

SOME CORRELATES OF BELIEF IN PSYCHICAL PHENOMENA: A PARTIAL REPLICATION OF THE HARALDSSON FINDINGS

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Nearly two years ago, Icelandic parapsychologist Erlendur Haraldsson reported the results of a series of analyses correlating scores on a "Sheep-Goat" Scale with a number of non-personality variables (Haraldsson, 1981). He found that, as a rule, the sheep—believers in psychical phenomena—tended more often to be women, to believe in life-after-death, to be more religious (in a personal, non-sectarian sense), and to remember their dreams better, as well as to engage in dream-interpretation.

Richard Strong, President of the Psychic Science Special Interest Group (PSI-SIG) of the high-intelligence club MENSA; decided in the Spring of 1982 to distribute to PSI-SIG members a questionnaire containing some (though not all) of the items used by Haraldsson. Some months following data-collection, I was asked to analyze the survey. This report provides the details and results of Richard Strong's attempt to replicate some of the Haraldsson findings.

The Method

Subjects: The questionnaire was distributed to the 442 members of the PSI-SIG as part of a larger Handbook/Mindbook (*Psi-M*, Vol. 6, no. 1, Jan.-Feb., 1982, pp. 18-19). PSI-SIG members live all over the USA. A total of 97 questionnaires were returned — a 22% response-rate. The questionnaires were filled out anonymously, but also without indicating age or sex. However, it proved possible to recover some of these data: sex was known for 75 subjects (44 males, 31 females); and age was known for 51 subjects, for whom the range was 21-71 yrs., with a mean of 45.2 yrs. and an s.d. of 12.1.

Test Instruments: (1) The Sheep-Goat Scale was identical to that used by Haraldsson (1981, pp. 298-299). It consisted of three items regarding belief in GESP and precognition and concerning reading about psychical phenomena (see Appendix, items 1, 2 and 3). The scale permits a range of 3-12, and samples usually contain

scores right across the range. The present sample, however, was top-heavy with sheep: the range was only 8-12, with a mean of 10.8 and an s.d. of 1.2, and the most frequent score was 12—the maximum possible! Since the population mean on this scale is normally about 8, this means that the present sample, rather than having a nice balance of sheep and goats in a normal distribution, consisted of mild sheep (or perhaps indecisives) and very strong sheep. This is not really surprising, given that the subjects were part of an organization interested in parapsychology and were sufficiently motivated to return the questionnaire. Indeed, this result may reflect favorably upon the validity of the Sheep-Goat Scale. On the other hand, the fact of a truncated range also seemed to augur poorly for the possibility of obtaining significant and meaningful correlations between the sheep-goat and the other variables. (2) In addition to the Sheep-Goat Scale were 11 items pertaining to various religious variables (items 4 to 14 in the Appendix). Haraldsson weighted and combined these items in such a way as to form two Religiosity Scales: the Three-Item Scale consists of items 4, 5 and 6 (possible range = 3-12 mean = 8.3, s.d. 2.3); the Eight-Item Scale consists of the Three-Item Scale augmented by items 7 through 11 (possible range = 8-31, mean = 23.21, s.d. = 5.1). The two Religiosity Scales correlated $r = +.91$, ($N = 85$). (3) Three questionnaire items, viz. items 15 through 17, pertained to aspects of dream-life. (4) Finally, the questionnaire also contained, for exploratory purposes, a nine-item "Learning-Style" Inventory (LSI), devised by David Kolb (1976). For each of the nine items, the test provides four descriptors (e.g. for #3: feeling — watching — thinking — doing), and the respondent must rank-order these four according to how well each seems to characterize his or her own learning style. Four scores are then obtained on as many dimensions, each scale theoretically ranging from

6-24. These dimensions, and the mean scores obtained for our 97 Mensans, are: for Concrete Experience (GE), mean = 14.8; for Abstract Conceptualization (AC), mean = 15.0; for Active Experimentation (AE), mean = 15.0; and for Reflective Observation (RO), mean = 14.8. Comparison with the norms for adults (Kolb, 1976) suggests that the sample is above the 50th and 60th percentile on Concrete Experience and Reflective Observation, respectively, at the 40th on Active Experimentation, and below the 30th on Abstract Conceptualization. Since, to my knowledge, this test has never before been studied in relation to the sheep-goat variable, no predictions were made about the direction of any relationships observed.

