

## **Psychological and parapsychological aspects of the alien contact experience**

Christopher C. French, Julia Santomauro, Victoria Hamilton, Rachel Fox  
& Michael Thalbourne

Paper presented to the Conference on  
Developing Perspectives on Anomalous Experience  
Liverpool Hope University College, 4 June 2005

### Abstract

Recent systematic research has supported previous anecdotal observations that those reporting alleged alien contact (known as 'experiencers') report a much higher incidence of ostensibly paranormal experiences and higher levels of paranormal belief than those not claiming such contact. The results of a study of a UK-based sample of experiencers are presented. Specifically, the project focussed upon quantitative and qualitative data relating to postulated psychological differences between experiencers and non-experiencers (with respect to fantasy-proneness, dissociativity, sleep paralysis experiences, and history of paranormal/anomalous experiences). Furthermore, data were collected pertaining to susceptibility to false memories using a word list paradigm. Finally, data were collected relating to possible paranormal abilities (ESP and PK) in experiencers and a comparison control group. The implications of the results are discussed.

### Introduction

In the late twentieth century, an increasing number of people around the world began to claim that they had had a most bizarre experience. Typically, they would report being taken from their beds or from their cars by alien beings. These beings were often around four feet high, with spindly arms and legs and oversized heads. The most striking thing about them was their large black eyes through which they appeared to communicate telepathically. The abductees, or "experiencers" as they prefer to be known, would describe how they had found themselves on board an alien spaceship where they were subjected to (often painful) medical examination, during which sperm or ova might be extracted. Sometimes, it was alleged, a small alien implant would be embedded in the experiencer's body, although the purpose of this hi-tech alien device was somewhat obscure. The reports may also involve a tour of the alien ship and sometimes the aliens would pass on a message of great importance to the experiencer, often concerning various threats to the future of our planet. Although it is hard to estimate just how many people have conscious memories of this kind (French, 2001), it is likely to run into at least several thousand worldwide.

Such claims attracted a great deal of media interest and also the attention of a number of psychologists and psychiatrists with an interest in anomalous experiences. Some, such as Dr John Mack, the Pulitzer Prize-winning Harvard psychiatrist were convinced that these accounts were not hallucinations, not dreams, but real experiences (Mack, 1994). Others felt that these accounts were best explained in psychological terms rather than in terms of any objectively real encounter with extraterrestrial beings or beings from another dimension (e.g., Baker, 1992; French, 2001; Holden & French, 2002; Newman & Baumeister, 1996; Randle, Estes, & Cone, 1999; Spanos, 1996). It is certainly the case, however, that there are many aspects of alien encounter experiences that await definitive explanation (Appelle, Lynn, & Newman, 2000).

The results of the current project, funded by the Bial Foundation of Portugal, do not address the issue of whether or not experiencers are reporting purely subjective experiences as opposed to objective events. Instead, it was focused on assessing the psychological and parapsychological characteristics of experiencers in more general terms. Inevitably, the results may be consistent or inconsistent with an explanation of the experience in purely psychological terms, but no definitive conclusions would be possible with respect to this issue. Logically, it is always possible that a certain psychological profile makes individuals more likely to experience both genuine paranormal experiences and anomalous non-paranormal experiences or that the psychological profile of experiencers is a result of their experiences rather than a causal factor.

Previous research has suggested certain psychological differences between experiencers and the general population including differences in belief in and experience of the paranormal (Basterfield & Thalbourne, 2002), susceptibility to false memories (Clancy, McNally, Schacter, Lenzenweger, & Pitman, 2002), interpretation of sleep paralysis (e.g., Holden & French, 2002; McNally & Clancy, 2005), and fantasy proneness (e.g., Bartholomew, Basterfield, & Howard, 1991). Other differences that may exist between experiencers and non-experiencers are tendency to hallucinatory experience, the personality trait absorption and dissociative tendencies. This project aimed to replicate some previously reported findings with a UK-based sample of experiencers as well as collect data on some hitherto uninvestigated psychological and parapsychological measures.

Given the limited time available today, only an overview of the preliminary findings will be presented. For each psychological variable considered, its relevance to the phenomenon will be briefly described along with a summary of any relevant previous findings and the results of the current study. Before doing so, however, an overview of the project will be provided. It was originally intended that only experiencers meeting strict criteria (Rodeghier, 1994) corresponding to the “classic” abduction scenario, as described above, would be included in the project. It quickly became apparent, however, that it would prove to be simply too difficult to recruit such experiencers in sufficient numbers and it was thus decided to accept into the experiencer category anyone who claimed to have had extraterrestrial contact.

