

Project Core Anonymous Survey Synopsis of Results

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Abstract

Project Core was an anonymous web-based survey of persons reporting paranormal experiences. Participants answered a battery of descriptive autobiographical questions and provided narrative accounts of their experiences. The request for accounts was open ended leaving participants entirely free to select and describe in their own words the experience(s) they deemed both significant and paranormal.

The survey was open for a period of one year and yielded a total of 210 responses, 206 of which were examined critically. The overall range of experiences reported was broad with some participants revealing encounters in several event categories. We compared attributes of the self-selected participant group and elements extracted from their paranormal experience reports for potential interrelationships.

Our effort suggests several avenues for future hypothesis-driven investigations. In general, the medical status of experiencers has received scant consideration from investigators. Several of our survey queries were intended to offer some insight regarding cardiovascular function and brain status, important factors long recognized to impact cognitive function. The next essential step will be detailed comparisons of subject groups reporting paranormal experiences to carefully selected, appropriately age/gender matched control groups representing the general population. Without replicated systematic, meticulous confirmatory studies, seemingly strong, yet spurious, correlations may lead to erroneous conclusions. In addition, we suggest new studies to assess the relationships between stress and experiences of paranormal phenomena are overdue.

Introduction

Project Core was a survey of witnesses to highly strange phenomena often compartmentalized as ufological, paranormal, psychic, religious, mystical, visionary, hallucinatory, shamanic, cryptozoological and folklorish. This survey was conducted by a team of scientists and experiencers. The goal was to examine the data without prejudice to approach what lies at the core of all of these allegedly separate phenomena, insofar as that is possible.

The survey addressed was conducted using anonymous participants with data collected through a webpage form; no direct interviews were conducted. Participants were recruited through the Paratopia.net website, message board, and podcast, as well as several other paranormal and UFO/alien reality-themed podcasts, websites, and message boards based in the U.S. and U.K. CraigsList was also used in major U.S. states including California, Hawaii, Massachusetts, and New York.

The survey consisted of 28 questions regarding reports of medical issues, activities and attitudes answerable by clicking a radio button selection or brief text/numeric input. We also requested participants provide detailed, written accounts of their most significant paranormal experiences, or, if they desired, create fictional descriptions of paranormal phenomena encounters. This request was open-ended and while participants were asked to explicitly designate whether the information provided was fact or fiction, no guidelines defining specific topics of interest were provided, leaving them free to describe any event(s) deemed to represent a paranormal experience. However, due to concerns that hypnosis may induce false memories, the survey instructions included an explicit request that no accounts recovered using hypnotic regression methods be submitted.

Survey Response

The survey opened October, 1, 2011, and submissions were accepted until September 30, 2012. Most submissions (89%) were received during the 4-month interval from October 1, 2011 to January 31, 2012.

A total of 210 unique submissions were received by the survey and 206 were reviewed in detail. Slightly over 96% (202) of the accounts received were described by providers as factual while 4 were denoted as fictional. Four submissions were excluded from survey analyses; two (0.95%) involved the use of hypnotic regression and two (0.95%) were rejected because they were simply comments. Responses to each survey question were compiled from the factual accounts, percentages are in parentheses.

The written material describing paranormal experiences spanned a wide range of detail. No character limits were imposed, participants were free to provide as complete an account of events as they felt necessary and sufficient to convey their stories. The range

of material provided varied from no additional descriptions at all to several pages in length. It was interesting that two of the most in-depth, detailed and lengthy accounts received by the survey were from participants indicating they had been subjected to hypnotic regression. However, due to this intervention, these accounts were excluded from the survey data pool.

Participant Gender

Survey respondents included 87 women (43%) and 115 men (57%). This difference from an equal ratio was large enough to be statistically significant.

Participant Race/Ethnicity

Project Core's reach, though somewhat global thanks to the internet, was dominated by English-speaking countries. This may reflect the fact that participants were solicited primarily from outlets in the US and UK.

Conventional wisdom in alien abduction research maintains that a large percentage of reports come from persons of Celtic/Irish, German, English, and/or Native American ancestry. Participants in the Project Core survey seem to reflect this idea. However, some respondents indicated a nationality for this question which complicated interpreting the results. A substantial amount of abduction research has been carried out in the US and UK. In addition, in the US a disproportionate percentage of the audience for UFO-related content, which includes abduction research, is Caucasian. Due to these limitations, we cannot establish a definite link between ethnic background and reporting of high strangeness events.

Table 1 shows reports of ancestral background as categorized by the participants. Many participants identified as having multiple ancestral components, and general terms only include those who did not provide more specific information.

Table 1. Participant Reports of Race/Ethnicity

<u>Heritage</u>	<u>Frequency</u>
Acadian	2
African	1
African American	3
Anglo-Saxon/Saxon/Anglo-Germanic	4
Armenian	3
Australian	2
Austrian	3
Baltic	1
Basque	1
Bavarian	2
Blackfoot	2
Bohemian	1
Bosnian	1
British/ British Isles/U.K.	13
Canadian	1
Cape Verdean	1
Caucasian	2
Celtic	9

Cherokee	13
Chinese	2
Chippewa	1
Colombian	1
Comanche	2
Czech	2
Danish	3
Dutch	6
Eastern European	2
English	59
European	3
Fijian	1
Finnish	4
Flemish	1
French	26
French Canadian	6
French Indian	1
German	64
Greek	1
Hispanic	1
Hungarian	2

Indian	1
Irish	71
Italian	11
Jewish	6
Latino	1
Lithuanian	1
Mexican	1
Mixed	1
Mixed European	3
Native American/American Indian	20
Native Islander	1
Navajo	1
Newfoundlander	1
Nordic/Norse	3
Northern European	4
Norwegian	7
Piscataway	1
Polish	6
Portuguese	2
Romanian	1
Romany	1
Russian	8

Scandinavian	2
Scots-Irish	9
Scottish	49
Seneca	1
Slavic	3
Southern European	1
Spanish	5
Swedish	6
Swiss	5
Syrian	1
Ukranian	1
Viking	2
Walloon	1
Welsh	20
West Indies	1
Western European	3

Estimated Number of Lifetime Paranormal Events Experienced

Study respondents were allowed to fill in a number or brief text to report the cumulative number of paranormal events they had experienced, and the range reported was extraordinary. Estimates varied from zero (participants who were unsure they had really experienced a paranormal event) to 1,000 events with some individuals simply stating ‘many’ in response to this query. A specific number was provided by 111 respondents, while others provided only ranges or rough estimates such as ‘20 or more.’