Results

A preliminary set of frequencies for an N of 95 was tabulated by Rosemarie Patterson and published in *Psi-M*, Vol. 6, no. 3, April, 1982, p. 59. For our N of 97, the computer-tallied frequency counts may be found, for each questionnaire item, in the Appendix. Since N almost equals 100, these raw figures may also be considered as being very rough approximations to percentages.

Judging by the modal responses it can be seen that the subjects tend to believe in GESP and precognition, to read books on psychic phenomena and on religion now and then; to consider themselves fairly religious, to pray often but seldom to attend religious gatherings, sometimes to think about religious matters, to have definitely experienced the presence of "God or a higher power" as well as "divine guidance or consolation"; they tend to believe in God (but not necessarily the God of Christianity), to have had a vivid religious or spiritual experience; they seldom read the Bible or books on Eastern religions or theosophy; they

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tended to remember, more or less clearly, part of a dream from the previous night; they tend to remember their dreams at least once a week, and at least now and then they attempt to search for the meaning of their dreams.

Correlational Analyses: Pearson Correlations. The independent variable was the subject's score on the Sheep-Goat Scale. Pearson correlations were calculated between this Scale and eight other variables, of which three were significant: for the Eight-Item Religiosity Scale, $r = +.22$, $N=83$, $2p = .049$; for the Concrete Experience dimension of the Learning-Style Inventory, $r = +.24$, $N = 87$, $2p = .025$; and for the Abstract Conceptualization dimension on the same test, $r = -.23$, $N = 87$, $2p = .036$. (All three of these variables are statistically independent of one another.) The correlations with sex and with the Three-Item Religiosity Scale were in the predicted direction (viz. with women and religious persons scoring higher on the Sheep-Goat Scale), but were not significant, in both cases r being $+.13$. The correlation with age was likewise non-significantly positive. Nor were the correlations significant for the LSI's Reflective Observation and Active Experimentation Scales.

It may therefore be concluded that compared with those subjects scoring lower down on the Sheep-Goat Scale, high-scorers tended to be more religious, to rely on concrete experience when it comes to approaching a problem to be solved, but *not* to rely on abstract conceptualization.

Spearman Correlations: The Sheep-Goat Scale was correlated with the other 14 individual items in the questionnaire. Five of these analyses gave significant results, all of them in the direction predicted on the basis of Haraldsson's findings. In order of magnitude they are: Q.17 on engaging in dream-interpretation ($\rho = +.35$, $N = 94$, $2p = .001$); Q9 on having ever felt the presence of God or a higher power ($\rho = +.31$, $N = 93$, $2p = .003$); Q.10 on having experienced divine guidance or consolation ($\rho = +.30$, $N = 92$, $2p = .003$); Q.14 concerning the reading of books on Eastern religions or theosophy ($\rho = +.30$, $N = 95$, $2p = .003$); and finally, Q.4 on

reading about religion ($\rho = +.22$, $N = 95$, $2p = .036$). It may also be mentioned that of the nine *nonsignificant* correlations, eight were in the predicated direction.

Discussion

Because of the marked absence of goats in this sample, the present author was, prior to the analysis, very pessimistic that any of the predicted significant correlations would occur. The fact that some *did* occur despite the problem of the truncated range, and in subjects of a different nationality, suggests that the relationship between the sheep-goat and these religious and dream variables may be not only robust but also strongly linear: high sheep showed a higher value on a given variable than did middling or low sheep. Moreover, since this sample consisted mainly of subjects of high intelligence—most PSI-SIG members are also members of MENSA and have thus scored in the top 2 percent of the population on accepted IQ tests—this partially successful replication again points to the likelihood that the findings are generalizable.

The two significant relationships found between the Sheep-Goat Scale and the Learning-Style Inventory are, of course, in need of replication, preferably in less unusual samples and with a better representation of goats. In the meantime, however, the findings suggest some intriguing possibilities: high sheep tended to rely on concrete experience in solving their problems, while low sheep (or the more goatish subjects) tended to rely on abstract conceptualization. Could this possibly suggest that sheep are "raw empiricists," taking facts and anomalies as they find them regardless of theory, while goats tend to rely on *a priori* theoretical assumptions (such as the Basic Limiting Principles), rejecting data that conflict with these expectations? This interpretation can perhaps be supported by examination of the items comprising the CE and AC scales: for Concrete Experience they are such words as *receptive, feeling, accepting, intuitive, present-oriented*, while for Abstract Conceptualization they are *analytical, thinking, evaluative, logical, and rational*. Moreover,

from a subjective or phenomenological point of view, one cannot help but be struck by the similarities these groups of adjectives have to the mental attitudes often thought to be in the one case conducive and in the other antagonistic to the acquisition of extrasensory information.