The project consisted of four main components: (a) participants completed a batch of pencil-and-paper tests measuring psychological variables of interest; (b) they completed an experimental test measuring susceptibility to false memories; (c) they completed computerised tests of clairvoyance, precognition and psychokinesis; (d) they were interviewed at length regarding their contact experience and any other anomalous experiences they may have had. Analysis of the qualitative data from the interviews will not be covered in today’s presentation. Responses from experiencers were compared with age- and gender-matched controls who did not have any memories of extraterrestrial contact.

### Participants

Participants were recruited via newspaper and radio publicity of the project, web site appeals and word of mouth. The experiencer and control groups each consisted of 19 participants, 8 male and 11 female. The mean age of the experiencers was 45.0 years (SD = 13.7), ranging from 23 to 72 years. The mean age of the control group was 45.5 years (SD = 14.5), ranging from 21 to 74 years. Participants came from a wide range of backgrounds. They were tested either at Goldsmiths College, another educational institution, or in their own homes. They received travelling expenses and a small payment (typically £10) in return for their participation.

## Results

In general, statistical comparisons between the experimenter and control groups were made using unrelated *t*-tests (two-tailed). Note that it would have been justifiable to have used the less conservative related *t*-test given that we have a matched pairs design and also to have used one-tailed tests for most comparisons given that the expected differences between groups were in the direction predicted on the basis of previous research. If Levene's test showed significantly different variances, degrees of freedom were adjusted accordingly. Occasionally, participants omitted to respond to one or more items from the administered scales. When this happened, both their score and that of their matched participant were omitted from the relevant analysis.

### *Paranormal Belief and Experience*

Recent systematic research by Basterfield and Thalbourne (2002) using the Australian Sheep-Goat Scale (Thalbourne, 1995) has confirmed anecdotal reports (e.g., Basterfield, 2001; Bullard, 1987; Druffel & Rogo, 1980; Evans, 1983, 1998; Gotlib, 1994; Mack, 1994; Randles, 1988; Schwarz, 1983; Spencer, 1994; Vallee, 1977) that experiencers have significantly higher levels of belief in and experience of ostensibly paranormal events. The same test was administered to our participants and Basterfield and Thalbourne's findings were replicated. The experiencers ( $N = 19$ ) mean score was 28.26 ( $SD = 4.47$ ) compared to 9.42 ( $SD = 8.81$ ) for the control group ( $N = 19$ ;  $t(26.70) = 8.32$ ,  $p < .001$ ).

The Anomalous Experiences Inventory (Kumar, Pekala, & Gallagher, 1994) was also administered. This scale provides scores on five sub-scales. Experiencers ( $N = 17$ ) scored significantly higher on the Anomalous Experience sub-scale (mean = 17.88,  $SD = 5.60$ ) than the control group ( $N = 17$ , mean = 3.65,  $SD = 4.78$ ;  $t(32) = 7.97$ ,  $p < .001$ ). Experiencers ( $N = 18$ ) also scored significantly higher on the Paranormal Belief sub-scale (mean = 9.89,  $SD = 1.61$ ) than the control group ( $N = 18$ , mean = 4.28,  $SD = 3.32$ ;  $t(24.52) = 6.45$ ,  $p < .001$ ). Finally, scores on the Paranormal Ability sub-scale were significantly higher for the Experiencers ( $N = 18$ , mean = 6.72,  $SD = 3.08$ ) than for the control group ( $N = 18$ , mean = 1.33,  $SD = 2.35$ ;  $t(34) = 5.90$ ,  $p < .001$ ). No significant differences were found between the two groups for scores on the Fear of the Paranormal sub-scale (for Experiencers,  $N = 18$ , mean = 1.22,  $SD = 0.88$ ; for controls,  $N = 18$ , mean = 1.22,  $SD = 1.35$ ;  $t(34) = 0.00$ , not significant) or the Use of Drugs and Alcohol sub-scale (for Experiencers,  $N = 18$ , mean = 2.44,  $SD = 1.54$ ; for controls,  $N = 18$ , mean = 2.33,  $SD = 1.61$ ;  $t(34) = 0.21$ , not significant).

