

# Paranormal Belief Among College Students and Elderly People: A Comparative Study

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## Abstract

This is a comparative study conducted for assessing the prevalence of paranormal belief among college students and elderly people, and for identifying if paranormal belief increases with increasing age. This study was conducted on two groups: college students and elderly people. The sample included 50 college students aged 20–25 years and 50 elderly persons aged 40–65 years. The study was conducted using the Revised Paranormal Belief Scale which was developed by Tobacyk in 2004. The study compared the paranormal beliefs of college students with those of elderly people to determine the relationship between paranormal beliefs and age. The study findings revealed that due to the negative correlation between both variables, elderly people and age, hypothesis 1 is rejected. Hypothesis 2 has a non-significant result in six sub-domains between two variables (elderly and college students), indicating that the elderly population will have higher levels of paranormal beliefs in the individual sub-domains of the scale than their younger counterparts. Hypothesis 2 was rejected in one sub-domain (extraordinary life forms) because it yielded a significant result in the study.

**Keywords:** groups, paranormal beliefs, population, relationship, domain

## 1. Introduction

The current study was conducted to assess the incidence of paranormal belief in elderly and college students (young people). It is a comparative study used to identify if the elderly population will have greater levels of paranormal beliefs in individuals than their younger counterparts. In a multiethnic and polytheistic society like India, ritualistic practices and paranormal beliefs are deeply ingrained in people's general psyche. Few studies on paranormal beliefs have been conducted in Indian settings. Paranormal phenomena are defined as those that, if genuine, would violate basic limiting principles of science (Broad, 1953). Paranormal is a general term that designates experiences that lie outside “the range of normal experience or scientific explanation”. The term paranormal refers to hypothesized processes that in principle are “physically impossible” or outside the realm of human capabilities as presently conceived by conventional scientists (Thalbourne, 1982).

Tobacyk and Milford (1983) used three criteria to define paranormality: (1) phenomena that cannot be explained by current science; (2) phenomena that can only be explained by significant changes in fundamental limiting laws of science; and (3) phenomena that are incompatible with conventional perceptions and expectations about reality.

Psychologists who study religion have long claimed that belief in the paranormal can act as a kind of shield against the harsher realities of life. When something unexpected occurs, such as a death, natural disaster, or job loss, the brain searches for answers, seeking meaning in the chaos. According to Jennifer Whitson of the University of Texas, it is such an aversive state that if it cannot gain control objectively, people will get it by perceiving more structures around them, even if they do not exist (Robson, 2014). Thus, belief in the paranormal contributes to the prediction of many other psychological attributions.

According to Ali A, Deuri SP, Jahan M (2013) and Kishore J, Gupta A, Jiloha RC., and Bantman P (2011), paranormal belief is common in India and is connected to bad luck, astrological influences, evil spirits, witchcraft, and punishment for sin. Several correlates of paranormal belief have been recognized, the most studied among these being personality. It is widely recognized that individuals who hold paranormal beliefs show a particular set of personality traits.

However, few attempts have been made in India to investigate paranormal beliefs. Several authors have conducted a study that shows the connection between religion and paranormal beliefs. Beck, R., and J.P. Miller (2001) discovered that religiosity predicted differences in beliefs regarding the supernatural versus paranormal beliefs, but that negative effect dampened these beliefs. Based on his research findings, A. Orenstein (2002) argues that paranormal beliefs are deeply rooted in religious beliefs.

Several studies have attempted to quantify the relationships between extra-sensory perception (ESP) life after death, psychokinesis, and other paranormal phenomena on one hand, and religious beliefs, success in ESP tasks, and mind-body dualism on the other (e.g., Stanovich, 1989; Brugger, Regard, & Landis, 1991; Duncan, Donnelly, & Nicholson, 1992; Haraldsson, 1993).

The main goal of the study was to determine whether there is a relationship between age and paranormal belief among elderly people and college students.

## **2. Objective & Hypothesis**

### **2.1 Objective**

The main objective of the study was to compare the paranormal beliefs of college students with elderly people. The study was conducted to determine the relationship between age and paranormal belief.

### **2.2 Hypothesis**

H<sub>1</sub> – There is a positive relationship between paranormal belief and increasing age.