Table 2. Lifetime Paranormal Events

<u>Number</u>	<u>Frequency (%)</u> *
1	16 (9%)
2-10	87 (47%)
11-20**	34 (18%)
21-100	36 (19%)
>100***	14 (7%)

* Based on 187 total responses.

** Included responses of “Many.”

***Included responses of “Daily.”

Taken together, the responses reveal that many persons report multiple paranormal event experiences. This offers investigators an opportunity to identify individuals having high likelihood to experience future events. Such individuals might be a particularly important resource for future prospective investigations addressing a wide array of questions about the phenomena themselves and help elucidate the precise environmental/psychological preconditions conducive to the appearance of paranormal events.

IQ Test Results

A group of 138 participants indicated that they had taken an IQ test and knew the result. Twelve subjects revealed they had taken a test, but did not know or could not recall the outcome while 51 participants responded they had never taken an IQ test.

Table 3. IQ Test Query Responses

<u>Reported Test Result</u>	<u>Frequency (%)</u>
Above Average	130 (94%)
Average	6 (4%)
Below Average	2 (1%)

One of the commonly held notions by mainstream ufology is that the higher the intelligence of the individual, the more likely they are to believe in UFOs. The broader scope of Project Core suggests this is not to be limited to the UFO subject, but high strangeness experiences that range across a very wide array of perceived anomalous events. That 130 participants reported an above-average IQ invites speculation that being able to extrapolate extraordinary concepts and theories from high strangeness experiences makes one better able to experience or perceive the anomaly. The ability to interpret and convey the experience to others may also be attributable to above average intelligence.

These results are intriguing and hinge completely on how the respondents defined the categories provided on the form. With an expected median score of 100, roughly 50% of persons in the general population would be anticipated to produce intelligence test scores below that level. However, the survey results are quite different from expectations. The nature of the test taken by each respondent is unknown and we simply assumed that all exams are comparable in scoring norms and validity. Clearly, this specific attribute of paranormal phenomena experiencers deserves additional systematic investigation.

Reports of Blood Type

A report of blood type was provided by 117 (58%) participants. Based on information in the narrative, one blood type report was deemed unreliable and not included in the analysis. A comparison to the percentages observed in U. S. Caucasians is provided in Table 4.

Table 4. Reported Blood Types

<u>ABO Type/Rh factor</u>	<u>Frequency (%)</u>	<u>U. S. Caucasian %*</u>
A positive	29 (25%)	33%
A negative	10 (8.6%)	7%
B positive	11 (9.5%)	9%
B negative	7 (6%)	2%
AB positive	1 (0.86%)	3%
AB negative	2 (1.7%)	1%
O positive	40 (34%)	37%
O negative	16 (14%)	8%

*American Red Cross (www.redcrossblood.org/learn-aboutblood/blood-types)

Previous assessments have suggested alien abduction experiencers exhibit an apparent increased frequency of Rh negative blood type. Our results seem consistent with those observations since 35 (30%) of Project Core participants reporting a blood type were Rh negative, approximately double the frequency expected to be obtained in a survey of a general population comparison group (18%).

We suggest that the results regarding Rh negative blood type frequency in the Project Core respondents be viewed as a basis for future hypothesis-driven investigations rather

than taken as confirmation of previous work or a definitive finding. Several complications arise in the analyses and interpretation of this information. First, it is important to bear in mind that only a minority of respondents reported an Rh factor negative blood type. In addition, the blood type information was supplied to the best of the participant knowledge and is, therefore, unverified. Although it is tempting to make sweeping generalizations based on the data or inferential statistical analyses derived from it, such extrapolations stretch the information far beyond its reliable limits. Future efforts to confirm the hypothesis that specific blood antigenicity types significantly correlate with paranormal events experience likelihood will require investigators perform blood type testing procedures on each participant.

General Medical Issues

Survey participants were queried about several general medical issues (Table 5). With the caveats that comparisons are derived from U. S. population data and these are single determinations based on self-reported data, the results imply some conditions may occur more frequently in the experiencer population. Determining if these differences are significant will demand repetition of the work with a sufficiently large subject group carefully segregated according to age and other demographic factors such as race/ethnicity. Matching subject ages to control groups is particularly important when considering issues such as cardiac diseases which tend to become more prevalent with advancing age. In addition, the survey responses suggest that the rate of head injury is much higher in paranormal event experiencers. However, it is important to note that the official statistics pertain to severe injuries resulting in Emergency Department treatment or persons whose injuries were substantial enough to result in clinically recognizable impairment. This situation suggests the apparent differences may be explainable by simple underreporting of less severe injuries.

Table 5. Subjective Reports of Medical Issues/Conditions

<u>Issue</u>	<u>Frequency*</u>	<u>US Statistics</u>
Diabetes	11 (5.6%)	9.3% ^a
Thyroid disorder	27 (14%)	>12% ^b
Cardiac/Circulatory system problems	24 (13%)	36.6% (male) 32.4% (female) ^c
Fainting (Syncope)	37 (19%)	19% ^d
Sleep walking (Somnambulism)	45 (24%)	1-15% ^e
Anemia	40 (20%)	12% female, 2% male ^f
Migraine headache	60 (31%)	12% ^g
Head injury producing loss of consciousness	33 (17%)	2% ^h

*Calculations based on number of subjects responding for each variable.

^aAmerican Diabetes Association, National Diabetes Statistics Report, 2014¹

^bAmerican Thyroid Association² One in eight women will develop a thyroid disorder during their lifetime; women are five to eight more times more likely than men to have a thyroid disorder.

