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BELIEF IN UFOs AS ALTERNATIVE REALITY, CULTURAL REJECTION OR DISTURBED PSYCHE

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No paranormal phenomenon has so captured public attention and has so permeated contemporary popular culture as have the so-called "Unidentified Flying Objects" (UFOs). However, few empirical studies exist to explain why some believe UFOs are alien spacecraft while others do not. Survey data (N= 453) were collected to test three commonly advanced explanations of belief in UFOs as alien spacecraft. The "alternative reality" theory claims that UFO believers are simply those caught up in the awe and excitement of possible extraterrestrial life. Such believers believe because they want to, and they are also more psychologically involved with science fiction and with mysticism. The "cultural rejection" thesis is that UFO believers are social marginals and cultural "outsiders" who express their alienation by adopting deviant beliefs. The "disturbed psyche" theory holds that UFO believers are distressed, troubled, unhappy, or maladjusted persons susceptible to "primitive" thinking and delusions. The data analysis supported only the alternative reality theory and further found UFO believers much more involved with science fiction than with mysticism.

INTRODUCTION

Collective belief in unusual or strange phenomena which lie outside the realm of the commonly accepted and routinely experienced realities is not itself an extraordinary occurrence. However, within our own time no unusual phenomenon has so captured the public imagination and has so permeated contemporary culture as have the so-called "Unidentified Flying Objects" (UFOs).

While most scientists and much of the public remain skeptical and some even hostile towards the interpretation that UFOs are visitations by alien intelligence from other planets, many nevertheless hold such a belief. Furthermore, the fact remains that UFO sightings continue to be made weekly with some reported as "news" by the mass media, a

policy criticized by some (Shaeffer, 1981:139-143; Menzel and Taves, 1977:179-186) as contributing to the level of public belief in UFOs as alien spacecraft.¹ Although discontinued in 1969, even the U.S. Air Force for many years officially investigated reported UFOs under the program Project Blue Book. UFOs, "aliens," and space travel in general are also big business yearly generating millions of dollars from the production of science fiction media.

However, despite high public familiarity and keen interest regarding UFOs, few systematic studies on UFO belief patterns are available. Both physical scientists (Menzel and Taves, 1977; Hynek, 1972) and social scientists (Fox, 1979; Westrum, 1977; Stuppel and Dashti, 1977) as well as others (Sullivan, 1972) have called for "serious" studies on UFO beliefs. Perhaps this topic has been ignored because social scientists themselves do not believe or take UFOs as "real" (Hall, 1972) or perhaps ridicule from peers is feared as has been implied for physical scientists (Swift, 1978). Whatever the reasons for the lack of study, an analysis of UFO beliefs would contribute much to the understanding of deviant belief systems. Furthermore, there are numerous interesting speculations and assertions concerning why some people believe UFOs are alien spaceships and these claims need empirical testing. This present paper employed survey data in order to test three competing models of what UFO beliefs represent.

UFO Beliefs as Alternative Reality

At any point in time for any given culture there is seldom only one reality subscribed to by all. History is replete with examples of subcultures and countercultures existing within dominant ones. Astronomy itself went through a fundamental transformation because Copernicus and Gallileo literally did not see the same universe that other saw. Additionally, in relentless pursuit of "truth," the

¹Gallup polls have revealed that only a slight majority of Americans believe that extraterrestrial intelligence (ETI) even exists anywhere in the universe (51% believe in ETI) or that alleged UFO sightings are something real rather than merely foolish imagination (57% believe real). Furthermore, regarding the belief that alien spaceships are visiting earth, studies have reported belief rates in the range of about 25% to 45%. This high fluctuation in belief rate is due to the common use of nonprobability samples and to the wording format for the UFO belief statement. For example, belief rates are highest for qualified statements ("UFOs might be alien spaceships") and lowest for absolute statements ("UFOs are alien spaceships"). This present study used a nonprobability sample with an absolute statement on UFO belief and found 32.2% believing that alien spaceships are visiting earth. In sum, existing evidence indicates that belief in UFOs as alien spaceships is both a minority and a deviant belief among the educational and scientific communities as well as among the general public (Schaeffer, 1981; Swift, 1978; Otis and Alcock, 1982; Westrum, 1982, 1977).

discipline of philosophy deliberately speculates on the existence of numerous alternative realities. Clearly, there is little actually uncommon or outlandish about subscribing to alternative realities. Indeed, history reveals that yesterday's alternative reality sometimes becomes today's truth such as a flat earth becoming a round one.