### *Clairvoyance and Precognition Tests*

The above results show that experiencers report more paranormal experiences, have higher levels of paranormal belief, and claim more paranormal abilities than the control group but these claims are based upon self-report only. An attempt was made to test the possible paranormal abilities of participants in this project using computerised tests of clairvoyance and precognition (psychokinetic ability was also tested but the results are not yet analysed). The simple computerised tests involved 50 trials each in which the participant had to guess either which symbol from the Zener pack the computer had already selected (clairvoyance) or would select (precognition). Selection was based upon the output from a random event generator. The control group showed no significant departure from mean chance expectation (MCE) of 10 for either the clairvoyance test ( $N = 19$ , mean = 10.26,  $SD = 2.56$ ,  $t(18) = 0.45$ , not significant) or the precognition test ( $N = 19$ , mean = 9.63,  $SD = 1.86$ ,  $t(18) = 0.86$ , not significant). The experiencers showed no significant departure from MCE for the precognition test ( $N = 19$ , mean = 10.42,  $SD = 2.43$ ,  $t(18) = 0.75$ , not significant) but a marginally

significant trend was noted for the clairvoyance test ( $N = 19$ , mean = 10.74,  $SD = 1.67$ ,  $t(18) = 1.95$ ,  $p = .07$ ). The two groups combined also failed to demonstrate any significant departures from MCE (for clairvoyance,  $N = 38$ , mean = 10.50,  $SD = 2.14$ ,  $t(37) = 1.44$ , not significant; for precognition,  $N = 38$ , mean = 10.03,  $SD = 2.18$ ,  $t(37) = .08$ , not significant). Finally the two groups did not differ significantly on either the clairvoyance test ( $t(30.90) = 0.68$ ) or the precognition test ( $t(36) = 1.12$ ). Of course, whereas a significant result for the experiencers on the ESP tasks would have strongly supported their claim to paranormal abilities, the lack of such a positive outcome in no way proves that they do not have such abilities. It may well be that the tests chosen were simply not suitable to demonstrate them.

### *Tendency to Hallucinate*

The Launay-Slade Hallucination Scale (Launay & Slade, 1981) was also administered to our participants. Modern theories of hallucinations recognise the fact that hallucinations can occur in non-clinical populations much more commonly than was once believed. A significant difference was found between the two groups on this measure, with the experiencers scoring higher ( $N = 19$ , mean = 4.16,  $SD = 2.95$ ) than the control sample ( $N = 19$ , mean = 2.26,  $SD = 1.97$ ;  $t(36) = 2.33$ ,  $p = .026$ ). This suggests that tendency to hallucinate might be a mediating factor in the alien encounter experience.

### *Absorption*

Tellegen and Atkinson (1974) define the personality trait absorption as “openness to absorbing and self-altering experiences, a trait related to hypnotic susceptibility”. Furthermore, “attention described in absorption items is a ‘total’ attention, involving a full commitment of available perceptual, motoric, imaginative and ideational resources to a unified representation of the attentional object”. This level of attention is applicable even if the item of attention is constructed from memory or the imagination. Tellegen and Atkinson suggest that thoughts such as “this is only a memory/fantasy” are unable to be maintained because the representational system is fully engaged in representing the attentional object. They argue that an absorbed individual’s imperviousness to usually distracting events supports this theory.

Clancy, McNally, Schacter, Lenzenweger and Pitman (2002) reported that their experiencer sample had significantly higher absorption scores than the control sample. That finding was replicated in the current study. The experiencers had significantly higher scores ( $N = 19$ , mean = 20.42,  $SD = 7.38$ ) on Tellegen’s Absorption Scale (Tellegen & Atkinson, 1974) than the control sample ( $N = 19$ , mean = 12.89,  $SD = 6.02$ ;  $t(36) = 3.45$ ,  $p = .001$ ). These results are consistent with the idea that the experiencer sample may be more prone to confusing real events with imagined events than the control sample.

### *Dissociative Tendencies*

DSM-IV defines dissociation as “A disruption in the usually integrated functions of consciousness, memory, identity, or perception of the environment. The disturbance may be sudden or gradual, transient or chronic” (American Psychiatric Association, 1994). Dissociative tendencies, like absorption and fantasy-proneness, correlate with hypnotic susceptibility, reports of trauma during childhood, and susceptibility to false memories (see French, 2003). Previous research (e.g., Powers, 1994) has reported higher levels of dissociativity amongst experiencers than control samples. This finding was replicated in the current study. Experiencers had significantly higher scores ( $N = 19$ , mean = 56.05,  $SD = 18.42$ ) on Goldberg’s (1999) Curious Experiences Survey than the controls ( $N = 19$ , mean = 45.47,  $SD = 7.72$ ;  $t(24.13) = 2.31$ ,  $p = .03$ ).

