

Effects of Social Influence and Persuasion on Paranormal Beliefs

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In the last decade scholars have unexpectedly found that beliefs in the paranormal were not significantly lower in college students vs. the general population. This research has produced a lot of controversy and concern regarding the student's education level and reasoning skills. To investigate further, the current experiment analyzed the relationship between media and social influence and college students' beliefs concerning the paranormal. In contrast to previous research, no differences in beliefs were supported as a function of media or social influence. Potential reasons for the lack of significant results are discussed and proposals for future studies are offered.

This experiment was designed to further previous research on the relationship between media and social influence on beliefs in the paranormal. The term "paranormal" is utilized for notions made about the existence of a wide range of extraordinary phenomena that include events such as extrasensory perception (ESP), haunted houses, ghosts, devils, spirits and reincarnation (Glenn, Leigh, Nelson, Rose, & Sparks, 1997). In a national survey of over 1,000 adults conducted in 1991, researchers found that nearly 50% of the participants reported that they believed in the power of ESP, and approximately 30% reported they believed in the phenomenon of haunted houses (Miller & Sparks, 2001). And, although surprising to many scholars, paranormal beliefs were not found to be significantly lower among college students (Miller & Sparks, 2001). In fact, the willingness of so many college students and adults to express their belief in the paranormal has attracted a lot of attention and is commonly treated with great concern (Miller & Sparks, 2001). In 2001, Bryan Farha at Oklahoma City University and Gary Steward, Jr. of the University of Central Oklahoma conducted a poll surveying 439 college students (Britt, 2006). They found that seniors and graduate students were more likely than freshman to believe in haunted houses, psychics, telepathy, channeling, and a host of other questionable ideas (Britt, 2006). They concluded, counter intuitively, that higher education is linked to a greater tendency to believe in ghosts and other paranormal phenomena

(Britt, 2006). The current research project sought to further examine whether or not there is a relationship between the exposure of social and visual influence and the participant's belief in the paranormal.

Earlier in the decade Chant, Gow and Lang (2004) investigated the relationship between out-of-body experiences (OBE), psychological variables and personality characteristics. They believed that, although there may be numerous variables and attributes contributing to the belief in OBE, there was a direct relationship to Stanford's (1987) developmental perspective on fantasy proneness. Stanford suggested that playing with imaginary playmates and enjoying children's books at a young age would help evoke imaginative development and the emotional absorption required in order to experience an OBE. The results of their 2004 study confirmed that there were significant differences among the groups tested and those in the OBE group had a greater tendency toward fantasy proneness and paranormal beliefs. A study conducted by Greening, Smith and Wiseman (2003), it was found that 1/3 of the participants who took part in a fake séance claimed that the table had moved because an actor suggested it, although in fact it had remained stationary. The results of this study showed a direct correlation between those who reported a belief in the paranormal and those who claimed the table did in fact move.

So what exactly does a superstitious person believe? Rudski (2003) directed a study that tested just that. He found that when asked to rate the beliefs of a fictitious superstitious person, they ascribed the most importance to socially transmitted beliefs (e.g., black cats, rabbit's feet, etc.) or idiosyncratic rituals related to luck and chance, followed by the belief in the paranormal (Rudski, 2003). Religious beliefs, however, tended to not be rated as descriptive of a superstitious person. The empirical work

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testing interrelationships between religious and classic paranormal beliefs has produced contradictory results as well (Rice, 2003). Several scholars have found an inverse relationship between the belief in certain religions and classic paranormal phenomena (Bainbridge & Stark, 1980; Emmons & Sobal, 1981; Eve & Harrold, 1986; Eve, Harold & Taylor 1990; Tobacyk & Wilkinson 1990). Others report an inverse relationship between church attendance and the belief in certain classic paranormal phenomena (Donahue, 1993; Hertel & Hughes, 1987). However, additional studies have shown a direct correlation between some classic paranormal belief and religion.