H<sub>2</sub> – The elderly population will have greater levels of paranormal beliefs in individual sub-domains of the scale, than their younger counterparts.

## **3. Methodology**

### **3.1 Sample of the Study**

The study involved two populations: elderly people and college students. There were 50 people in each group. Students in college were typically between the ages of 20 and 25, and the elderly were generally between the ages of 40 and 65. For the current study, convenience sampling was used.

### **3.2 Tools Used**

Tobacyk's Revised Paranormal Beliefs Scale (R-PBS), developed in 2004, was used to measure one's paranormal beliefs. The scale has 26 statements with a rating scale of 1 to 7, with 7 being the strongest

agreement. It assesses the seven areas of supernatural belief, which include precognition, psi, witchcraft, superstition, and unusual life forms.

### 3.3 Statistical Analysis

The Pearson Product Moment correlation was calculated to determine whether there is a relationship between age and paranormal belief. A t-test was conducted following which the mean was calculated to see whether or not there was a statistically significant relationship between age and paranormal belief. The data for this study were analyzed using SPSS version 13.0, the ‘Statistical Package for Social Sciences.

### 3.4 Research Design

Correlational research was adopted to investigate the relationship between the paranormal beliefs of college students and elderly persons.

### 3.5 Procedure

The sample drawn for the study consisted of 50 college students and 50 elderly persons. The questionnaire was distributed, the data was collected individually, and consent was obtained. They were informed about the purpose of the study. Further, socio-demographic information was collected, and consent was obtained from each participant. The tool used in the study was the Revised Paranormal Belief Scale (R-PBS) which was administered to both groups. Post-data collection was completed, and the questionnaire was accurately scored using the norms provided in the R-PBS manual. The data was then analyzed using SPSS.

## 4. Results

The table given below shows all analyses and results of this study.

**Table 1: Correlation between paranormal belief and age**

Sample	Pearson Correlation	Level of Significance
College students (N = 50)	0.159	Non-significant
Elderly persons (N = 50)	-0.032	Significant

\*Correlation is significant at a 0.05 level

Table 1 summarizes the results of the correlational analysis, which shows that the correlation of elderly persons was found to be significant ( $r = -0.032$ ,  $p < 0.05$ ). As a result, hypothesis 1 stating that there will be a positive relationship between paranormal belief and increasing age is rejected because of a negative correlation between both the variables, elderly persons and age. In terms of expansion of the current study in the future, a larger sample size is required for a better understanding of paranormal belief in different age ranges, to increase the generalizing ability of the acquired and interpreted data.

**Table 2: Group difference in seven dimensions of the Revised Paranormal Belief Scale**

Dimensions	College students N = 50		Elderly persons N = 50		f	T	Sig (2-tailed) df = 98	Level of significance
	Mean	SD	Mean	SD				
<b>Traditional Religious belief</b>	19.98	5.777	18.44	5.887	115	1.320	.190	Non-significant
<b>Psi</b>	14.60	4.290	15.40	5.050	.609	-.854	.395	Non-significant
<b>Witchcraft</b>	14.82	6.336	12.42	7.059	1.044	1.789	.077	Non-significant
<b>Superstition</b>	6.50	3.866	6.24	4.749	1.406	.300	.765	Non-significant
<b>Extraordinary life forms</b>	16.10	5.334	13.92	6.598	.800	2.458	.016	Significant
<b>Spiritualism</b>	12.00	2.213	10.90	2.261	1.474	1.817	.072	Non-significant
<b>Precognition</b>	14.44	5.230	14.72	6.648	3.999	-.234	.815	Non-significant

Table 2 summarizes the calculation of the t-test of seven dimensions, to describe the relationship between two variables that are college students and elderly persons.

The independent sample t-test values for traditional belief, psi, witchcraft, superstition, spiritualism, and precognition were .190, .395, .077, .765, .072, and .815 respectively. As a result, it showed statistically non-significant results between two variables (elderly and college students) in six domains, which are traditional belief, psi, witchcraft, superstition, spiritualism, and precognition, Therefore, hypothesis 2 states that the elderly population will exhibit greater levels of paranormal beliefs in the individual sub-domains of the scale than younger counterparts is accepted. Whereas, in the case of one sub-domain (extraordinary life forms), it showed a statistically significant result between two variables (elderly and college students), which shows hypothesis 2 is rejected.