^cWhite & Cardiovascular Diseases Statistical Fact Sheet 2014 Update, American Heart Association/American Stroke Association³

^dPrevalence of Syncope in a Population Aged more than 45 Years.⁴

^eSleep walking (Somnambulism) has an estimated prevalence of 1-15% in the general U.S. population.^v

^fIron deficiency anemia is found in approximately 12% of adult females and 2% of males.⁵ Thirty-nine (19%) respondents returned a yes answer to the anemia query with females representing approximately 83% of that group.

^gAn estimated 12% of general U. S. population suffers from migraine headaches.⁶

^hApproximately 2% of the population is living with disability due to traumatic brain injury (TBI)⁷ and each year a minimum of 1.7 million TBI occur in the U.S.⁸

Activities and Opinions

Select activities and opinions of Project Core participants that could be tabulated in ‘yes,’ ‘no,’ or ‘don’t know’ categories are shown in Table 6. Reports concerning the media portrayal of experiences were also considered in a separate section.

Table 6. Reports of Activities and Opinions

<i>Query</i>	<i>Response</i>		
	<u>Yes</u>	<u>No</u>	<u>DK/NR*</u>
Contact/Collision sports participation	44 (22%)	156 (77%)	2 (1%)
Exceptional long term memory	107 (53%)	56 (28%)	39 (19%)
Creative	175 (87%)	11 (5%)	16 (8%)
Use of psychedelic substances	94 (47%)	102 (50%)	6 (3%)
Participation in Occult practices	78 (38%)	113 (56%)	11 (5%)
Favorite numbers represented in experience(s)	13 (6%)	145 (72%)	44 (22%)
Favorite colors represented in experience(s)	13 (7%)	150 (74%)	39 (19%)
Exaggerated emotions during event(s)	57 (27%)	125 (62%)	20 (10%)
Experiences accurately portrayed in media	34 (17%)	98 (49%)	69 (35%)

*DK/NR; Subjects selecting Don’t Know or No Response.

Participation in Vigorous Contact/Collision Sports

Most participants, 156 (77%), denied any participation, while 44 (22%), revealed they did take part in such activities. Prize fighting has long been linked to significant risk for development of neurologic disorders such as Parkinson's disease and a suite of physical damage with associated cognitive impairments termed dementia pugilistica.⁹ Recent studies have revealed that participants in US-style football and other contact sports sometimes develop a similar damage and cognitive impairment syndrome now termed chronic traumatic encephalopathy (CTE).¹⁰ It is unclear how rapidly CTE cognitive manifestations emerge, but there are hints the pathological changes begin surprisingly early in the course of sports participation. Additional work to clarify the frequency and severity of traumatic brain injury sustained by experiencers due to accidents or sports participation is warranted.

Self Assessment as Creative

Survey participants reporting they were creative, 175 (87%), outnumbered those who answered no, 11 (5%), don't know, 16 (8%) or provided no response to the question, 2 (1%).

One way to interpret this data is to assume that creative personalities are more prone to storytelling or fantasy. However, it is equally plausible that the experiences are filled with abstraction and symbolism, which are difficult for non-creatives to relate to or interpret. Exploring the latter interpretation, the questions implied are similar to those of the possible interrelation between high IQ and high strangeness experiences: Does a high strangeness enigma reveal itself to the creative mind because the creative mind is optimal for conveying it to others? Alternatively, are creative persons simply better able to perceive the events? A third question, also in tandem with the IQ results, is: Does repeated exposure to anomalies foster creative development? A consistent body of "alien" contact cases illustrates that these and related experiences do trigger creativity in experiencers. It would be worth investigating whether other phenomena (ghost, ESP, et al.) produce the same tandem effect.

Additional Survey Queries

Family History of Psychiatric Disorders

A total of 60 respondents (30%) indicated a documented family history of psychiatric disorders. More than twice as many persons, 120 (59%), denied such a history, while 22 (11%) responded did not know or did not answer the query.

Management of Anger

More survey respondents reported they express anger, 136 (67%) compared to those indicating they take it out on themselves, 63 (31%).

Military Experience

Eighteen (9%) survey participants reported military service. The majority of those indicating military experience, 15, stated they served during peacetime and 3 served in combat. Combat veterans may experience a range of service-related medical and psychological challenges including post-traumatic stress disorder (PTSD) and issues consequent to traumatic brain injury (TBI). Project Core respondents indicating military experience stated they served during peacetime predominately, with only a small fraction of that group revealing combat participation.

Third Party Witnesses of Paranormal Experiences

Most respondents, 126 (62%), reported being alone during paranormal experiences. In contrast, 61 (30%) persons indicated others were present and witnessed the event while 13 (6%) reports indicated others were present who did not witness the incident(s).

This result suggests investigators should be alert to the possibility approximately one-third of all events may offer the potential for independent witness corroboration and/or provide a capability to confirm specific assertions regarding paranormal experiences such as time, geographical location, *etc.*

Subjective Reports of Reactions to Paranormal Experiences

Subjective reports of how experiencing paranormal events made the participant feel were provided by all but one participant. Three answer alternatives were offered on the web form and responses were split almost evenly between them with 79 (40%) indicating feelings of being ‘watched over,’ 71 (35%) ‘protected’ and 51 (25%) choosing ‘neither.’

Experiences Accurately Portrayed in Media – Additional Considerations

Project Core was an online survey making it obvious that all participants had some access to the internet. Given the age we live in, it is highly likely that the overwhelming majority also have access to television, periodicals, books, and other forms of media. Having abnormal experiences of any type may prompt one to search for the cause, or at least seek out others with similar experiences. Given all of these factors, it seems worth scrutinizing the extremely low percentage of respondents (17%) who said they have seen their particular experience(s) accurately portrayed in the media.

Our hypothesis was that, in order for this to be an accurate assertion, most of these accounts must in whole or in part contain elements that are so bizarre as to be edited out of the media narrative(s) and/or left aside as outlier data. To test this, we examined the narrative accounts of respondents answering “No” and “I Don’t Know” to survey question 28—*Have your experiences been accurately portrayed in the media and/or literature on the subject matter?*—and assigned them to one of four categories as follows:

Category 1 - We Have Seen It Portrayed Just Like This in Media and/or Literature

This is as self-explanatory as it looks. If we have seen or read an account that matches the participant’s, it was placed in this category.