### *Fantasy Proneness*

Differences in fantasy proneness between experiencers and non-experiencers have not previously been demonstrated using questionnaires (Rodeghier, Goodpaster, & Blatterbauer, 1991; Spanos, Cross, Dickson & DuBreuil, 1993). However, biographical analyses have suggested that experiencers do demonstrate features of fantasy proneness. Bartholomew, Basterfield and Howard (1991) reported that 132 of 152 (87%) of alien contactees or experiencers had experienced one or more of the anomalous experiences typically associated with fantasy proneness (e.g., psychic experiences, out-of-body experiences, automatic writing, religious visions, healing and experiences with apparitions). However, Bartholomew *et al.* (1991) did not interview alien contactees and experiencers but undertook a “retrospective examination of biographical content from widely disparate archival sources”. These biographies ranged from brief paragraphs describing subjective experiences to entire books. Similarly, Nickell (1997) retrospectively reviewed thirteen cases of alleged alien abductions from John Mack’s (1994) book *Abduction*. He concluded that all 13 experiencers exhibited characteristics of fantasy-prone personality as defined by Wilson and Barber (1983).

Both types of analysis will be possible with data from the current study but only the results of the quantitative analysis will be presented here (systematic qualitative analysis of the interview data is not yet complete). Using a two-tailed unrelated *t*-test to analyse the data, although the experiencers obtained a higher score ( $N = 19$ , mean = 19.00, SD = 8.28) on the Inventory of Childhood Memories and Imaginings (Myers, 1983) than the control sample ( $N = 19$ , mean = 13.21, SD = 10.16), this difference just failed to reach the conventionally accepted level of statistical significance ( $t(36) = 1.93$ ,  $p = .06$ ). However, the difference is statistically significant if either a one-tailed test is used ( $p = .03$ ) or if a related *t*-test is used to analyse the data ( $t(18) = 2.12$ ,  $p < .05$ ), both of which would have been justified. It seems reasonable to conclude therefore that this is the first study to find results showing higher levels of fantasy proneness in experiencers than controls using the standard pencil-and-paper measure of this psychological construct.

### *Susceptibility to False Memories*

Results from this project so far suggest that experiencers score more highly than controls on such measures as absorption, dissociativity and fantasy proneness, each of which correlate with susceptibility to false memories (French, 2003). Although this provides indirect support for the idea that experiencers may be prone to false memories than controls, the only direct support to date for this claim was provided by Clancy *et al.* (2002). They compared participants who had conscious memories of being abducted by aliens with those who believed they had been abducted by aliens but had no conscious memories of the event and a third group of participants who did not believe they had been abducted. They employed a commonly used paradigm in which participants are presented with lists of words. Within each list, all of the words (e.g., *thread*, *pin*, *sow*, etc.) are strongly associated with a critical ‘lure’ word (in this example, *needle*) which is not itself actually presented. On subsequent memory tasks, however, participants are quite likely to falsely recall or recognise the non-presented lures. The current project included an attempt to replicate this finding with our UK-based sample. However, no significant differences were found between the two groups for either recall ( $t(36) = 0.11$ ) or recognition ( $t(35) = 1.37$ ; data missing due to technical problems for one participant). It is worth noting that false memories for individual words on lists may not be the best measure of susceptibility to false memories for entire incidents. It is possible that a more appropriate measure would have produced different results. Indeed, a recent study by

Wilson and French (submitted) did find higher levels of paranormal belief and experience among those susceptible to false memories using a different measure of susceptibility.

### *Sleep Paralysis*

Sleep paralysis is a common but frightening experience that takes place in the state between sleep and wakefulness. Sufferers become aware of the fact that they cannot move and often experience a strong sense of presence. Sleep paralysis is often associated with visual and auditory hallucinations, intense fear, difficulty breathing, and anomalous sensations such as out-of-body experiences. Many commentators believe that the experience of sleep paralysis is the trigger that leads some people to develop the belief that they have been abducted by aliens (e.g., Holden & French, 2002; McNally & Clancy, 2005). Indeed, it is a common belief among UFOlogists that the symptoms listed above are indicators of probable alien abduction even though the sufferer may have no actual memories of aliens whatsoever. In the current project, the Nocturnal Experiences Questionnaire (French, Rose, & Blackmore, 2002) was administered. Although full analysis of the data from this questionnaire is not yet complete, it is worth noting that the self-reported incidence of sleep paralysis was higher in the experiencers than the control group (Mann Whitney  $U = 83$ ,  $p = .002$ ).

