Gender Impacts Paranormal Beliefs Differentially Across Populations

Stephanie L. Menotti, Caleb W. Lack, M. Huskey, & Edward Clint
University of Central Oklahoma

Introduction
In this study, the researchers were interested in examining how gender differences would be similar or different in a group of undergraduate students compared to an older group of self-identified "skeptics." This research project was designed to examine the role that gender plays in influencing one's level of belief in paranormal phenomena. Specifically, we were interested if and how gender would be related to paranormal beliefs in two distinct populations: self-identified "skeptics" and college undergraduates. Previous literature is somewhat inconsistent as regards the relationship between gender and paranormal belief, with some beliefs more prevalent in females (such as astrology, ghosts, and psychic powers) and some more prevalent in males (such as UFOs and cryptids), but women overall showing higher beliefs (Fox, 1992). In terms of acting on those, though, such as by purchasing books or magazines related to those topics, no differences were found (Mears & Ellison, 2000).

Study hypotheses:

a) There would be significant differences between paranormal belief, with women showing more paranormal belief overall;

b) These gender differences would be negligible once age of the sample is accounted for.

Method

Participants
In order to examine these hypotheses, questionnaire data was gathered from two populations. The first group, TAM attendees, a total of 175 completed the survey. The second group consisted of undergraduate students at a mid-size university in the United States; 347 of them participated, for a total of 522 participants in the study overall.

Measures
Each participant completed the same packet of survey questionnaires, which began by asking about demographic data. They then answered questions on:

- Paranormal belief/skepticism (Paranormal Belief Scale – Revised)
- Experience of odd events (Anomalous Experience Inventory)
- Religious belief (Santa Clara Strength of Religious Faith Questionnaire)

Procedure
In order to examine study hypotheses, questionnaire data was gathered from two populations. First, attendees at The Amazing Meeting (TAM), an annual conference sponsored by the James Randi Educational Foundation focused on science, skepticism, and critical thinking, were recruited. For their effort, they received a $10 gift card. The second group consisted of undergraduate students at a mid-size university in the central United States. They participated to obtain part of their required course credit. Both completed the questionnaires via an online interface using Qualtrics.

Results
Initially analyses revealed overall gender differences in PBS-R scores, t = 7.33, p < .001.

- Males (n = 216; M = 63.32, SD = 30.04)
- Females (n = 306; M = 82.30, SD = 28.45)

Interestingly, total AEI scores were not different, but analyses showed that for the Fear of Anomalous Phenomena subscale, women scored higher than men, t = 5.68, p < .001.

In order to parse out age versus gender effects to test the second hypothesis, the two groups (TAM vs. students) were separated out and analyses were run again.

In the older TAM group (n = 173, mean age of 42.93 vs. 20.08 for the 347 participants in the student group), there was still a significant difference between males and females on PBS-R total scores (t = 2.11, p = .036), and the AEI of anomalous phenomena subscale (t = 2.37, p = .019).

In the younger student group, no gender differences were found on the PBS-R, but were found on the AEI total (t = 2.09, p = .037) and almost all AEI subscales, with males scoring higher than females.

Discussion
These data indicate that demographic variables are obviously important, most notably gender. There were significant differences on several demographic variables between the two groups, most notably overall age and income along with lower overall religiosity in the TAM sample (all of which were expected).

Some results were contrary to hypotheses, in that significant gender differences with the paranormal belief measure remained, even when accounting for the age differences in the samples.

Further data collection that allows for a broader age range of paranormal believers will be very useful in examining potential age effects.