Category 2 - Experience Odd Enough and/or a One-Off So as To Be Unreported or Underreported

Some sets of experiences form too odd a tapestry to be made sense of by commercial media that demand carbon copy stories to form coherent narratives, which they label and sell as “ghosts,” “demons,” “aliens” and so forth. Other experiences may be uneasily categorized *standalones* and therefore go underreported, if reported at all.

Category 3 - Experience Reflected Topically In Media but Not In This Detail

Perhaps a participant’s confusion or denial that they’ve seen reporting of an experience like theirs is because they’ve seen, for instance, ghost stories that resemble their personal experience in name only. That is to say, the accounts presented in media sources are not anything similar to the manner in which they experienced their haunting.

Category 4 - We Do Not Know

Accounts that fall into this category include those in which too little detail is related, those with which we are unfamiliar such as “spirit channeling,” about which we have read and watched little, those from a foreign country with whose media coverage we are unfamiliar, and those experiences we strongly feel have a conventional explanation.

We also found three respondents who answered “Yes” to survey question 28 with whom we disagreed. These are also included in Table 7.

Table 7. Experiences Accurately Portrayed in Media

	We Have Seen It Just Like This in Media and/or Literature	Experience Odd Enough and/or a One-Off So as To Be Unreported or Underreported	Experience Reflected Topically In Media, but Not In This Detail	We Do Not Know
All Respondents Who Answered “I Don’t Know”	35	17	14	2
All Respondents Who Answered “No”	34	27	22	11
Some Respondents Who Answered “Yes”			3	
TOTAL	69	44	39	13

For just under half of the respondents who answered “No” and “I Don’t Know,” we have seen experiences quite similar accounts portrayed in mainstream media and/or popular literature. For just over half, we have not. To a large extent, we’ve seen the superficial architecture of cases like these—a haunted house, for example—but nothing approaching the details of *what happened* in that haunted house. In some of the one-off events, the entirety of the experience was an event that we’ve only seen portrayed in media as an element to a larger story. By itself, it would be too mundane to focus on in media, holding no real significance to anyone but the experiencer. While this does not prove our hypothesis, it does show a trend in that direction too obvious to ignore.

Correlation Matrix for Questionnaire Items

To assess the mass of information systematically for relationships while minimizing bias, a correlation matrix was generated in GraphPad Prism for Windows (GraphPad Software, La Jolla California USA, www.graphpad.com) using Spearman nonparametric correlation, which does not assume an underlying distribution pattern. This effort aids hypothesis generation as well as revealing potential issues future investigators might need to be aware of going forward, such as demographic variables that happen to correlate with each other thereby making both appear to correlate with a specific hypothesized outcome. While the P -values for the tested associations were 0.05 or less and therefore appear to be highly significant by that criterion, the corresponding r_s values are at or below the minimal levels generally considered to reveal a practically significant effect size.

Factors Correlated with Number of Events

Since number of events reports is one of the few instances where we received numeric responses, lifetime number of events was recoded from the categories presented in Table 2. Responses such as “many, daily, etc.” were omitted, entries like “20+” were represented as “20,” and midpoints used when ranges were presented. A correlation matrix of survey parameters revealed that lifetime number of events was positively correlated with being female ($P=0.009$, $r_s=0.194$), having European/Caucasian ancestry ($P=0.024$, $r_s=0.172$), having a thyroid disorder ($P=0.003$, $r_s=0.229$), being anemic ($P=0.015$, $r_s=0.183$), identifying as creative ($P=0.041$, $r_s=0.160$) and feeling watched over or protected ($P<0.001$, $r_s=0.246$). Number of events was negatively correlated with East Asian ancestry ($P=0.04$, $r_s= -0.151$) and participation in contact sports ($P=0.021$, $r_s= -0.157$). Although some significant associations were found, the ancestry data is of limited value since most of respondents claimed some European/Caucasian ancestry, and other groups were mentioned rarely.

The correlation between being female and experiencing a large number of life events is interesting, as well as the correlations with thyroid disorders, anemia and feeling watched over/protected. Being female had strong positive correlations with thyroid disorders ($P<0.001$, $r_s=0.379$) and anemia ($P<0.001$, $r_s=0.408$), and a non-significant, positive correlation with the feeling of being watched over or protected ($P=0.080$, $r_s=0.124$), so these should be examined to see if they correlate with number of events independently.

Factors Correlated with IQ and Rh⁻ Blood Type

IQ and Rh factor were each correlated with one other survey item. There was a negative correlation between IQ and participation in contact sports ($P=0.002$, $r_s= -0.267$), and respondents reporting Rh⁻ blood types were more likely to self-identify as creative

($P=0.040$, $r_s = -0.200$; [Rh⁻ coded as 0, Rh⁺ coded as 1]).

Accurate Portrayal in Literature/Media

Study participants who reported that their experiences were accurately represented in literature or media reports were more likely to also report Native American ancestry ($P < 0.001$, $r_s = 0.295$).

Content Analysis of Submitted Narratives

For content analysis, an additional four submissions were excluded because they did not describe an event experienced by the individual submitting the information. Key phrases were extracted from each submission, resulting in an initial list of 528 key phrases. These were further categorized in two ways: experience type (UFO sighting, ghost, etc.) and experience characteristics (experience occurred when the person was awake, experience occurred at night, etc.). Some submissions clearly described more than one experience and some judgment was exercised in categorizing the information. To ensure every submission had a category, submissions that did not fit into a major category were given their own category, resulting in 25 experience types (Table 8) and 22 characteristics (Table 9). The extracted categories represent only one possible classification of the submissions, and certainly other categories could be created.