### Conclusions

Our results confirm that experiencers have a different psychological profile to non-experiencers in that they show higher levels of belief in and experience of the paranormal, self-reported paranormal abilities, tendency to hallucinate, absorption, dissociativity, fantasy proneness, and incidence of sleep paralysis. No differences were found between our groups in terms of ESP abilities or a direct measure of susceptibility to false memories, but in each case different results may have been obtained if different tests had been used.

In general our results are consistent with those psychological models of the alien encounter experience that posit that such anomalous experiences may be a reflection of problems with reality monitoring (Johnson & Raye, 1981), that is, our ability to distinguish between events which take place out in the real world and those that occur only in our subjective mental space (via imagination, fantasy, dreams and so on). Modern theories of both hallucinations and false memories are often conceptualised in terms of problems with reality monitoring. Absorption, dissociativity and fantasy proneness have all been shown to be correlated with susceptibility to false memories (French, 2003). However, these results by no means prove that such explanations are correct. At least two other explanations of the psychological profile of experiencers would have to be ruled out first. The first is that a particular type of psychological profile is required if one is to be psychologically open to experiencing genuine paranormal and related phenomena (such as alien encounters), if indeed such phenomena genuinely exist. The second possibility is that the psychological profile that we see in the experiencers is a consequence of their experience and not a causal factor at all. Future research should be directed at distinguishing between these possibilities.

### Acknowledgements

Thanks are due to the Bial Foundation for supporting this work and to all participants, especially to the experiencers for their courage and honesty in discussing their perplexing experiences with us.

### References

American Psychiatric Association (1994). *Diagnostic and statistical manual of mental disorders*, 4<sup>th</sup> ed. Washington: American Psychiatric Publishing Inc.

- Appelle, S., Lynn, S. J., & Newman, L. (2000). Alien abduction experiences. In E. Cardeña, S. J. Lynn, & S. Krippner (eds.). *Varieties of Anomalous Experience: Examining the Scientific Evidence*. Washington, DC: American Psychological Association. Pp. 253-282.
- Baker, R. A. (1992). *Hidden Memories: Voices and Visions from Within*. Buffalo, NY: Prometheus.
- Bartholomew, R. E., Basterfield, K., & Howard, G. S. (1991). UFO abductees and contactees: Psychopathology or fantasy proneness? *Professional Psychology: Research and Practice*, 22, 215-222.
- Basterfield, K. (2001). Paranormal aspects of the UFO phenomenon: 1975-1999. *Australian Journal of Parapsychology*, 1, 30-55
- Basterfield, K., & Thalbourne, M. A. (2002). Belief in, and alleged experience of, the paranormal in ostensible UFO abductees. *Australian Journal of Parapsychology*, 2, 2-18.
- Bullard, T. E. (1987). *UFO Abductions: The Measure of a Mystery*. Mount Rainier, MD: Fund for UFO Research.
- Clancy, S. A., McNally, R. J., Schacter, D. L., Lenzenweger, M. F., & Pitman, R. K. (2002). Memory distortion in people reporting abduction by aliens. *Journal of Abnormal Psychology*, 111, 455-461.
- Druffel, A., & Rogo, D. S. (1980). *The Tujunga Canyon contacts*. Englewood Cliffs, NJ: Prentice Hall.
- Evans, H. (1983). *The Evidence for UFOs*. Wellingborough: Aquarian.
- Evans, H. (1998). *From Other Worlds: The Truth About Aliens, Abductions, UFOs and the Paranormal*. London: Carlton.
- French, C. C. (2001). Alien abductions. In R. Roberts & D. Groome (ed.). *Parapsychology: The Science of Unusual Experience*. London: Arnold. Pp. 102-116.
- French, C. C. (2003). Fantastic memories: The relevance of research into eyewitness testimony and false memories for reports of anomalous experiences. *Journal of Consciousness Studies*, 10, 153-174.
- French, C. C., Rose, N. J., & Blackmore, S. J. (2002). Paranormal belief and interpretations of sleep paralysis. Paper presented at the 45<sup>th</sup> Annual Convention of the Parapsychological Association, 5-8 August 2002, Paris.
- Goldberg, L. R. (1999). The Curious Experiences Survey, a revised version of the Dissociative Experiences Scale: Factor structure, reliability, and relations to demographic and personality variables. *Psychological Assessment*, 11, 134-145.
- Gotlib, D. (1994). Comments, questions on Keith Basterfield's talk "Abductions: The paranormal connection". In A. Pritchard, D. E. Pritchard, J. E. Mack, P. Casey, & C. Yapp (Eds.), *Alien Discussions: Proceedings of the Abduction Study Conference held at MIT* (p. 50). Cambridge, MA: North Cambridge Press.
- Holden, K. J., & French, C. C. (2002). Alien abduction experiences: Clues from neuropsychology and neuropsychiatry. *Cognitive Neuropsychiatry*, 7, 163-178.
- Johnson, M. K., & Raye, C. (1981). Reality monitoring. *Psychological Review*, 88, 67-85.
- Kumar, V. K., Pekala, R. J., & Gallagher, C. (1994). The Anomalous Experiences Inventory (AEI). *Unpublished psychological test*. West Chester: West Chester University of Pennsylvania.
- Launay, G., & Slade, P. (1981). The measurement of hallucinatory predisposition in male and female prisoners. *Personality and Individual Differences*, 2, 221-234.
- Mack, J. (1994). *Abduction: Human Encounters with Aliens*. New York: Scribner's.
- McNally, R. J., & Clancy, S. A. (2005). Sleep paralysis, sexual abuse, and space alien abduction. *Transcultural Psychiatry*, 42, 113-122.

