

# TESTING THE VALIDITY OF TAROT CARDS: CAN WE DISTINGUISH BETWEEN A REAL AND A CONTROL READING?

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## INTRODUCTION

This study juxtaposes two alternative approaches to understanding the results obtained in Tarot reading: the paranormal and the non-paranormal. People consult advisors using different means of divination and claim that the insights they are supplied with are accurate. The assumption behind this experiment was that if this is true, the participant should give higher ratings to a real reading in terms of overall relevance compared with a control reading. In this study, the real reading is one for which the participants choose their own cards compared with the control reading, which consists of randomly chosen cards.

Non-paranormal explanations of the apparent success of divination systems such as Tarot emphasise such factors as the Barnum effect, i.e., the tendency to interpret general statements as applying specifically and accurately to one's own unique circumstances (e.g., Meehl, 1956). Paranormal explanations would suggest that any card drawn in response to an issue is a direct reflection of an inner state. In other words, we unconsciously choose cards in response to the present issue and these cards are a mirror of our deeper understandings (e.g., Angeles, 1987).

Research testing the validity of divination has focused mainly on astrology with very little research regarding the validity of Tarot cards. Blackmore (1983), however, did test the validity of Tarot cards with respect to personality interpretations. Only the first out of three experiments yielded significant results and even then doubts were raised regarding possible flaws in the design.

This experiment also investigated the possibility that believers in the paranormal might be able to accurately distinguish between real and control readings more effectively than non-believers, with believers giving the real reading a higher rating. A non-paranormal explanation might predict that believers would give higher ratings than non-believers to both real and control readings on the assumption that believers may be susceptible to the Barnum effect and that this greater susceptibility was a factor in leading them to become believers in the first place. Although some previous studies have found evidence to support this position (e.g., Glick, Gottesman, & Jolton, 1989), others have failed (e.g., French, Fowler, McCarthy, & Peers, 1998; Tobacyk, Milford, Springer, & Tobacyk, 1988).

## METHOD

### *Participants*

Participants were 30 volunteer students (8 male), aged between 18 and 49 years (mean age = 25.3 years, SD = 8.4). Experimenter 1 (E1) was also the Tarot reader, having had ten years experience of using the cards for divination.

### *Procedure*

E1 informed each participant that one reading would be based upon the specific cards chosen whereas the other would be based upon the five cards that happened to end up at the bottom of the deck. Each participant was instructed to shuffle the cards while thinking of a specific issue upon which s/he would like guidance without revealing the issue to E1. The participant next chose five cards and laid them out, face down on the right hand side of the table, in a specific pattern (the *diamond* layout) as instructed by E1. The

first card is placed in the centre of the display with the remaining four cards laid out at the vertices of a diamond around it. This constituted the “Real” reading. Each card in this layout is said to relate to the issue in question in a specific way (Angeles, 1987). The backs of the cards were all identical.

Then both the participant and E1 left the room and a third person (Experimenter 2, E2) came into the room and took the five cards from the bottom of the deck and laid them out in the same pattern as the real reading, only on the left. This spread is the control reading. E2 then used a list of random numbers (originally generated by a true random process REG) to determine if the real reading remained on the right side of the table or was swapped with the control reading on the left for each participant. The cards were then positioned in a way that left no clues for E1 or the participant to be able to distinguish between the layouts. This was achieved by ensuring that all the cards were the same way up and that the separation between cards was approximately equal in the two spreads.

Next, E1 and the participant re-entered the room and E1 provided readings based upon both layouts, always starting with the one on the right. After the readings the participant was asked to rate each of the readings by answering eight questions. The questions asked the participant to say to what extent the reading related to the specific issue s/he had in mind. Three questions were about the reading in general (in terms of interest, insightfulness, and helpfulness) and the other five asked specifically about each card. Answers could range from 1 (not at all) to 8 (very much). An overall average across all eight ratings provided the data for the analysis below.

Participants then completed Thalbourne’s Australian Sheep-Goat Scale (ASGS). Allocation to Belief Group was done on the basis of a median split of scores on this scale.

## RESULTS AND DISCUSSION

The possible range of scores on the ASGS was 0 to 36. The mean score for the Non-Believers Group was 6.13 (SD = 4.99) and that for the Believers Group was 19.26 (SD = 3.89). Results were analyzed using a 2 (Reading: Real vs. Control) x 2 (Belief Group: Believers vs. Non-believers) mixed Analysis of Variance. The ANOVA revealed a significant main effect for Belief Group ( $F(1, 28) = 6.09, p = .02$ ) with Believers giving higher overall ratings to the readings (6.09) compared to the Non-Believers (5.09). The overall ratings given to Real vs Control Readings did not differ significantly ( $F(1, 28) = .15$ , not sig.), but the interaction between Belief Group and Reading was highly significant ( $F(1, 28) = 7.42, p = .011$ ). As can be seen from Figure 1, the pattern of results obtained did not correspond to what might be predicted upon the basis of either of the general hypotheses outlined. Post hoc *t*-tests revealed that the ratings given to the Real and Control readings did not differ significantly for the non-believers (means of 5.48 and 4.70, respectively;  $t(14) = 1.41$ , not sig.), but did so for the believers ( $t(14) = 2.79, p = .014$ ). However, the believers gave the Control readings *higher* overall ratings (6.61) than the Real readings (5.58). Simple effects analysis further revealed that the groups did not differ with respect to the ratings given to the Real reading but the believers gave a significantly higher rating to the Control rating compared to the non-believers. This intriguing result obviously requires replication and a replication study is currently being planned. The possibility that the result might be an artifact due to an unintentional sampling bias relating to the order in which the Real and Control readings were read is ruled out by the fact that the Real reading was the first one to be read for 16 participants and the Control reading was first for the remaining 14.

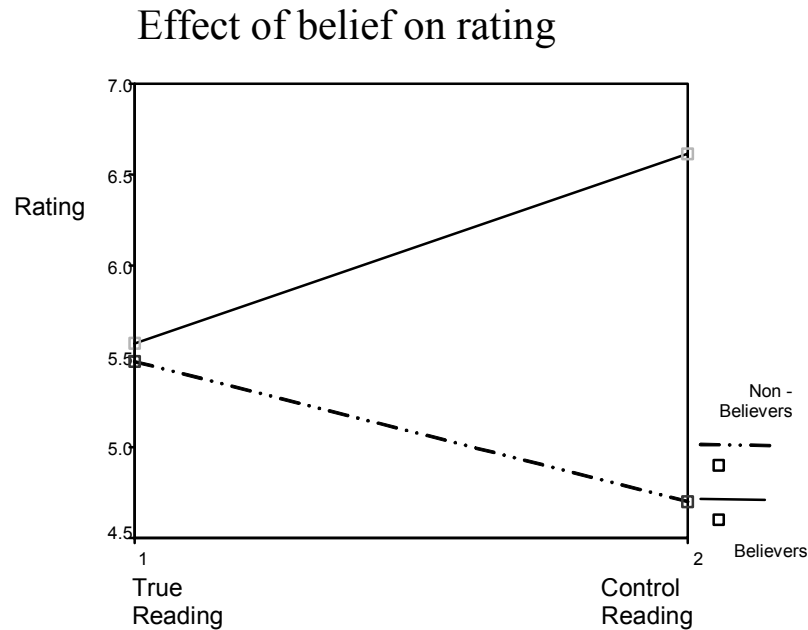


Fig. 1: The effect of Belief Group on the overall rating of the real and control readings.

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