The most common types of experience reported by the study participants were encounters with aliens, extraterrestrials, or other unknown entities (63 submissions, 32%). This was followed by reports related to psychic abilities such as precognition, prediction, premonition, and telepathy (52 submissions, 26%) and unexplained activity typical of haunted locations (51 submissions, 26%). There were 47 submissions (24%) claiming UFO sightings (objects) and 37 reports (19%) of unexplained light phenomena without a solid object. Apparitions, ghosts, spirits, and poltergeist activity were found in 44 submissions (22%).

Table 8. Categories of Experience Type

Type of experience	No. (%)
*Alien abduction/ general abduction experience/ missing time	18 (9.1%)
*Apparition/ ghost/ poltergeist/ spirit	44 (22%)
*Astral travel/ dissociative experience/ out-of-body experience	20 (10%)
Damaged object restored	1 (0.5%)
Déjà vu/ incident repeating itself	3 (1.5%)
*Demon/ demonic influence/ evidence of devil worship	4 (2.0%)
Dreams (lucid, shared, recurring, repressed/early life/past life memories)†	17 (8.6%)
*Encounter with alien/ extra-terrestrial/ other unknown entity	63 (32%)
Energy worker	1 (0.5%)
Felt a presence/ feeling of being watched	20 (10%)
*Information or instructions received from an unverifiable source	7 (3.6%)
*Light phenomena (lights in the sky, etc.)	37 (19%)
Near-death experience	4 (2.0%)
*Paralysis/ feeling of being restrained	21 (11%)
Phobia of UFOs and aliens	1 (0.5%)
*Protective entity/ guardian angel/ guides/ something preventing a disaster	12 (6.1%)
*Psychic ability/ precognition/ prediction/ premonition/ telepathy	52 (26%)
*Religious experience or vision	10 (5.1%)
*Shadow figure	13 (6.6%)
*Synchronicity or coincidences	7 (3.6%)
*Touched/ threatened/ attached by an unseen entity	12 (6.1%)
*UFO sighting (object)	47 (24%)
*Unexplained activity typical of a haunted location	51 (26%)

*Vision/ sign	16 (8.1%)
Wind inside from an unexplained source	3 (1.5%)

*Included in correlation matrix of questionnaire items and extracted phrases.

†Precognitive dreams were included with precognition.

Experience characteristics that described when experiences occurred and the experiencer's state of mind are shown in Table 9. The most common characteristic reported was that the experiencer was awake for the experience (100 submissions, 51%), suggesting that over half of the project submissions cannot be explained by sleep-related disorders. This was followed by experiences occurring at night (73 submissions, 37%). Fifty-two (26%) participants reported having experiences as a child, and 51 (26%) reported that their experiences were corroborated by someone else or later verified.

Table 9. Experience Characteristics

Experience characteristic	No. (%)
Daily events	2 (1.0%)
*Experience(s) occurred in daylight	32 (16%)
†Experience(s) occurred in early morning	10 (5.1%)
*Experience(s) occurred at night	73 (37%)
††Experience(s) occurred at dusk/during the evening	6 (3.0%)
*Had experience(s) as a child	52 (26%)
*Had experience(s) as an adolescent or teen	16 (8.1%)
*Experience(s) occurred while awake	100 (51%)
†††Experience(s) occurred while awake with eyes closed	3 (1.5%)
*Experience(s) woke him/her up	35 (18%)
*Experience(s) occurred while falling asleep/lying in bed	18 (9.1%)
Experience(s) occurred while meditating	6 (3.0%)
Experience(s) occurred while sleeping or napping	7 (3.6%)
Experience(s) occurred while waking up or shortly after	7 (3.6%)
Experience(s) occurred while in the womb	1 (0.5%)
Experience(s) occurred while ill or during a surgical procedure	4 (2.0%)
Experience(s) run in the family	4 (2.0%)
Experience(s) occurred in a rural area	12 (6.1%)
*Experience(s) corroborated, matched reports, or were later confirmed	51 (26%)
*Others present didn't notice anything or think event was significant	13 (6.6%)
* Physical evidence, medical symptoms, unexplained injuries	18 (9.1%)
*Experience(s) were traumatic or terrifying	28 (14%)

*Included in correlation matrix of questionnaire items and extracted phrases

†Included with daytime experiences in matrix

††Included with experiences that occurred at night in matrix

†††Included with experiences that occurred while awake in matrix

Correlation Matrix Incorporating Narrative Data

A second correlation matrix was generated that included the survey variables (with events coded as in the first matrix) and some of the experience types and characteristics extracted during content analysis. In general, experience types and characteristics that were included were ones that occurred in high enough frequency that under-sampling would hopefully not generate false correlations. The experience type involving demon and demonic influence was included because these experiences tend to be especially disturbing and sometimes violent, so there is a potential benefit of identifying correlating factors that might help those at risk of such experiences.

Experience Types and Characteristics Correlated with Number of Events

Lifetime number of events was positively correlated with five event types: experiences involving apparitions, ghosts, spirits, or poltergeist activity ($P=0.010$, $r_s=0.194$); receiving information or instructions from an unverifiable source ($P=0.006$, $r_s=0.207$); experiences involving protective entities, guardian angels, guides, or something else that actively prevented a disaster ($P=0.009$, $r_s=0.196$); psychic abilities such as precognition, prediction, premonition, or telepathy ($P<0.001$, $r_s=0.274$); and UFO sightings ($P=0.032$, $r_s=0.163$). There was also a positive correlation with having physical evidence of the experience, medical symptoms, or unexplained injuries ($P=0.004$, $r_s=0.218$).

Experience Types and Characteristics Correlated with IQ and Rh Factor

While the addition of narrative data did not add any correlations for IQ, Rh factor was negatively correlated (less likely to be reported by Rh⁺ individuals) with two experience types and one characteristic: experiences involving demons, demonic influence, or evidence of devil worship ($P=0.031$, $r_s= -0.204$); receiving information or instructions from an unverifiable source ($P=0.031$, $r_s= -0.204$); and experiences being corroborated by others or information that was verified later ($P=0.030$, $r_s= -0.206$).