Regarding UFO beliefs, the argument considered here is that UFO believers are those simply caught up in the excitement and awe of science fiction and perhaps also in the aura of the occult as well. Belief in UFOs, then, is a manifestation or an extension for involvement in the "worlds" of science fiction and the supernatural. Others have already advocated this interpretation even though they failed to present evidence to support their claims. For example, Shaeffer (1981: 235-238) considers UFO believers to be like "children" believing in monsters, goblins, witches, and other mythical creatures as well as in astrology and other paranormal "reality." Menzel and Taves (1977: 231-232) simply assert that UFO believers are also likely to believe in astrology, witches, occultism, and parapsychology.

However, there is some existing evidence to support the claim that UFO beliefs reflect psychological involvement with mysticism. Buckner's (1968) informal participant observation of "flying saucer clubs" in the mid-1960s led him to conclude that members tended to believe or at least be interested in the occult and mysticism. A much later participant observation study of a UFO cult by Balch and Taylor (1977) also led to the conclusion that members expressed many mystical and occult beliefs. The problem with these studies is that members of UFO clubs or cults are not necessarily typical of all UFO believers. The very UFO believers attracted to cults or to clubs might well be the very ones also more likely to espouse mysticism. This possibility is implicitly acknowledged by Balch and Taylor (1977: 847-852) who characterized the UFO devotees as typical "metaphysical seekers" such as those found in religious cults. Also, the evidence provided by Balch and Taylor (1977) as well as by Buckner (1968) was based upon qualitative impressions rather than upon quantitative measurements.

Fortunately, there are several studies based on quantitative survey data rather than on impressionistic personal observations. In 1968, Saunders (1968) factor analyzed 41 science-related and UFO-related items from a questionnaire administered to 267 undergraduates at the University of Colorado. The results basically revealed the existence of a general "belief in extraterrestrial visitation" factor highly correlated with the other UFO items but not correlated with the "philosophy of science" factor items. However, Saunders (1968) did not include items on mysticism in his study, and students were asked to identify themselves on the questionnaire.

Another survey of UFO beliefs reported by Stupple and Dashti (1977) involved 4,400 names on the mailing list of the "Saucerian Press," a mail order firm dealing in books of interest to UFO enthusiasts. Although the questionnaire return rate from the mailing list was low (9.1%), some interesting results were obtained. Only 12% reported belonging to an occult group with 10% belonging to a scientific group,

and the lines between these two affiliations were very distinct. That is, very few respondents were affiliated with both an occult and a scientific group. However, there was some general but not extensive interest in reading material on mysticism, the occult, and science fiction. Stupple and Dashti (1977) concluded that the respondents were not a cult but rather were simply bound together only by a common interest in an unconventional topic. The problem here, of course, is that caution must be applied in interpreting these survey results given the low return rate and the fact that only UFO buffs were included in the study.

Perhaps the most helpful data comes from three separate surveys of small communities conducted by Phillis Fox (1979) in 1975 (N= 95) and 1976 (N= 101 and N= 170). The findings revealed that the strongest correlate for beliefs in UFOs as alien visitors was a belief in the existence of extraterrestrial intelligence (ETI). Fox (1979) also found that Protestant fundamentalists were slightly less likely to believe in UFOs as spacecraft. According to Fox (1979) many fundamentalists regard UFOs as demons from Satan or angels from God. The only other item analyzed by Fox (1979) and found related to belief in UFOs as aliens was reading and believing books and articles on UFOs. However, it is critical to note here that measures of mere exposure to UFO media content (news or fiction) were uncorrelated with believing in UFOs. This is particularly interesting since some strongly insist (Shaeffer, 1981:123, 139-146, 210; Menzel and Taves, 1977:179-186; Sullivan, 1972) that media coverage is largely the factor responsible for so much of the belief in UFOs. Also not related to belief in UFOs were exposure to media on the supernatural, interest in or knowledge of astronomy, support for the U.S. space program, open-mindedness, being in a congruent social network of UFO believers, or status inconsistency.

