

EDUCATIONAL LEVEL AND PRIMARY BELIEFS ABOUT  
UNIDENTIFIED FLYING OBJECTS HELD BY  
RECOGNIZED UFOLOGISTS<sup>1</sup>

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*Summary.*—Academic degree and primary beliefs about the nature of UFOs were collected from 102 recognized ufologists by two independent raters. Over a third of the population of ufologists held doctorates while another third had bachelor's or Master's degrees. The most frequent belief about the nature of UFOs is that they are extraterrestrial in nature (39%) while a large percentage of the ufologists did not express a primary belief (30%). It was suggested that the epistemology underlying UFO beliefs is fertile ground for research.

Reports of unidentified flying objects (UFOs) have generally received an unsympathetic scientific response since UFO reports began in 1947 (8). Most organized scientific investigations into the UFO phenomenon have been sponsored by governmental agencies. These investigations have consistently explained or accounted for 90 to 95% of all UFO reports (7). The bulk of the explainable reports consist of a variety of psychological factors, misrepresentations and misidentifications of aircraft and objects, weather and atmospheric abnormalities, and sightings of planets. As to the residual of unexplained UFO reports, scientific investigations have classified them simply as unknowns. Most governmental studies have concluded that UFOs posed no threat to national security and that they were not worthy of further scientific study.

It is well-recognized by serious UFO researchers (ufologists) that the majority of UFO reports are accounted for by the foregoing list. Ufologists and scientists interested in the UFO phenomenon are, however, not so quick to dismiss the residual of unexplained UFO cases as unimportant. For example, in a 1975 survey of the 2611 members of the American Astronomical Society (with a 52% return rate), 80% of the astronomers believed that UFOs certainly, probably, or possibly merited further scientific study (3).

Since the 1973 founding of the Center for UFO Studies by astronomer J. Allen Hynek, a core of scientists (including those with behavioral specialties) have been studying the phenomenon. The findings of the Center have been rather consistent with earlier studies: 90 to 95% of UFO reports are explainable with a small residual of unknowns (1).

It is the nature of the unexplained residual of cases (5 to 10%) that

<sup>1</sup>The author thanks Richard Rotter for his service in this study and Dr. John Bassett for statistical advice.

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creates most of the UFO controversy. Even Carl Jung was drawn into the subject to the extent that he wrote an article and book about UFOs. One of Jung's conclusions was: "something is seen, but one doesn't know what" (4, p. 5).

Most everyone who investigates the subject of UFOs appears to form conclusions and establish beliefs about the nature of the phenomenon. Price-Williams (5) has pointed out that an important element not often addressed by ufologists is the psychology and epistemology underlying UFO interpretations. He suggests that more attention center upon the beliefs people hold about UFOs. The purpose of the present study then was to explore the primary beliefs expressed by recognized ufologists about the origin of UFOs and to investigate the influence of education upon their views.

#### METHOD

The ufologists who participated here as subjects were chosen from the most authoritative and comprehensive reference source in the field of ufology: *The Encyclopedia of UFOs* (6). One of the categories of information within the sourcebook is that of people. "The people category includes those who, likewise in the opinion of the editors and our advisors, are generally regarded within the UFO field as the most notable personalities, leading UFO investigators, major thinkers, *et cetera*. Each personality is introduced with a brief biographical sketch . . . followed by a personal POSITION STATEMENT, written, in most cases, especially for this book" (6, p. vii).

From information in each person's biographical sketch, age, education level, and academic area were collected by two independent raters. From the position statement, the subjects' primary belief about the origin of UFOs was independently classified by each rater. Only those people who were living at the time of writing the sourcebook were included in the study. There were no UFO contactees (people claiming contact with extraterrestrials) in the study. A total of 102 subjects made up the population of interest.

It should be noted that almost all subjects qualified their interpretations about UFOs by stating that most UFO reports were eventually identifiable as known objects or phenomena. The primary variable of interest in this study were the subjects' interpretations or prime beliefs about the approximate 5% of cases classified as unknowns.

Most of the subjects entertained and discussed more than one theory about UFOs. Many ufologists distinguished between simple reports of an object or light being seen and those reports that include UFO "occupants." Some ufologists expressed combinational beliefs to account for a diversity of UFO phenomena. Most subjects, however, clearly expressed a preference for a particular theory.