Experience Types and Characteristics Correlated with Accurate Portrayal in Literature/Media

Accurate portrayal of experiences had significant positive correlations with light phenomena ($P=0.020$, $r_s=0.205$); psychic abilities such as precognition, prediction, premonition, or telepathy ($P=0.002$, $r_s=0.265$); and experiences that occurred while falling asleep or lying in bed ($P=0.010$, $r_s=0.228$). There was a significant negative correlation with experiences involving encounters with unknown entities ($P=0.048$, $r_s=$

-0.175).

The number of experience types described by individual participants ranged from one to nine (Table 10). The majority of submissions described only one or two types, while less than 10% described five or more types of experiences. Since the questionnaire stated, “Please relate your experience,” it is possible that these are under-reported because many respondents interpreted this as being instructed to describe a single event.

Table 10. Number of Experience Types Reported by Individual Participants

Number of experience types	Number of submissions (%)
1	71 (36%)
2	52 (26%)
3	31 (16%)
4	26 (13%)
5	4 (2%)
6	6 (3%)
7	2 (1%)
8	4 (2%)
9	1 (0.5%)

Some experience types were significantly correlated with others (Table 11). Experiences involving astral travel, dissociative experiences, or out-of-body experiences were correlated with six other experience types, as were experiences involving visions or signs; encounters with aliens, extra-terrestrials, or other unknown entities were correlated with five other experience types.

Table 11. Significantly Correlated Experience Types

Experience type 1	Experience type 2	<i>P</i>-value	Correlation coeff.
Alien abduction/ general abduction experience/ missing time	UFO sighting (object)	0.006	0.195
Apparition/ ghost/ poltergeist/ spirit	Protective entity/ guardian angel/ guides/ something preventing a disaster	0.015	0.174
Astral travel/ dissociative experience/ out-of-body experience	Encounter with alien/ extra-terrestrial/ other unknown entity	0.020	0.166
	Paralysis/ feeling of being restrained	0.003	0.211
	Psychic ability/ precognition/ prediction/ premonition/ telepathy	0.011	0.180
	Religious experience or vision	0.033	0.152
	Shadow figure	0.011	0.181
	Vision/ sign	0.040	0.146
Demon/ demonic influence/ evidence of devil worship	Information or instructions received from an unverifiable source	0.019	0.167
	Paralysis/ feeling of being restrained	0.010	0.184
Encounter with alien/ extra-terrestrial/ other unknown entity	Information or instructions received from an unverifiable source	0.023	0.162
	Light phenomena	0.022	-0.163

	Paralysis/ feeling of being restrained	0.009	0.186
	Vision/ sign	0.030	0.155
Light phenomena	UFO sighting (object)	0.002	0.219
	Vision/ sign	0.045	-0.143
Paralysis/ feeling of being restrained	Shadow figure	0.015	0.173
Protective entity/ guardian angel/ guides/ something preventing a disaster	Vision/ sign	0.027	0.157
Religious experience or vision	Vision/ sign	0.009	0.185
Touched/ threatened/ attached by an unseen entity	Unexplained activity typical of a haunted location	0.007	0.193
	Vision/ sign	0.027	0.157

There were also some significant correlations between experience type and extracted characteristics (Table 12). Some experiences correlated with seemingly contradictory characteristics, such as light phenomena correlating both with experiences being corroborated and experiences in which others present didn't notice the phenomena or didn't think it was significant. Further studies can investigate whether there are specific characteristics associated with whether or not experiencing unexplained light phenomena is corroborated or dismissed by potential witnesses.

Table 12. Correlations Between Experience Types and Characteristics

Experience type	Experience characteristic	<i>P</i>-value	Correlation coeff.
Alien abduction/ general abduction experience/ missing time	Physical evidence, medical symptoms, unexplained injuries	0.004	0.205
	Had experience(s) as an adolescent or teen	0.040	0.146
Astral travel/ dissociative experience/ out-of-body experience	Experience(s) occurred while awake (or awake with eyes closed)	0.035	-0.150
	Had experience(s) as a child	<0.001	0.330
Encounter with alien/ extra-terrestrial/ other unknown entity	Experience(s) woke him/ her up	<0.001	0.365
	Experience(s) occurred at night (including evening and dusk)	0.002	0.216
	Experience(s) were traumatic or terrifying	<0.001	0.282
Light phenomena	Experience(s) occurred while awake (or awake with eyes closed)	0.001	0.225
	Experience(s) corroborated, matched reports, or were later confirmed	0.007	0.191
	Others present didn't notice anything or think event was significant	0.009	0.186

	Experience(s) occurred at night (including evening and dusk)	0.002	0.216
Paralysis/ feeling of being restrained	Experience(s) occurred while falling asleep/lying in bed	0.013	0.176
	Experience(s) woke him/her up	0.001	0.227
	Experience(s) were traumatic or terrifying	<0.001	0.330
Protective entity/ guardian angel/ guides/ something Preventing a disaster	Had experience(s) as a child	0.009	0.185
	Had experience(s) as an adolescent or teen	0.027	0.157
	Experience(s) occurred while falling asleep/lying in bed	0.003	0.214
	Experience(s) occurred in daylight (including early morning)	0.012	0.178
	Experience(s) occurred at night (including evening and dusk)	0.002	0.225
Shadow figure	Experience(s) woke him/her up	0.005	0.197
Touched/ threatened/ attached by an unseen entity	Experience(s) occurred while falling asleep/lying in bed	0.003	0.214
UFO sighting (object)	Experience(s) occurred while awake (or awake with eyes closed)	<0.001	0.249
	Experience(s) corroborated, matched reports, or were later confirmed	<0.001	0.376

	Experience(s) occurred in daylight (including early morning)	0.042	0.145
Unexplained activity typical of a haunted location	Experience(s) occurred while falling asleep/lying in bed	0.012	0.179
	Experience(s) corroborated, matched reports, or were later confirmed	0.002	0.215
	Physical evidence, medical symptoms, unexplained injuries	0.012	0.179
Vision/ sign	Had experience(s) as a child	0.005	0.201
	Had experience(s) as an adolescent or teen	0.010	0.184
	Experience(s) occurred while falling asleep/lying in bed	0.022	0.164

There were also some significant correlations between characteristics extracted from the submitted narratives (Table 13). Experiences that were traumatic or terrifying were correlated with five other characteristics (Table 13) as well as encounters with aliens, extra-terrestrials, or other entities, and experiences of paralysis or a feeling of being restrained (Table 12).