Thus, the data provided by Fox (1979) may be used to infer that the most significant factor among those she studied is a strong belief in an alternative reality (ETI) manifesting the additional "reality" of visitations by alien spacecraft, the ultimate proof of ETI. Fox essentially made the alternative reality argument when she provided reasons why Americans believing in ETI and UFOs as alien visitors are not such far-fetched ideas. Fox (1979) noted that America has an active and successful space program, the scientific community supports the idea of ETI if not UFOs (Swift, 1978; Sagen, 1972), news and fiction media provide extensive coverage of UFOs, and scientists have not been able to explain away all UFO reports as something other than alien spacecraft (about 8% of UFO sightings remain "unexplained").

UFO Beliefs as Cultural Rejection

There are those who argue or imply (Balch and Taylor, 1977; Shaeffer, 1981; Menzel and Taves, 1977; Buckner, 1968) that believing in UFOs as alien visitors is partly if not entirely a manifestation of rejecting or feeling alienated from one's own society and culture. By adopting unconventional beliefs, outsiders both mock their culture and re-affirm their marginal status by being different. It is a way for the marginals to at least psychologically proclaim their cultural

independence and "liberation" in the form of their deviant beliefs.

While there are no direct tests of the cultural rejection thesis, Warren (1970) reports an indirect test. Warren (1970) argued that persons experiencing the status inconsistency of higher education but lower income would feel resentful and alienated from society and be more vulnerable to adopting unconventional beliefs such as UFOs. Using 1966 Gallup poll data, Warren (1970) found that status inconsistencies were more likely to claim having seen a possible UFO. Fox (1979), however, failed to replicate Warren's (1970) findings as applied to belief in UFOs as spaceships. Fox (1979) criticized status inconsistency as too ambiguous and indirect as a measurement of cultural alienation and as a process too subject to the influence of intervening variables.

UFO Beliefs as "Disturbed" Psyche

One of the most strongly made if not modal explanations of those who believe in UFOs as alien visitors is that the believers are mentally disturbed, troubled, or distressed. The idea here seems to be that merely believing in UFOs as alien visitors automatically determines that there is something maladjusted or "strange" about the believer. For example, Shaeffer (1981: 78, 235-238) considers UFO believers as representing a "throwback" to pre-scientific times and as being very "irrational" and emotional. Buckner (1968) characterizes believers as low in mental health and susceptible to hallucinations. Balch and Taylor (1977) claim that UFO "true believers" "suffer" from what they term "psychic deprivation," an unfulfilled emptiness about direction and meaning in their lives.

Others regard UFO believers simply as hucksters or as foolish. Menzel and Taves (1977:255) directly assert that many alleged UFO sightings are made by "liars" and much of the public simply believe the liars and the lies. Another possibility according to Menzel and Taves (1977:238) is that belief in the UFO "nonsense" is the believer's attempt to cope with a world which to some often seems to be on a course of self-destruction. To such people, UFOs represent the coming of a new social and moral order and thus constitute a sign of hope and salvation to the believer.

One of the strongest indictments against UFO believers has been made by Grinspoon and Persky (1972). Grinspoon and Persky (1972) consider such persons as engaging in "primal" modes of thinking which is the source of myth, magic, and fantasy in human culture. Believers are also regarded as having unhappy life situations and a high need for diversion. Personal stress and an anxiety-provoking world are likewise conditions which encourage persons to "regress" to primal thought patterns and to become more vulnerable to believing that UFOs are alien spacecraft. However, existing evidence for the disturbed psyche explanation is mostly from observations of cult members, UFO groups, or those troubled by their alleged encounters with UFOs especially if an "abduction" by "aliens" supposedly took place. Perhaps "extreme" claims are made by those with "extreme" imagination or acute perceptual distortions. However, such extreme claims are also not necessarily typical of all UFO believers as well.

METHODS

An anonymous questionnaire was obtained from 475 college undergraduates enrolled mostly in introductory sociology at a public, four-year university.² List-wise deletion of missing data yielded a usable sample of 453. Also, unless indicated otherwise, responses were measured by an 11-point intensity (agree to disagree) scale. Respondents were asked if they believed that the earth is being visited by intelligent life in spaceships coming from other planets. They were also asked if they had ever seen a possible UFO (yes= 1, no= 0) and if they knew someone who claimed to have seen a possible UFO (yes= 1, no= 0). Respondents were asked if they were strong science fiction fans, if they liked to talk to others about the possibility of UFOs being alien visitors, and if media presentations (news or fiction) of UFOs made them seem more real whether they believed in UFOs or not. Respondents were also asked if the American government has been telling the public the truth about UFOs.

