in each round. During this procedure, a camera will be present to record the results of experiment. The whole experiment will take approximately 15 minutes.

Description of risks
There are no known risks associated with this procedure. You will not be exposed to risks greater than or additional to those encountered in normal lifestyles.
Benefits of proposed research
There are no direct benefits to you from participating in this study. However, we hope that by participating in this research it will provide you with insight into why we choose and perform specific actions in everyday interaction with people. We are happy to answer any questions you may have about your participation. You can contact the principle investigator via email: neil.drew@students.plymouth.ac.uk. Or if you prefer, you can contact the supervisor of the experiment: Patric.bach@plymouth.ac.uk

Right to withdraw
You are free to withdraw from the research at any stage of the experiment, and you can ask for your data to be destroyed if desired.

If you are dissatisfied with the way the research is conducted, please contact the principle investigator first, Neil Drew. If you feel the problem has not been resolved please contact the supervisor Patric Bach. Email details are above.

Appendix 2

University of Plymouth
Faculty of Science and Technology

Human Ethics Committee Consent Form
Consent to Participate In Research Project/Practical Study

Name of Principle Investigator
Neil Drew

Title of research:
The study of human interaction, when playing rock, paper, scissors.

Brief Statement of purpose of work:
This experiment will investigate the degree of human interaction which can be a factor in influencing peoples actions when participating in a game of rock, paper, scissors.

The objectives of this experiment have been explained to me.
I understand that I am free to withdraw from the research at any stage, and ask for my data to be destroyed if I desire to do so.

I understand that my anonymity is guaranteed, unless I expressly state otherwise.

I understand that the Principle investigator of this work will have attempted, as far as possible, to avoid any potential harm and risks, and that safety and health risks will have been assessed by appropriate authorities.

Under these circumstances, I agree to participate in the research.

Name: ..................................................
Signature: ......................................... Date: ..........................
Table of means

This Table displays the average amount of wins and losses for both the winning sequence round and the losing sequence round for all participants. These results were then used to carry out the One-sample T-test.

<table>
<thead>
<tr>
<th>Participant</th>
<th>Losing round: sum of wins-losses (divided by) wins + losses</th>
<th>Winning round: sum of wins-losses (divided by) wins+losses</th>
<th>Difference between the two</th>
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</tbody>
</table>