Table 13. Significantly Correlated Experience Characteristics

Characteristic 1	Characteristic 2	<i>P</i>-value	Correlation coeff.
Experience(s) were traumatic or terrifying	Had experience(s) as a child	0.009	0.185
	Experience(s) occurred while falling asleep/lying in bed	0.002	0.224
	Experience(s) woke him/her up	<0.001	0.305
	Physical evidence, medical symptoms, unexplained injuries	0.015	0.174
	Experience(s) occurred at night (including evening and dusk)	0.016	0.171
Had experience(s) as a child	Had experience(s) as an adolescent or teen	0.025	0.159
	Experience(s) occurred while falling asleep/lying in bed	0.003	0.210
Experience(s) occurred while awake (or awake with eyes closed)	Experience(s) woke him/her up	<0.001	-0.380
	Experience(s) corroborated, matched reports, or were later confirmed	0.017	0.170
	Experience(s) occurred in daylight (including early morning)	0.002	0.224
Experience(s) occurred at night (including evening	Experience(s) woke him/her up	<0.001	0.297

and dusk)	Others present didn't notice anything or think event was significant	0.027	0.158
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Issues of Cultural Contamination

Fantasy Proneness vs. Creative Impulse

One fallback position for debunkers wishing to discredit reports of alien abductions and other unproven phenomena is that they are all nothing more than cultural contaminations filtered through gullible minds. If, for example, one watches enough science fiction movies about aliens and then dreams they've been abducted by aliens, they may believe they have been. Usually "fantasy proneness" is cited for this. That a majority of participants in Project Core have not seen their experiences reflected in media and literature calls the skeptic's cultural contamination concerns as a blanket explanation into serious question.

The Project Core finding that 87% of participants consider themselves creative, combined with the commonly reported outcome that high strangeness experiencers develop artistic abilities as a result of these events, begs the question: what is the line between fantasy proneness and artistic vision? There could be a cognitive component to these phenomena, but it might have more to do with how one's brain is wired or how open one is to the possibility of translogical phenomena than how gullible one is or how unable to distinguish fantasy from experience. That said, we cannot discount fantasy proneness as a contributing factor in some cases.

Hypnosis

However, there is a greater proven risk of cultural (and pseudo-therapist) contamination in using hypnosis as a memory retrieval tool—a favorite amongst alien abduction and past life researchers. Under hypnosis a subject is far more prone to mistaking dreams, works of fiction, imagination, and fantasy material for actual memories—or to filling in the holes of real memories with these. This is why we excluded hypnotically treated people from our survey.¹¹

Setting Project Core Results in Context

Project Core is best viewed as an aid to the development of hypotheses for future detailed investigations. Some results appear intriguing, but attempting to extract any generalizable conclusions from them at this stage is premature.

Presenting the survey results in the form of tabulated numeric and graphical information is convenient, but tends to obscure any intrinsic uncertainty in the data. This imprecision complicates attempts to compare survey results to the general population using inferential statistical analyses. Apparent correlations revealed by broad surveys certainly may provide a focus for future in-depth studies, but investigators must guard against falling prey to the “Texas Sharpshooter Fallacy”¹² and awarding them more significance than warranted.

Project Core participants were a self-selected sample derived from a population with an interest in paranormal phenomena, a situation virtually guaranteed to introduce some level of bias into the survey responses. By necessity, responses provided by participants were deemed generally and equally reliable. Unfortunately, the use web-based submission method offered no opportunity to clarify any uncertainty regarding the queries; the participants were required to interpret as best they could the intent of the survey creators. In addition, the investigators were unable to independently confirm the accuracy of responses regarding objective information such as blood type or IQ test scores.

An article written by Siddhartha Mukherjee, “*Do Cellphones Cause Brain Cancer?*”¹³ illustrates how challenging it can sometimes be to account for all sources of error. A group of women with breast cancer and a matched group of control subjects participated in a survey assessing their dietary habits. In line with general expectations, the results seemed to reveal that the subjects with cancer were more likely to have consumed high fat diets. However, this study represented a unique situation in which the participants had all completed surveys of dietary habits *before* anyone had been diagnosed with cancer. Comparing the reports produced by the same subjects at different times led to a realization that women with cancer may have exhibited a unique recall bias. While the control group reports of their dietary habits remained the same over time, current cancer patients were more likely to describe consuming a higher fat diet than they did prior to receiving their diagnosis. One remarkable possibility for this discrepancy is that a cancer diagnosis has altered the individual’s life narrative. Perhaps cancer patients report a high fat diet when they did not in the past because that slight alteration helps provide a rational explanation for what happened to them.

A variety of studies suggest that many factors such as self-esteem and social approval influence participant recall of past experiences or actions.¹⁴ The Project Core survey would also be subject to such influences and investigators must be alert to inadvertent impacts from subtle external factors. For example, an idea that uncommon blood types are somehow linked to paranormal experiences has been examined¹⁵ and repeated for decades. Whether that impression has altered the proportions of blood types reported by Project Core participants is unknown.

Limitations of Content Analysis and Correlation Matrices

The correlation matrix itself was intended as a quick analysis to generate potential hypotheses that could be tested in future investigations. The appropriateness and utility of key phrases extracted and how they were combined into larger categories was subjective. There were also some choices made about which categories to include in the matrix, so potentially some interesting correlations may have been missed. Although a non-parametric test was used, most of the survey data was coded as 0 and 1 (absent and present) for the parameter in question. Since correlations address one variable increasing or decreasing as the other changes, data with a broader range of values would have been preferable. Some coding of non-binary data was also questionable. Again, the results presented should be considered starting points for more targeted study rather than definitive support for any particular relationship.