### 5. Discussion

The purpose of the study was to determine the relationship between paranormal belief and age. For this purpose, questionnaires were administered to a sample of 100 participants, consisting of 50 college students and 50 elderly persons. Data were collected and analyzed using statistical methods, including Pearson Product Moment correlation and t-test.

In the present research, we discovered that significant results were obtained for hypothesis 1. These results lead to the conclusion that the positive relationship between paranormal belief and increasing age is rejected. This rejection is based on the negative correlation observed between both variables, specifically among elderly persons and age.

Hypothesis 2 showed non-significant results for six sub-domains — traditional belief, psi, witchcraft, superstition, spiritualism, and precognition. This hypothesis posited that the elderly population would demonstrate higher levels of paranormal beliefs in these six sub-domains compared to younger individuals. However, one sub-domain (extraordinary life forms) did yield a significant result, leading to the rejection of hypothesis 2.

With a few exceptions, most paranormal beliefs appear to be stronger in young adults than in elderly people. Indeed, Emmons and Sobal (1981, p. 52) state that age is the most powerful demographic predictor of paranormal belief. In any case, the dominant negative relationship between age and paranormal belief appears to be incompatible with the social marginality hypothesis (Emmons & Sobal, 1981). Youthfulness is highly valued in Western society, making the elderly a socially marginalized group. According to the social marginality hypothesis, elderly people should be more prone to paranormal belief, but this is not the case for the majority of aspects of this belief, the opposite is true.

## 6. Conclusion

The findings of this study indicate that hypothesis 1 is not supported, as there is a negative correlation between paranormal belief and increasing age. This suggests that the assumption of a positive relationship between these variables, specifically among elderly people, is not valid. Hypothesis 2 yielded a non-significant result when examining the relationship between two variables, namely the elderly population and college students, across six sub-domains. This finding suggests that the elderly population may demonstrate higher levels of paranormal beliefs in the individual sub-domains of the scale compared to their younger counterparts. In the context of the study, hypothesis 2 about extraordinary life forms in a specific sub-domain was rejected due to the presence of a statistically significant result.

## 7. Appendix

### Revised Paranormal Belief Scale (Questionnaire)

Please put a number next to each item to indicate how much you agree or disagree with that item. Use the numbers as indicated below. There are no right or wrong answers. This is a sample of your own beliefs and attitudes. Thank you. 1 = Strongly Disagree 2 = Moderately Disagree 3 = Slightly Disagree 4 = Uncertain 5 = Slightly Agree 6 = Moderately Agree 7 = Strongly Agree

1. The soul continues to exist though the body may die.
2. Some individuals can levitate (lift) objects through mental forces.
3. Black magic exists.
4. Black cats can bring bad luck.
5. Your mind or soul can leave your body and travel (astral projection).
6. The abominable snowman of Tibet exists.
7. Astrology is a way to accurately predict the future.
8. There is a devil.
9. Psychokinesis, the movement of objects through psychic powers, does exist.
10. Witches do exist.

11. If you break a mirror, you will have bad luck.
12. During altered states, such as sleep or trances, the spirit can leave the body.
13. The Loch Ness monster of Scotland exists.
14. The horoscope accurately tells a person's future.
15. I believe in God
16. A person's thoughts can influence the movement of a physical object.
17. Through the use of formulas and incantations, it is possible to cast spells on persons.
18. The number "13" is unlucky.
19. Reincarnation does occur.
20. There is life on other planets.
21. Some psychics can accurately predict the future.
22. There is a heaven and a hell.
23. Mind reading is not possible.
24. There are actual cases of witchcraft.
25. It is possible to communicate with the dead.
26. Some people have an unexplained ability to predict the future.

\*\*Note. Item 23 is reverse scored. Traditional Religious Belief = Mean of Items (1, 8, 15, 22); Psi = Mean of Items (2, 9, 16, 23); Witchcraft = Mean of Items (3, 10, 17, 24); Superstition = Mean of Items (4, 11, 18); Spiritualism = Mean of Items (5, 12, 19, 25) Extraordinary Life Forms = Mean of Items (6, 13, 20); Precognition = Mean of Items (7, 14, 21, 26).

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