Regarding mysticism and the occult, respondents indicated which of the following phenomena they considered to really exist: ghosts, witches, and demons. These items formed a single unidimensional, Likert-type "occult" scale (scale alpha= .82). Belief in astrology was measured as the endorsement of the accuracy and usefulness of horoscopes. Furthermore, the occult scale and the astrology belief were not very seriously inter-correlated ($r = .14$) indicating that they represented different aspects of mysticism. Given Fox's (1979) findings on conventional religion with UFO belief, also included here was a measure of religious orthodoxy and fundamentalism in the form of absolute belief in the unquestioned existence of God.

²Since the use of college undergraduates essentially stratifies the sample by age and education, some attention must be given to the implications of such sample bias. Existing data indicates that younger or more educated persons are more likely to believe in ETI, to consider UFOs as something real (but not necessarily spaceships), or to make a UFO sighting. However, these belief differences by age or educational level tend to be small or not linear. For example, according to Gallup poll data, more of those in the 25-29 age category (77%) compared to those 18-24 (66%) consider UFOs as real, and there was no difference (0%) between these age categories on belief in ETI. Differences between those under 25 compared to those 30-49 were very minimal for UFOs as real (66% to 63%) and not great for ETI (67% to 54%). Similar patterns were true for educational level. In fact, UFO belief differences were strongest only for those under 30 compared to those 50 or over and for the college-educated compared to those not even completing high school. More importantly, there is direct evidence (Otis and Alcock, 1982; Fox, 1979) that belief in most paranormal phenomenon, including UFO aliens, is not seriously correlated with either age or educational level. Thus, the sample used in this present study should not yield misleading results based on either the age or the educational characteristics of the respondents.

In order to reduce possible response bias, cultural rejection was measured indirectly by the following three items. Respondents were asked if they would be happier living in another time (past or present) or happier living on a remote island or mountain top far away from society. The third item was most extreme and asked if respondents sometimes wished for a catastrophe to strike the world and force society to start over again. Items reflecting a "disturbed" psyche dealt with perceptions of the larger world as well as with personal well-being. Thus, items constituting a general cynicism and pessimism Likert-type scale and one measuring a troubled and endangered world perception scale were included.³ Regarding evil as a stronger force than good was also included as part of the "malevolent world view" syndrome. Personal well-being was represented by items similar to those in the NORC General Social Survey item inventory indicating levels of stress/anxiety, personal unhappiness, life dissatisfaction, personal amomia, and need for diversion. These items were employed to test exactly how unhappy or maladjusted UFO believers were compared to nonbelievers.

RESULTS

Table 1 contains the zero-order correlations for the appropriate theoretical indicators with believing UFOs to be alien spacecraft (11-point scale) and with being unsure whether UFOs are alien spacecraft or not (unsure= 1, belief or disbelief= 0). Being unsure if UFOs are alien spacecraft was included for separate analysis because unexpectedly an unusually large proportion of respondents (30.5%) expressed uncertainty about the nature of UFOs (32.2% believed some UFOs were aliens and 37.3% disbelieved). Since so many could not decide if UFOs were alien visitors or not, it is possible that the unsure category reflected a systematic response syndrome on UFOs. That is, perhaps those unable to decide about UFOs were also similar in other ways as well. However, the data in Table 1 revealed that the social psychological indicators tested were essentially uncorrelated with being unsure about the existence of UFOs as alien visitors.

³The cynicism and pessimism scale (scale alpha= .69) contained the following items: "Most people cannot be trusted, are just looking out for themselves, and will take advantage of you if they have a chance;" "Today one cannot be sure of anything;" "I believe that if something can possibly go wrong, it usually will." The troubled and endangered world scale (scale alpha= .67) consisted of: "The world is in such a mess that it needs someone or something to help it;" "The world will run critically short of important resources within the next ten years;" "The world will experience a major nuclear war within the next ten years;" "International communism is a very serious and direct danger to the survival of the American way of life;" "Wars, revolutions, unrest, and discontent in the world will become more common within the next ten years." With the exception of the first cynicism and pessimism item, the above items are ad hoc and were developed only for use here rather than as general scales to measure predispositions in other research contexts.