- Myers, S. A. (1983). The Wilson-Barber Inventory of Childhood Memories and Imaginings: Children's form and norms for 1337 children and adolescents. *Journal of Mental Imagery*, 7, 83-94.
- Newman, L. S., & Baumeister, R. F. (1996). Toward an explanation of the UFO abduction phenomenon: hypnotic elaboration, extraterrestrial sadomasochism, and spurious memories. *Psychological Inquiry*, 7, 99-126.
- Nickell, J. (1997). A study of fantasy proneness in thirteen cases of alleged encounters in John Mack's *Abduction*. In K. Frazier, B. Karr, & J. Nickell (Eds.), *The UFO Invasion*. New York: Prometheus. Pp. 237-244
- Powers, S. M. (1994). Dissociation in alleged extraterrestrial abductees, *Dissociation*, 7, 44-50.
- Randle, K. D., Estes, R., & Cone, W. P. (1999). *The Abduction Enigma: The Truth Behind the Mass Alien Abductions of the Late Twentieth Century*. New York: Forge.
- Randles, J. (1988). *Abduction*. London: Robert Hale.
- Rodeghier, M. (1994). Who is an abductee? A set of selection criteria for abductees. In A. Pritchard, D. E. Pritchard, J. E. Mack, P. Kasey, & C. Yapp (Eds.), *Alien Discussions: Proceedings of the Abduction Study Conference*. Cambridge, Massachusetts: North Cambridge Press. Pp. 22-23.
- Rodeghier, M., Goodpaster, J., & Blatterbauer, S. (1991). Psychosocial characteristics of abductees: Results from the CUFOS abduction project. *Journal of UFO Studies*, 3, 59-90.
- Schwarz, B. E. (1983). *UFO dynamics*. Moore Haven, FL: Rainbow Books
- Spanos, N. P. (1996). *Multiple Identities and False Memories: A Sociocognitive Perspective*. Washington, DC: American Psychological Association.
- Spanos, N. P., Cross, P. A., Dickson, K., & DuBreuil, S. C. (1993). Close encounters: An examination of UFO experiences. *Journal of Abnormal Psychology*, 102, 624-632.
- Spencer, J. (1994). *Gifts of the gods?* London: Virgin.
- Tellegen, A & Atkinson, G. (1974). Openness to absorbing and self-altering experiences ("absorption"), a trait related to hypnotic susceptibility. *Journal of Abnormal Psychology*, 83, 268-277.
- Thalbourne, M. A. (1995). Further studies of the measurement and correlates of belief in the paranormal. *The Journal of the American Society for Psychical Research*, 89, 235-247.
- Vallee, J. (1977). *UFOs: The Psychic Solution*. St. Albans: Panther.
- Wilson, K., & French, C. C. (submitted). The relationship between susceptibility to false memories, dissociativity, and paranormal belief and experience.
- Wilson, S. C., & Barber, T. X. (1983). The fantasy-prone personality: Implications for understanding imagery, hypnosis, and parapsychological phenomena. In A. A. Sheikh (ed.), *Imagery: Current Theory, Research and Application*. New York: John Wiley and Sons. Pp. 340-387.