The current study measured the influence media has on an average college student's beliefs in the paranormal. Media influence refers to the way in which mass media in all its forms (television, films and advertising) affect the way we, as an audience, behave and act in our everyday lives. Each year, the average American spends 1550 hours of TV, listens to 1160 hours of radio, and spends 290 hours reading newspapers and magazines (Pratkanis, 2001). If you watch the average amount of TV, each day you'll have seen 100 TV ads (Pratkanis, 2001). In recent years, scholars have also begun a debate over whether or not children who are exposed to violent media engage in a significantly higher number of violent and delinquent acts. Stanley Kubrick released a film titled, *A Clockwork Orange* (1971), that caused controversy immediately upon its release due to the graphic violent content of fights, rape and murder. The public's disapproval regarding the film tripled when a number of youth gangs began to copycat the acts of violence and rape (Burgess, 1972).

With that said, one can only imagine how many people a year may be influenced to buy a certain product or exhibit a certain behavior without acknowledging that they are being influenced by the media. The idea that students will conform to the beliefs of their peers as a result of social influence was the original basis for conducting the current study. The researcher manipulated an article into two forms that would test this and that was given to the different groups of participants. A second manipulation focused on the effects of persuasion. The groups of participants were asked either to watch a scene from the video, *The Exorcism of Emily Rose* or they were asked to read the script of that same scene. Previous research studies that portrayed the use of video versus literature found that it did not result in a significant difference on the participants' understanding of the information and that was supported through this study (Russell, 2001).

Social influence refers broadly to changes in behavior, an attitude, or a belief. Inducing a change in behavior is called compliance, whereas inducing a change in attitude is called persuasion. A change in belief is called either education or propaganda, depending on your perspective (Pratkanis, 2001). The current study investigated whether or not students would conform to their peers regarding their beliefs in the paranormal. The participants in each group received literature summarizing the different percentages of college students who believe in areas of the paranormal. The four groups received the same journal article, however, the researcher manipulated it so that they were given different statistics. Two of the groups received the literature declaring that 20% of college students believe in the phenomena of haunted houses, while the other two groups' literature stated

that 70% of them do. The researcher hypothesized that through years of education these students have learned the importance of statistics and that they can accurately reflect the opinions and beliefs of others, including fellow students. Therefore, the prediction was that they should be more likely to conform to the beliefs of others when there are greater, as opposed to fewer, individuals endorsing a particular viewpoint.

Whether or not there was a relationship determined by the evidence of increased endorsement from peers and media exposure on the participant's belief in the paranormal were the questions investigated in the present study. It was hypothesized that the students randomly assigned to the group that watched the scene from the paranormal movie and then were asked to fill out the two-part questionnaire would result in a higher recording of their paranormal beliefs than the groups only given the literature. That is because the film is graphic and it was expected that it would have a greater effect on their decisions. It was also hypothesized that the information stating a higher percentage rate of college students who believe in the paranormal would also reflect onto the students' decisions and they would conform more. Therefore the researcher expected that both of these groups would report a significantly higher belief in the supernatural. The researcher also expected that the groups that received both the video and the data stating the high level of believers would show a greater belief than the other three groups. Lastly, exposure to information about the relatively higher or lower endorsement rates by other students should affect participant responses accordingly.

Method

Participants

This research study consisted of a convenience sample of forty undergraduate students enrolled in psychology classes at a public northeastern university. Each of the four groups consisted of 10 men or women ranging from 18-25 years of age. Students were treated in accordance with the "Ethical Principles of Psychologists and Code of Conduct" (American Psychological Association, 1992).

Materials

The materials utilized in this study consisted of a scene from the 2005 film, *The Exorcism of Emily Rose*. The scene used was a short 5-minute clip of the trial defending the family priest accused of negligence that resulted in the death of Emily, who they believe to have been possessed. An interval scale designed by the researcher, called the Paranormal Belief Scale, was used for testing the participant's belief in the paranormal (see Appendix A). Participants answered questions according to their agreement with the statement using the scale of 1-5. There were two variables manipulated in this study. The first was the administration of whether or not the participants were shown a paranormal video clip, which measured the idea of persuasion. Two short journal articles discussing the amount of college student's in the United States that believe in the paranormal that were originally written by Miller and Sparks in 2001 will also be used in this study (see

Appendix B & C). However, the researcher manipulated both articles in order to test social influence by changing the statistics the participants read. Before dismissal the researcher had the participants respond to additional “filler” items (Appendix D) in order to reduce any experimenter expectancy effects.