TABLE 1. Zero-order Correlations (Pearson's r) for UFO Beliefs with Orientation and Background Test Items ($N= 453$).

Test Items Treated as Causal Factors	UFOs Alien Spaceships	
	Believe	Unsure
<u>Science Fiction Subculture</u>		
Science fiction fan	.30*	-.02
Like to talk about UFOs	.45*	-.03
Media make UFOs more real	.27*	.08
Government honest on UFOs	-.38*	.04
I saw possible UFO	.28*	-.03
Friend saw possible UFO	.17	-.01
<u>Mysticism</u>		
Astrology is accurate	.29*	.04
Occult exists	.36	.04
Religious orthodoxy	-.07	-.01
<u>Cultural Rejection</u>		
Want to live in another time	.11	-.01
Want to live on remote island	.11*	-.09
Want to start society over	.18	-.06
<u>Malevolent World View</u>		
Cynicism and pessimism	.12	-.13*
World in trouble and endangered	.06	-.06
Evil is stronger than good	.04	-.08
<u>Personal Well-Being</u>		
Stress/anxiety level	.06	-.10
Life unhappiness	.09	-.09
Life dissatisfaction	.11	.03
Anomia	.04	-.07
Need for diversion	.07	-.06
<u>Background</u>		
Sex (male)	.12	-.10
Age	-.01	-.04
Major (hard sciences)	.02	-.06
GPA	-.01	.11

*Probability less than .01, one-tailed.

On the other hand, Table 1 further revealed certain interesting correlations for believing that UFOs are alien visitors. The data clearly confirmed the alternative reality theory since UFO belief was significantly correlated with being a science fiction fan ($r= .30$), liking to talk about the possibility of UFOs as alien spaceships ($r= .45$), and regarding media presentations of UFOs as making them seem more real ($r= .27$). Thus, persons more interested and psychologically involved with science fiction and the topic of UFOs were also more

likely to regard UFOs as alien spacecraft. Furthermore, as expected, believing the government to be honest on UFOs was negatively related to UFO belief ($r = -.38$), and UFO belief was positively related to having seen a possible UFO ($r = .28$) or knowing someone who may have seen a UFO ($r = .17$).

Also supportive of the alternative reality theory were the correlations for UFO belief with regarding astrology as accurate ($r = .29$) and with believing in the occult ($r = .36$). Thus, those who accepted these mystical alternative realities were also more likely to accept the UFO alternative reality as well. The only item which failed to correlate with UFO belief was religious orthodoxy ($r = -.07$). Overall, then, there was strong empirical support for the alternative reality explanation of UFO beliefs.

Regarding the remaining two theories, however, the data provided a much different picture. None of the indicators for malevolent world view or for personal well-being correlated significantly with belief in UFOs as alien spaceships. These findings clearly disconfirmed the disturbed psyche explanation of belief in UFOs as aliens. UFO believers were no more likely than non-believers to be distressed, unhappy, dissatisfied, anomic, needing diversion, cynical, see the world as endangered, or to regard evil as a stronger force than good. Furthermore, of the three cultural rejection items, only one, wanting to start society over, was related to belief in UFOs ($r = .18$). Thus, only those so alienated that they would agree to destroy the world in order to start society over were also more likely to regard UFOs as alien spacecraft. However, this provided some weak support for the contention by Menzel and Taves (1977:238) that cultural marginals may regard UFOs as signs of hope for a new social order in the world.

In sum, data presented in Table 1 decidedly supported the alternative reality theory while essentially disconfirming the disturbed psyche and cultural rejection theories. The objective now was assessment of how much of the UFO belief could be accounted for by the alternative reality theory, which of the correlated indicators were the most important, and which zero-order correlations in Table 1 were spurious. This was all accomplished by multiple regression. However, since there were six science fiction/UFO indicators strongly inter-correlated with one another, factor analysis of these six items was employed in order to assess the feasibility of combining the multiple items into a single, composite science fiction index. These results are found in Table 2 which contains the principal-components, varimax-rotated factor loadings for the science fiction subculture items.

