

“I Know It And I’m Gonna Show It!”: The Power Of Uncontrolled Intelligence

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INTRODUCTION

- ❖ Facilitated communication has been claimed to allow individuals with communication difficulties to converse with others by having a facilitator assist them with typing answers. The facilitator should not use his or her own knowledge, but merely guide the client in typing.
- ❖ Previous studies suggest that facilitators do use their own knowledge when they help the client respond (e.g., Hirshoren & Gregory, 1995; Klewe, 1993; Wheeler, Jacobson, Paglieri, & Schwartz, 1993).
- ❖ Facilitators, despite trying not to, could be using their own knowledge but are unaware of having done so. This unconscious mechanism has been called 'uncontrolled intelligence' (Wegner, Fuller, & Sparrow, 2003).
- ❖ Dunham & Mansfield (2010) examined uncontrolled intelligence using a version of Wegner et al.'s (2003) task. Students were given a series of yes/no questions and were told to answer with a random sequence of responses rather than correct answers.
- ❖ Results showed that the percent correct was significantly higher than 50%, the score we would expect if they were answering randomly.
- ❖ One criticism of our prior study (and of Wegner et al., 2003) is that, because the order of questions was random, the pattern of correct yes/no responses was also random. Students could answer questions correctly yet still feel they answered in a random sequence.
- ❖ To test this, we generated two question sequences: 1) the order of correct yes/no responses was designed to appear random, and 2) the pattern of correct responses was alternating yes-no-yes-no... We anticipated that this would prevent students from using their knowledge to answer the questions because doing so would generate a predictable pattern of responses.

- ❖ We also varied the instructions regarding random responding. Students were instructed to read each question, but then give a random answer and either a) "Try not to generate a predictable pattern, such as *yes-no-yes-no*." or b) "For each question, imagine mentally flipping a Y/N coin, and then mark your answer based on the outcome." We anticipated that the latter would be more successful at getting the students to answer randomly (and to avoid uncontrolled intelligence) because it focuses on the process of generating randomness rather than on the output of the random process.

METHOD

- ❖ A convenience sample of 79 undergraduates was randomly assigned to one of the two forms of instructions and to one of the two sequences of questions.
- ❖ 19 were excluded who did not show an understanding of the instruction to answer randomly when asked to restate the instructions they had been given.
- ❖ Sample questions:

- Y N
- ☐ ☐ Do cats catch mice?
 - ☐ ☐ Were the Olympics held in South Africa this year?
 - ☐ ☐ Is a circle round?
 - ☐ ☐ Do fish have fur?
 - ☐ ☐ Does a triangle have 3 sides?
 - ☐ ☐ Is the Eiffel tower in Montreal?
 - ☐ ☐ Is Italy part of Europe?
 - ☐ ☐ Is 10 greater than 100?
 - ☐ ☐ Can most birds fly?
 - ☐ ☐ Does the equator pass through Vermont?

RESULTS

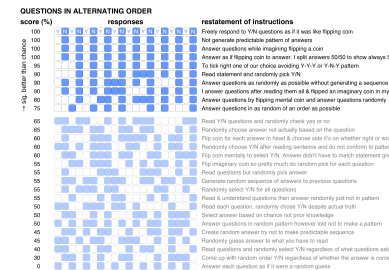


Figure 1. Student responses and restatement of instructions. When the questions were in the alternating order, 10 of the 28 students had significantly more correct responses than expected by chance.

- ❖ The overall percent correct was significantly higher than the chance level (50%) that would be expected if participants were answering randomly, $M = 71.75\%$, $SD = 23.03$, $t(59) = 7.32$, $p < .001$.
- ❖ A 2 x 2 ANOVA was performed with instruction type and question order as between-subjects factors. The main effect of instruction type and the interaction of order by instruction type were not significant. There was a significant main effect of the order of questions, $F(1, 56) = 5.55$, $p < .05$.
- ❖ The mean score when an alternating sequence of questions with yes or no as the correct answer was used was significantly lower ($M = 64.71\%$, $SE = 4.19$) than when a random sequence was used ($M = 78.22$, $SE = 3.92$).
- ❖ Figures 1 and 2 display each student's responses to the yes/no questions along with their restatement of the instructions. This shows that, despite acknowledging the requirement to give random responses, a sizeable portion of students gave significantly more correct answers than expected had they responded randomly.
- ❖ Even with an obviously predictable pattern of correct responses, the percent correct was still significantly higher than chance despite instructions to answer randomly!

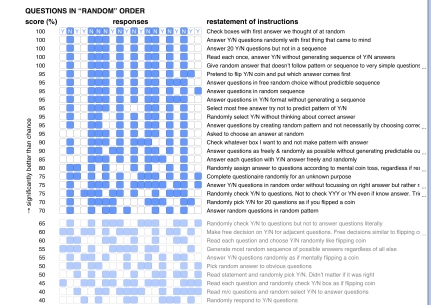


Figure 2. Student responses and restatement of instructions. When the questions were in a 'random' order, 22 of the 32 students had significantly more correct responses than expected by chance.

CONCLUSIONS

- ❖ This study further reinforces the results from Wegner et al. (2003) and Dunham and Mansfield (2010). Uncontrolled intelligence is pervasive in all of these studies. Even when we eliminate students who have not understood the instructions for the task, and even when answering correctly produces a predictable pattern of alternating yes/no responses, students still tend to answer questions correctly despite the instructions to generate answers randomly.
- ❖ Wegner et al. offered training on randomness that only slightly lowered the percent correct. Similarly, in our study, neither form of instructions to elicit random responding reduced this tendency.
- ❖ In sum, these findings demonstrate that people often cannot help using their own knowledge despite clear instructions not to do so.
- ❖ These results help us understand how well-intentioned facilitated communicators would struggle to avoid influencing their clients' responses, but the findings also have implications for other domains, such as prejudice, stereotyping, etc, where we are influenced by our pre-existing knowledge.