Procedure

Upon arrival the forty participants were randomly assigned to one of four groups. Each of the groups was informed of their rights and then given participation consent forms. In order to ensure the validity of the participant’s results they were first told that they were supposed to report what they would read or watch to be either suitable or not suitable for children. Once informed of what was expected from them participants were given the literature detailing the average college student’s beliefs in the paranormal. However, the short articles provided to each participant discussing the average number of college students that believe in different paranormal areas had been manipulated. Two groups received the article asserting that a large percentage (70%), of students believe in the use of ESP (see Appendix B). The other two groups of participants read the article that informed them that only 20% of college students believe in ESP (see Appendix C).

Next, participants in two of the group’s viewed the video clip from the 1995 film, *The Exorcism of Emily Rose*. When finished with the film the researcher then provided these participants with the Paranormal Belief Scale and Child Appropriate Scales (see Appendix D). After finishing their work on the scales participants were debriefed and then released. The other two groups did not view the video clip but instead received the scene’s script. When finished reading the participants were then also provided with the Paranormal Belief Scale and Child Appropriate Scales. When all the data was collected a between subjects ANOVA was utilized to analyze the results.

Results

This study had two independent variables (media and social influence) and the sum of the data from the paranormal belief scale was computed for the dependent variable (belief). Participant’s data was collected by the use of a five-point likert scale and then evaluated to measure the student’s willingness to conform. A 2x2 Univariate Analysis of Variance was utilized to determine whether or not the presence of social influence and the video had a significant effect on the participant’s answers. With an alpha level of .05, no main effect was found through the use of the video, $F(1,36) = .000, p = 1.0$. Therefore, the researcher’s hypothesis suggesting that the use of a video would be more influential on decision making was not supported. The researcher’s second hypothesis proposing that students will conform to their peers was also not supported. The ANOVA revealed that there was no main effect based upon the level of social influence participants read about in the journal article, $F(1,36) = 3.24, p = .572$. The interaction between the two independent variables was assessed to conclude its significance.

The results did not support the researchers hypothesis and therefore no interaction was found between the use of social influence and video $F(1,36) = 4.53, p = .505$.

Table 1
Means and Standard Deviations for the Paranormal Belief Scale

| | No Video | Video |
|--------------------|---------------|---------------|
| Level of Influence | <i>M (SD)</i> | <i>M (SD)</i> |
| Low | 2.93 (.44) | 3.06 (.52) |
| High | 2.95 (.50) | 2.82 (.88) |

The researcher reevaluated the Paranormal Belief Scale and ran an ANOVA based on the total of questions 2, 5 and 10. Again there was no main effect through the use of the video, $F(1,36) = .166, p = .686$. The between-subjects ANOVA also produced the same statistics declaring there was no main effect through the use of different levels of influence, $F(1,36) = .166, p = .686$. The interaction was also not significant, $F(1,36) = 3.117, p = .086$.

Discussion

The results of this study did not support the original hypotheses that the use of the social influence and persuasion would be influential in the participants’ decision making. Previous research conducted, however, found that there was no significant difference in the understanding of information whether it is by video or literature (Russell, 2001). This study’s findings therefore provide more support for these scholars’ research. One limitation of this study was that participants’ only watched a five-minute video clip which may not have been enough exposure. Also, students’ that viewed Stanley Kubrick’s video might have felt a personal connection to the characters, whereas students in this study did not. In order to report the results of television exposure to paranormal programs participants should be surveyed over an extended period of time. Another limitation due to lack of funds and time was the sample size of the participants.