= Recurring sign
## Appendix 5

### Autistic Spectrum Quotient

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<thead>
<tr>
<th>No</th>
<th>Item</th>
<th>Definitely Agree</th>
<th>Slightly Agree</th>
<th>Slightly Disagree</th>
<th>Definitely Disagree</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>I prefer to do things with others rather than on my own</td>
<td></td>
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<tr>
<td>2</td>
<td>I prefer to do things the same way over and over again</td>
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<tr>
<td>3</td>
<td>If I try to imagine something, I find it very easy to create a picture in my mind</td>
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<tr>
<td>4</td>
<td>I frequently get so strongly absorbed in one thing that I lose sight of other things</td>
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<tr>
<td>5</td>
<td>I often notice small sounds when others do not</td>
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<tr>
<td>6</td>
<td>I usually notice car number plates or similar strings of information</td>
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<tr>
<td>7</td>
<td>Other people frequently tell me that what I've said is impolite, even though I think it is polite</td>
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<tr>
<td>8</td>
<td>When I'm reading a story, I can easily imagine what the characters might look like</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>9</td>
<td>I am fascinated by dates</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>In a social group, I can easily keep track of several different people’s conversations</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>11</td>
<td>I find social situations easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>I tend to notice details that others do not</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>13</td>
<td>I would rather go to the library than a party</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Item</td>
<td>Definitely Agree</td>
<td>Slightly Agree</td>
<td>Slightly Disagree</td>
<td>Definitely Disagree</td>
</tr>
<tr>
<td>----</td>
<td>----------------------------------------------------------------------</td>
<td>-----------------</td>
<td>---------------</td>
<td>------------------</td>
<td>--------------------</td>
</tr>
<tr>
<td>14</td>
<td>I find making up stories easy</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>I find myself drawn more strongly to people than to things</td>
<td></td>
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<tr>
<td>16</td>
<td>I tend to have very strong interests, which I get upset about if I can’t pursue</td>
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</tr>
<tr>
<td>17</td>
<td>I enjoy social Chit-chat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18</td>
<td>When I talk, it isn’t always easy for others to get a word in edgeway</td>
<td></td>
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</tr>
<tr>
<td>19</td>
<td>I am fascinated by numbers</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>20</td>
<td>When I’m reading a story, I find it difficult to work out the characters’ intentions</td>
<td></td>
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<tr>
<td>21</td>
<td>I don’t particularly enjoy reading fiction</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>22</td>
<td>I find it hard to make new friends</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>23</td>
<td>I notice patterns in things all the time</td>
<td></td>
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<td></td>
</tr>
<tr>
<td>24</td>
<td>I would rather go to the theatre than a museum</td>
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<td></td>
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<tr>
<td>25</td>
<td>It does not upset me if my daily routine is disturbed</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>26</td>
<td>I frequently find that I don’t know how to keep a conversation going</td>
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<tr>
<td>27</td>
<td>I find it easy to “read between the lines” when someone is talking to me</td>
<td></td>
<td></td>
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<tr>
<td>28</td>
<td>I usually concentrate more on the whole picture, rather than the small details</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>No</td>
<td>Item</td>
<td>Definitely Agree</td>
<td>Slightly Agree</td>
<td>Slightly Disagree</td>
<td>Definitely Disagree</td>
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<td>----------------------------------------------------------------------</td>
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</tr>
<tr>
<td>29</td>
<td>I am not very good at remembering phone numbers</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>30</td>
<td>I don’t usually notice small changes in a situation, or a person’s appearance</td>
<td></td>
<td></td>
<td></td>
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</tr>
<tr>
<td>31</td>
<td>I know how to tell if someone listening to me is getting bored</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>32</td>
<td>I find it easy to do more than one thing at once</td>
<td></td>
<td></td>
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<tr>
<td>33</td>
<td>When I talk on the phone, I’m not sure when it’s my turn to speak</td>
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<tr>
<td>34</td>
<td>I enjoy doing things spontaneously</td>
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<tr>
<td>35</td>
<td>I am often the last to understand the point of a joke</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>36</td>
<td>I find it easy to work out what someone is thinking or feeling just by looking at their face</td>
<td></td>
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<tr>
<td>37</td>
<td>If there is an interruption, I can switch back to what I was doing very quickly</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>38</td>
<td>I am good at social chit-chat</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>39</td>
<td>People often tell me that I keep going on and on about the same thing</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>40</td>
<td>When I was young, I used to enjoy playing games involving pretending with other children</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>41</td>
<td>I like to collect information about categories of things (e.g. types of car, types of bird, etc.)</td>
<td></td>
<td></td>
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<tr>
<td>42</td>
<td>I find it difficult to imagine what it would be like to be someone else</td>
<td></td>
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<tr>
<td>43</td>
<td>I like to plan any activities I participate in carefully</td>
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<td></td>
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<tr>
<td>No</td>
<td>Item</td>
<td>Definitely Agree</td>
<td>Slightly Agree</td>
<td>Slightly Disagree</td>
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</tr>
<tr>
<td>44</td>
<td>I enjoy social occasions</td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>45</td>
<td>I find it difficult to work out people’s intentions</td>
<td></td>
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<tr>
<td>46</td>
<td>New situations make me anxious</td>
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<tr>
<td>47</td>
<td>I enjoy meeting new people</td>
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<tr>
<td>48</td>
<td>I am a good diplomat</td>
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<td>I am not very good at remembering people’s date of birth</td>
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<tr>
<td>50</td>
<td>I find it easy to play games with children that involve pretending</td>
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</table>

**Appendix 6**

**Notes taken throughout experimentation**

1) This was found in participant 1, winning 1st sequence group 1: Participant towards the end seemed to get bored of the game, and knew I was trying some sort of method to either win or lose, so just did 4 scissors in a row to avoid being caught out. This may be because they think the experimenter has a prediction on what they will choose, and it is unlikely that we would predict them to pick 4 scissors in a row, as it seemed like tactical play by the participant.

2) Sometimes participants would get the timing wrong on what time to go (after 3 fists). This would mess up there results as they would do their initial action (rock, paper or scissors) and then as they had to do it again, they would usually change their choice to avoid predictability. So they had to make a conscious thought on what action to pick, rather than it just being natural without much thought where it is more likely that mirror neurons and imitation would have an effect.

3) When asked a participant whether he noticed anything before I debriefed him, he said he did notice that I was doing it in a sequence for him to imitate me.
4) Participant 11, said she noticed the sequence I was doing, e.g. Rock, Paper, and then scissors, so she knew I was never going to do the same action twice in a row. So she could use this to her advantage. This is a problem when participants are thinking too much by trying to figure out what I am doing.

5) I have noticed that instead of the participant copying what I did in the last game of rock paper scissors, instead they are choosing the action that beats the action I did in the previous game. This is shown clearly in participant 18 results, when I was trying to lose. And because they chose this method I actually won the majority.

6) Participants 21 pointed out afterwards when asked, that she did notice a pattern in the first round of games, but then lost it in the 2nd round. Thus I think the fake random round is vital in throwing off participants thought on the sequences I was doing, as the pattern is not there anymore. Although this pattern she noticed may have affected her actions in the 1st round, and possibly in the third.