Envisioning the Future

Project Core participants were deliberately provided few hints as to what the investigators considered constituted a paranormal experience leaving them free to decide this matter for themselves. A wide range of experiences were detailed in the written accounts with many reports indicating the individual had encountered more than a single type of paranormal event. The questionnaire asked about significant events and so may underestimate the range of experiences. Approximately 78% of respondents reported three or fewer types of experiences, and on consideration of the narratives, some of these could probably be reduced since categories are partially redundant (for example, someone may have reported feeling watched and having typical haunted house activity, or feeling watched and seeing a shadow figure). This area should probably be explored in more detail in future studies to dissect out which, if any, experience tends to dominate, whether they occur randomly or follow a sequence and whether the subjects assign a personal hierarchy of importance to the various events.

The survey responses suggest investigators have several exploitable opportunities. First, the fact that many subjects indicated they were not alone during paranormal events suggests it might be possible to obtain reliable independent witness corroboration of events and/or clarification of the specific conditions leading up to and during the experience itself. In addition, it is clear that many persons have multiple, perhaps lifelong, encounters with the paranormal and this provides the chance to conduct a broad array of sophisticated prospective investigations focused on obtaining direct objective evidence for the phenomena as well as clarifying the environmental and psychological conditions necessary and sufficient for their emergence.

All Project Core participants, including those relaying accounts involving alien abductions, reported unaided conscious recall of events. It is clear that American alien abduction investigators as a group have made almost no use of such individuals, with the

bulk of assertions and hypotheses surrounding this phenomenon developed from persons subjected to hypnotic regression. The use of hypnosis to penetrate “screen memories,” itself a hypothetical construct, or simply enable recovery of experiences is unnecessary and ill-advised in such subjects. Use of such tactics may tend to induce a preferred narrative and may be reflected in the differing explanatory accounts proffered by individual investigators through the past 25 years.¹⁶ Creating an accurate, unbiased database of alien abduction experiences, one that is not predicated exclusively on hypnotic regression methods is long overdue.

Many Project Core participants revealed a history of classic UFO sightings. Clearly, the universe of paranormal events is broader than UFOs and alien abductions although phenomena have been largely categorized separately and considered in isolation. Whether such compartmentalization is valid remains to be established. For the purposes of our survey we simply combined query data. Comprehending UFO phenomena has been thwarted by its inherent complexity and recalcitrance to systematic study. Paranormal experiences seem likely to be more diverse in manifestation and promise to be equally challenging and complex. These considerations strongly suggest that anyone seeking a single, global explanation for the pantheon of paranormal experiences will be disappointed unless or until such time as a firm case is made that there is something like a singular mechanical underpinning to them all beyond hallucinations or other such brain disturbances.

Integrating Technological Advances into Research

Opportunities to seek objective biomarkers underlying paranormal experiences reports are expanding rapidly. New techniques to follow brain activity in living subjects on a real time basis are now undergoing rapid development. Regional brain activity can be inferred with methods such as fMRI (functional Magnetic Resonance Imaging) that reveal blood flow and metabolic dynamics in response to stimulation. These new imaging methods offer unprecedented glimpses into the activities of neurons and their interconnections. Claims that the new imaging technologies have sufficient precision to distinguish between mental states thereby enabling truth to be separated from lie or reveal the character of thoughts as they transpire are now being debated. As is already the case with genetic analysis technology, these new developments may ultimately revolutionize neuroscience, medicine, and the legal system.

The new neuro-activity monitoring technologies are tantalizing glimpses into future possibilities. How they will be reduced to routine practice is unclear and if they will be accepted by the paranormal phenomena investigators of the future is uncertain. The situation with new genetic technologies offers a sobering example. Genetic profiling services now offer services that are easy to use and come complete with expert interpretation of the results. Next generation DNA sequencing technologies are now poised to make complete genomic sequences a routine part of patient profiles, providing a

potential gold mine of genetic data. Detailed claims regarding human-alien genetic hybrids, alien instigated and terminated pregnancies, *etc.* have been repeated for decades. Such nefarious activities would leave genetic traces that are now well within the capacity of medical science to detect. For decades wild assertions human genetics had been appropriated and adulterated by aliens could never be confirmed because the essential technologies did not exist. The true tragedy of alien abduction research is that now that complete genomes can be directly examined to confirm the long-alleged facts, investigators seem disinterested in actually putting their hypotheses to the test.

Some facets of paranormal phenomena investigation are not technology limited, but operationally impaired. Ghost/spirit hunters have been using an array of visible light, night vision and infrared video, sound recording equipment and magnetic field detectors, just not effectively. What is needed to get at the reality of events such as electronic voice phenomena (EVPs) is the execution of repeatable, well-controlled studies that can be replicated precisely by other investigators.

The history of science and medicine has been marked by periods of creative destruction in which the deficiencies of old ideas are exposed and new hypotheses replace them. Some commonly held notions regarding paranormal phenomena are now poised to experience rigorous and paradigm-shattering upheavals due to the application of new technologies and systematic investigatory approaches.

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- ² <http://www.thyroid.org/media-main/about-hypothyroidism>
- ³ http://www.heart.org/idc/groups/heart-public/@wcm/@sop/@smd/documents/downloadable/ucm_462029.pdf
- ⁴ Chen et al., 2006. *The American Journal of Medicine*. 119: 1088.e1-1088.e7
- ⁵ <http://www.aafp.org/afp/2007/0301/p671.html>
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- ⁷ <http://www.braintrauma.org/tbi-faqs/tbi-statistics/>
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- ¹¹ Cultural and procedural contamination issues were examined in detail in the book *The abduction Enigma: An Investigation of The Alien Abduction Phenomenon*. Randle, Kevin D., Russ Estes, and William P. Cone. New York: St. Martin's, 1999. Print.
- ¹² http://en.wikipedia.org/wiki/Texas_sharpshooter_fallacy
- ¹³ *The New York Times*, 13 April 2011 (<http://www.nytimes.com/2011/04/17/magazine/mag-17cellphones-t.html?pagewanted=all>)
- ¹⁴ <http://www.affective-science.org/pubs/2003/conner-wood-barrett-2003.pdf>, <http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2467430/>
- ¹⁵ <http://www.bradandsherry.com/sfiles.htm>
- ¹⁶ Randle, Cone and Estes