Potential reasons for the lack of significance results could have been because most of the participants were required to participate in a study and they did not volunteer. Therefore, they may not have read and processed the information provided to them. This would explain why the difference in statistics had no effect on their answers. Although college students may not have a significantly lower belief in the paranormal, this study found that their decisions also were not influenced by the use of the media and persuasion. In the future researchers might want to investigate how influential movies are without the use of the script and vice versa. Researchers should also focus on the participant’s television habits and personal experience with the paranormal. Also, Bryan Farha and Gary Steward Jr.’s research concluded that higher education fuels a stronger belief in ghosts, and the participants in this study were mostly freshman.

Therefore in the future the researcher would also suggest incorporating age and class as another factor.

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Appendix A

1. I do not believe that anyone really has psychic powers.

| | | | | |
|-------------------|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | | | | Strongly agree |

2. I believe that some people have actually seen ghosts.

| | | | | |
|-------------------|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | | | | Strongly agree |

3. Daily horoscopes found in the newspaper provide accurate information about a person's life.

| | | | | |
|-------------------|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | | | | Strongly agree |

4. Some people claim to have had dreams that have come true, this is just a coincidence.

| | | | | |
|-------------------|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | | | | Strongly agree |

5. I do not believe that any houses are or have been haunted.

| | | | | |
|-------------------|---|---|---|----------------|
| 1 | 2 | 3 | 4 | 5 |
| Strongly disagree | | | | Strongly agree |

6. Some people can levitate and lift objects with the use of only their mind.

1 2 3 4 5
Strongly Strongly
disagree agree

7. I do not believe there is any other life in the solar system besides Earth.

1 2 3 4 5
Strongly Strongly
disagree agree

8. I sometimes think that I myself have ESP and can figure out what other people are thinking.

1 2 3 4 5
Strongly Strongly
disagree agree

9. Some fortunetellers can really tell a person's future by just reading their palm.

1 2 3 4 5
Strongly Strongly
disagree agree

10. I believe Emily Rose was indeed possessed.

1 2 3 4 5
Strongly Strongly
disagree agree

Appendix B

In one national survey of over 1,000 college students, Gallop and Newport (1991) reported that paranormal beliefs were “widespread”, with nearly 70% of respondents reporting belief in ESP and almost 57% reporting belief in haunted houses. Jaroff (1995) reported the results of a Roper poll indicating that, “nearly a half of Americans believe in extraterrestrial UFO’s and astrology.” For example in one sample of students from Purdue University, a variety of different paranormal beliefs were endorsed by many of the respondents: the existence of ghosts (70%), accurate forecasting of the future by reading palms (50%), accurate predictions of the future made by psychics (48%), personal ability to use extra-sensory perception on occasion (55%), and astral projection (44%) (Sparks, Hansen & Shah, 1994).

Appendix C

In one national survey of over 1,000 college students, Gallop and Newport (1991) reported that paranormal beliefs were “low”, with only 20% of respondents reporting belief in ESP and about 30% reporting belief in haunted houses. Jaroff (1995) reported the results of a Roper poll indicating that, “nearly a half of Americans do not believe in extraterrestrial UFO’s and astrology.” For example in one sample of students from Purdue University, a variety of different paranormal beliefs were not supported by many of the respondents: the existence of ghosts (20%), accurate forecasting of the future by reading palms (10%), accurate predictions of the future made by psychics (32%), personal ability to use extra-sensory perception on occasion (28%), and astral projection (18%) (Sparks, Hansen & Shah, 1994).

Appendix D

1. On a scale of 1-10 please rate the content of the information you just reviewed. (circle)

1 2 3 4 5 6 7 8 9 10

2. Do you believe children should be exposed to this type of content?

3. At what age do you feel would be appropriate?

0-3 yrs. 4-7 yrs 10-13 yrs 16-19 yrs 20-23 yrs

4. In order to shelter children from graphic films would you advise others to buy a filter for their television?

5. When you were a child what was the first R rated film you watched?

6. How old were you?

7. Have you ever watched any of the films *Carrie*, *ET*, *the Exorcist*, *Poltergeist*, if so at what age?

8. Did you watch these films without your parent's permission?