Table 2 reveals that the loadings from the factor-analyzed items clustered into the distinct domains of science fiction interest (science fiction fan = .81, like to talk about UFOs = .61, and media make UFOs more real = .40) and possible UFO sightings (respondent saw = .73, friend saw = .53). These two factors were entered into the multiple regression as Likert-type scales with one for science fiction interest (scale alpha = .63) and one for UFO sightings (scale alpha = .64). Perceiving the government as honest on UFOs was mostly independent of the two observed factors in Table 2 and thus was also entered in the regression as a separate indicator.

TABLE 2. Factor Analysis of Science Fiction Subculture Items (N= 453)

Science Fiction Subculture	Varimax Rotated Factors	
	Science Fiction Interest	UFO Sightings
Science fiction fan	.81*	.02
Like to talk about UFOs	.61*	.19
Media make UFOs more real	.40	.10*
I saw possible UFO	-.01	.73*
Friend saw possible UFO	.12	.53
Government honest on UFOs	-.11	-.24
Scale alpha=	.63	.64

*Factor loading magnitude acceptable for convergent validity.

Presented in Table 3 is the correlation matrix needed for the multiple regression, and Table 4 contains the regression results. Using the standardized regression coefficients (betas) presented in Table 4, results revealed that UFO belief was much more strongly related to involvement in the science fiction alternative reality (beta= .29) than in the mysticism alternative reality (astrology beta= .15, and occult beta= .14). Furthermore, since astrology and occult beliefs were only slightly inter-correlated ($r = .14$, Table 3), each one of these items lower relative influence on UFO belief was not attenuated by their relationship to one another. These findings constituted direct evidence that mystical beliefs were rather unimportant for explaining belief in UFOs on either a relative or an absolute level. Perhaps mystical beliefs tend to be more common or stronger among those UFO believers who belong to cults or clubs or who have had a UFO close encounter of the "third kind" (have "seen" aliens).

Table 4 further revealed that regarding the government as being honest about UFOs was moderately associated with belief in UFOs as aliens (beta= -.27). Unfortunately, the limitations of the research design employed here did not allow proof for correct causal ordering. Thus, it cannot be said if regarding the government as being honest about UFOs reduces the likelihood of believing in UFOs as alien visitors or if it is this UFO belief that reduces trust in government honesty concerning UFOs. Perhaps a reciprocal relationship exists. Nevertheless, even though correct causal ordering between government honesty and UFO belief cannot be determined here, certain implications of the relationship may be considered. The data reported here suggests that if the government were to present evidence or even merely to endorse the idea of some UFOs as possible alien visitors, then many more would likely believe this than is now the case. Undoubtedly the most affected would be those "unsure" about UFOs as alien visitors. Moreover, since the unsure category was very large (30.5 % of this present sample), a substantial increase in the number of UFO believers could be expected following government endorsement of UFOs as possible alien visitors.

TABLE 3. Correlation Matrix for UFO Alien Visitor Belief Regression (N= 453)

	UFO belief ^a	Astrology accurate	Restart society	Govt. honest	Occult exists	Sci Fi index	UFO sightings
Astrology is accurate ^a	.29	1.00					
Want to start society over ^a	.18	.22	1.00				
Government honest on UFOs ^a	-.38	-.08	-.06	1.00			
Occult really exists ^b	.36	.14	.17	-.26	1.00		
Science fiction index ^b	.44	.26	.16	-.14	.30	1.00	
UFO sightings index ^c	.28	.08	.05	-.19	.20	.13	1.00
\bar{X} =	4.49	2.05	2.25	3.24	11.48	12.32	0.66
SD=	2.83	2.43	2.75	2.67	8.78	6.66	1.03

Note: correlations of .13 or greater are significant at the .01 level, one-tailed.

^aMeasured on an 11-point intensity scale (0-10).

^bMeasured on a 33-point intensity scale (0-32).

^cMeasured on a 4-point intensity scale (0-3).

TABLE 4. Regression of UFO Belief on Selected Items (N= 453)

Selected Items	<u>Standardized Coefficients</u> UFOs Are Spaceships
Science fiction index	.29*
Government honest on UFOs	-.27*
UFO sightings index	.15*
Astrology is accurate	.15*
Occult really exists	.14
Want to start society over	.05
R=	.61*

*Probability less than .05, one-tailed.