There may also be a possible tie-in with a finding of Murphy and Lester (1976). Using the thinking-feeling scale of the Myers-Briggs Type Indicator (MBTI), these researchers replicated a weak, but significant tendency for a belief-in-ESP scale to be related to "feeling" rather than "thinking" as a "mode of judging." One might, if very optimistic, predict a transitive relation between the sheep-goat variable, the IVIBTI and the LSI: since sheep tend to be "feelers," and also to be high on CE and low on AC, one might perhaps expect that feelers would tend to be high on CE and low on AC. Astonishingly, (given the low inter-correlations of all these variables), this is exactly what Kolb (1976, p. 28) found: for a sample of 135 undergraduates, the MBTI feeling-scale correlated $+.34$ with Concrete Experience, and $-.25$ with Abstract Conceptualization. The three variables thus seem to have something in common.

It is not necessary to repeat at length Haraldsson's (1981) speculations as to the *reasons* for the correlations between the sheep-goat variable and the religious and dream variables. But it looks very much as if the believer in psychical phenomena tends to be the sort of person who (1) believes in the existence of "spiritual" or "non-physical" realities, and/or (2) tends to attribute cause-effect relationships in situations where other observers (such as goats) would *not* regard the same events as being causally related (e.g., the conjunction of two events is said to be "just a coincidence"). It is the task of parapsychologists to try to obtain evidence which will help us to decide which of the two interpretations—the causal or the non-causal—is more likely to be correct.

NOTES

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APPENDIX

This appendix lists the text of the questions asked in this survey, together with the possible responses allowed and the number of respondents electing each response (these figures being enclosed in two slashes). The frequencies do not always add up to the total N of 97 owing to missing or unscorable responses.

1. Do you believe that the existence of telepathy (thought transference) or clairvoyance is—
 - (1) unthinkable /0/; (2) unlikely /0/;
 - (3) likely /20/; (4) certain /77/.
2. Do you believe that the ability to know the future or to have dreams about it is—
 - (1) unthinkable /0/; (2) unlikely /2/;
 - (3) likely /38/; (4) certain /56/.
3. Do you read books or articles on psychic phenomena—
 - (1) never /0/; (2) seldom /3/;
 - (3) now and then /50/; (4) often /43/.
4. Do you read articles or books about religious matters—
 - (1) never /4/; (2) seldom /34/;
 - (3) now and then /39/; (4) often /20/.
5. How religious do you consider yourself to be—
 - (1) not at all /14/; (2) slightly /17/;
 - (3) fairly /43/; (4) very /22/.
6. Do you pray—
 - (1) never /16/; (2) seldom /19/;
 - (3) now and then /28/; (4) often /32/.
7. Do you attend religious gatherings—
 - (1) never /25/; (2) seldom /39/;
 - (3) now and then /11/; (4) often /22/.
8. Do you sometimes think about religious matters? No /6/ Yes /90/
9. Have you ever felt in some way the presence of God or a higher power?
 - (1) no /14/; (2) yes, perhaps /29/;
 - (2) yes, definitely /52/.
10. Have you ever experienced divine guidance or consolation?
 - (1) no /28/; (2) yes, perhaps /30/;
 - (3) yes, definitely /36/.
11. Which of the following statements best describes the extent to which you believe in God?
 - (1) I do not believe in any God /6/;
 - (2) I believe in a God, but not necessarily the God of Christianity /56/;
 - (3) I believe in the God of Christianity /21/;
 - (4) I do not know what I believe in /7/.
12. Have you ever had a vivid religious or spiritual experience?
 - No /43/ Yes /51/
13. How often do you read the Bible?
 - (1) often /14/;
 - (2) seldom /58/;
 - (3) never /25/.
14. Do you read books on Eastern religions or theosophy?
 - (1) often /24/;
 - (2) seldom /54/;
 - (3) never /19/.
15. Do you remember having dreamt last night?
 - (1) I do not remember any dreams /12/;
 - (2) I vaguely remember part of a dream /31/;
 - (3) I clearly remember part of a dream /30/;
 - (4) I remember an entire dream /21/.
16. How often do you generally or usually remember your dreams?
 - (1) Almost never /7/;
 - (2) At least once a month /17/;
 - (3) At least once a week /39/;
 - (4) Almost every night /31/.
17. Do you attempt to interpret or understand your dreams?
 - (1) never /5/;
 - (2) seldom /17/;
 - (3) now and then /42/;
 - (4) often /32/.