#### RESULTS AND DISCUSSION

Of the population of 102 subjects, only six or 5.9% were female. The mean age of the population was 48.41 yr., with a range of 26 to 89 yr. (birth year from 1980). When classified by level of education, 35% of the population held less than a bachelor's degree, 30% held bachelor's or Master's degrees, and 35% held doctorates. Bachelor and Master's degrees were grouped because many biographies indicated unspecified amounts of graduate work beyond the bachelor's level.

Of the 36 subjects with doctorates, a wide range of major academic areas were represented: astronomy ( $n = 9$ ), physics ( $n = 6$ ), psychology ( $n = 4$ ), other social and behavioral sciences ( $n = 6$ ), engineering ( $n = 3$ ), and miscellaneous areas ( $n = 8$ ).

To evaluate the reliability of judgments made by the two raters on ufologists' primary belief, the procedure of Cohen (2) was utilized. Of the total of 102 judgments made by each rater, agreement was found in 82 cases. A proportional agreement matrix was constructed and the coefficient of agreement ( $k$ ) calculated.  $k$  is especially appropriate with categorical judgments in that it adjusts for agreements expected by chance; when converted into a  $z$  score,  $k$  enables a test of significance on inter-rater reliability. Results of the inter-rater reliability test indicated that agreement between the two raters occurred well beyond that expected by chance ( $k = .72$ ,  $\sigma_{ko} = .05$ ,  $z = 12.43$ ,  $p < .001$ ).

Table 1 shows a breakdown of primary UFO beliefs for the population of ufologists by education level. Percents shown in Table 1 represent the mean of the two raters' judgments in each category, respectively.

To determine whether primary belief was related to education level, a  $3 \times 8$  chi-squared analysis was performed (with Yates correction). Results indicated that amount of education and belief were not significantly related ( $\chi_{14}^2 = 8.85$ ,  $p > .05$ ).

The most frequent primary belief about the origin of UFOs was the extraterrestrial hypothesis. Over a third (39%) of the ufologists believed that UFOs were extraterrestrial in nature. Nearly a third (30%) of the population affirmed the belief that the UFO phenomenon was real, but they were unwilling or unable to cite a primary belief about the origin of UFOs. Psychological/sociological explanations accounted for 7% of the ufologists' primary beliefs.

TABLE 1  
PRIMARY BELIEF ABOUT NATURE OF UFOs BY EDUCATION LEVEL: PERCENTS\*

Belief About UFOs	Education			Total
	<Bachelors	Bachelor/ Masters	Doctoral	
Extraterrestrial	51.5	42.5	26.5	39
UFOs are real but origin unknown	30.0	30.5	30.5	30
Psychological/sociological	4.5	3.0	12.5	7
Psychic	4.5	1.5	5.5	4
Misinterpretations	3.0	11.0	8.5	7
Multidimensional	7.5	4.5	3.0	5
Religious	0	0	11.0	4
Unknown physical phenomena	0	6.0	3.0	3
<i>n</i>	35	31	36	

\*Percentages are rounded.

Such explanations included an interaction between an unknown physical object and the psychological state of the observer while a few saw UFOs as part of a sociological (mass psychology) phenomenon. Psychic explanations accounted for 4% of the primary beliefs. A distinction is made between psychic and psychological explanations only because the ufologists did so. Some of the psychic theories are parapsychological in nature; it is questionable whether these two areas should be combined.

A few ufologists (7%) conclude that the UFO phenomenon consists of a variety of misinterpretations and is "bunk." They insist that the small residual of unexplained UFO cases could eventually be identified if enough facts were available. Multidimensional theories were also proposed by the ufologists (5%). Most of these were in combination with other beliefs. For example, it was suggested that UFOs are interdimensional time travelers from other worlds. UFO theories based on religion made up 4% of the primary beliefs. Included was the belief that UFOs are angels or demons. Ufologists holding doctorates were the only subjects expressing this primary belief. Finally, 3% of the population believe that UFOs are unknown physical phenomena such as plasmas or geologic-based energy forces.

The UFO phenomenon is complex, confusing, and baffling to many people. It is a popular subject area consisting of tens of thousands of unexplained reports by usually credible people of sightings of strange objects and lights, UFO "occupants," and various interactions between "them" and "us." Nevertheless, UFO beliefs are inferential, and, to this date, not empirically verifiable. That the topic has held the attention of the public for over 35 years and convinced many highly educated professionals of its reality gives reason to ponder the significance of the phenomenon. The often complex nature of ufologists' beliefs about their topic is certainly interesting. It is suggested here, as Price-Williams (5) suggested, that the epistemology underlying UFO beliefs may well be an important and highly interesting area of inquiry.

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*Accepted April 16, 1984.*