Another interesting finding from Table 4 is that the UFO sightings index was only weakly related to UFO belief ($\beta = .15$). This is important because it becomes apparent that UFO sightings per se propelled few observers into the conclusion that aliens are visiting earth. Conversely, it is also correct to say that most of those who already believed in UFOs as alien spaceships were not inordinately susceptible to UFO sightings. Whether UFO believer or not, people were obviously cautious about interpreting possible UFO sightings. Table 4 also eliminated cultural rejection as even a partial explanation for belief in UFOs since wanting to start society over was unrelated to UFO belief ($\beta = -.05$). Interestingly, this cultural rejection item was also unrelated (see Table 3) to UFO sightings ($r = .05$) and was more related to mysticism (astrology $r = .22$, occult $r = .17$).

CONCLUSIONS

The findings presented here supported only the alternative reality theory as an explanation for the tendency to regard UFOs as alien spaceships. Thus, UFO believers were those fascinated with and caught up in the mental excitement generated by the possible alternative reality of other worlds besides earth having intelligent life. Things which make the existence of this alternative reality more believable such as unexplained UFOs and media attention would be most welcome to the believer. Such stimuli allow the believer to maintain conviction on a basis other than pure imagination, fantasy, or faith alone. Conversely, things which challenge the alternative reality belief such as government denial or disinterest would be most unwelcomed and likely to be rejected as false. Furthermore, evidence presented in this paper also indicated that believers were only slightly more likely to have seen a UFO and only somewhat more likely to be media impacted about UFOs. It would thus appear that belief needs were not causing severe perceptual distortions uncritically supportive of the belief. It is clear that UFO sightings and belief in UFOs as alien spaceships are distinct phenomenon only slightly related to one another.

Another important observation reported here was that UFO belief was much more a consequence of psychological involvement in the world of science fiction than it was in the world of mysticism. Quite possibly it is mostly those few who are high on both mysticism and science fiction who are the ones attracted to UFO cults and clubs. However, it is also likely that these types of UFO believers are not typical or representative of UFO believers in general. In this present study for those who believed in both mysticism and science fiction, the overlap of these belief patterns was less than 10% very similar to the rate reported by Stupple and Dashti (1977). UFO believers studied here were diverse in many ways, and in no sense as reported from the data were believers highly similar in their social psychological characteristics.

It was also established that those who regarded UFOs as alien visitors were not more unhappy, distressed, dissatisfied, alienated, or malevolent individuals than were those who disbelieved UFOs were spaceships. Believers likewise were not cultural outsiders rejecting their own society or historical time. The idea among some observers that UFO believers are "disturbed" in one way or another probably originates in sensational media accounts of UFO sightings and reports of alleged close encounters of the third kind. Therefore, those writing mostly to discredit or debunk the UFO "nonsense" often focus on incidents or sightings which are bizarre or can be easily explained as natural occurrences or as human artifacts. Such criticism or ridicule of sensationalized UFO experiences unfortunately casts aspersions on all UFO reports and promotes stereotyping of sighters and believers alike. UFO critics have stressed the fact that no scientifically acceptable evidence yet exists which demonstrates that UFOs are alien spaceships. However, the rebuttal often made is that neither scientists nor critics have yet disproved the reality of alien visitors, a point that one UFO critic freely admits (Shaeffer, 1981:110, 210-213). Furthermore, characterizing all UFO believers from only those who belong to a cult or who claim to have been abducted by aliens is like characterizing all Christians from observing only fundamentalists. There sometimes can be more differences than similarities between the extreme and the typical believer.

In terms of future research, certain extensions appear promising. One area of further study should be an understanding of how people become attracted to or accepting of alternative realities in the first place. It is possible that introduction and reinforcement of a given alternative reality such as ETI, science fiction, or the occult is essentially a function of primary or secondary socialization from significant others. It is well-established that strong feelings or convictions regarding religious beliefs or political ideologies are mostly the result of influences from primary group associations particularly the family. It is easy to imagine that someone raised by parents who encourage speculation on alternative realities and/or belief in ETI would be most receptive to belief in UFOs as alien spaceships. Nevertheless, consideration also needs to be given to possible influences from dramatic life events (UFO sighting) in combination with a supportive social network. Lastly, UFO beliefs might be related to personality traits which were not tested here.

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