

## SCORING THICK AND SCORING THIN:

### *The Boundaries of Psychic Claimants*

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#### ABSTRACT

The research participants in this study were 34 volunteer psychic claimants who were administered the Dissociative Experiences Scale (DES), the Boundary Questionnaire (BQ), and a supplemental data sheet. Our research question was, "For psychic claimants, is there a significant correlation between DES and BQ scores?" The mean score for this group on the BQ indicated "very thin boundaries," a trait that the past literature has linked with psychic experiences. Their mean score on the DES was within normal limits, and a significant relationship was found between the two measures. Thinness of boundaries was positively correlated with a strong tendency to dissociate. Those claimants who identified themselves as "channelers" demonstrated significant correlations between both measures and tooth grinding, as well as between the BQ and their frequency of nightmares. In terms of Wickramasekera's "high risk" model, this group might be more prone to somatization than those with other self-descriptions.

**KEYWORDS:** Psychological boundaries, dissociation, nightmares, psychic claimants, somatization

**S**o-called “psi phenomena,” whatever their explanation, appear to represent a complex system of interactive processes, and “psi performance” may depend upon the interaction of many variables—biochemical, environmental, psychological, psychoneurological, and situational. The literature of personality test patterns and psi performance encompasses both research conducted under what the Parapsychological Association has described as “psi task conditions” and accounts concerning what Wiseman and Morris have described as “psychic claimants.”<sup>1,2</sup> One of several difficulties that arise in testing the personality parameters of psychic claimants is that scores on personality tests vary to some extent with attitude, mood, and the manner of test administration; psi-scoring varies even more widely due, in part, to what Stanford calls “the typical, restrictive, intentional laboratory paradigm.”<sup>3(p.138),4(p.54).</sup>

When given the opportunity to work with psychic claimants, many parapsychologists have been ambivalent. Haraldsson and Houtkooper have outlined the value and limitations of working with those individuals who are often dubbed “star performers,” i.e., research participants who allegedly manifest dramatic phenomena.<sup>5</sup> The possibility of fraud is omnipresent, and many of these “stars” have earned a reputation for being “difficult” refusing to perform under controlled conditions or with magicians present, invoking demands that scientists consider unwarranted, and making outrageous claims about the scientific verification of their abilities once the research has been concluded. Nevertheless, psi phenomena as it occurs among unselected volunteers may differ from psi phenomena occurring among psychic claimants. Further, if collected under psi-task conditions, to many, the phenomena associated with psychic claimants is more convincing than the statistical data obtained from large groups.<sup>2(p.12)</sup>

Information concerning the personality traits of psychic claimants serves several purposes. It assists investigators in adapting their research methods and their interactive style to the claimants’ traits. It facilitates rapport and cooperation which, in turn, may permit the operation of whatever psi abilities the claimants might possess. It provides cumulative data that, in combination with other data, may illuminate the multi-dimensional system of interactive psi processes that could lead to improved test procedures. An ethical issue is also involved; psychic claimants often report high levels of stress and anxiety when attempting

to manifest psi, and investigators need to design experiments that will not exacerbate these tendencies.

The framework guiding this research project was Wickramasekera's multidimensional High Risk Model of Threat Perception designed to identify persons at risk for anomalous experiences and mind-body incongruence.<sup>6,7</sup> Wickramasekera has amassed considerable data in support of Wickramasekera's model, and found 71% of one high risk group (high hypnotic ability people) to report anomalous experiences in comparison with 19% of another high risk group (low hypnotic ability people).<sup>8-12</sup> This quantitative discrepancy in lows is hypothesized to be due to an active inhibitory cognitive style that blocks access to implicit or unconscious perceptions of threat that can drive somatic symptoms.<sup>6,13,14</sup> Wickramasekera's model predicts that (1) the capacity to enter an altered state of consciousness, and (2) the capacity to block the perception of threat from consciousness, are *preconditions* for the development of both somatization disorders and presumptive psi abilities, especially anomalous healing.

**O**ver the years, Wickramasekera has identified four predisposing high risk factors: either high or low hypnotic ability, excessive catastrophizing, high negative affect, and high Marlowe Crowne scores (*i.e.*, people who inhibit from their awareness the perception of threat).<sup>15</sup> These predisposing factors amplify the probability that the two triggering high risk factors, major life changes and multiple life style "hassles," will generate dysfunctional symptoms unless their impact is reduced by buffering the high risk factors with social support and coping skills. Wickramasekera has hypothesized that people who are high on the predisposing risk factors for hypnotic ability are: (1) hypersensitive to both sensory and anomalous phenomena, (2) prone to surplus empathy and boundary problems, and (3) also prone to surplus pattern recognition or the tendency to find meaning in randomly distributed events. If high risk patients anguish about their high frequency of presumptive parapsychological experiences, Wickramasekera reframes their concerns, helping them to assimilate the incidents comfortably.<sup>6,14</sup> Typically, this process is followed by an attendant decrease in psychological and physical symptoms and medical costs.<sup>6,11,14</sup> We suspect that these high risk factors characterize many psychic claimants, as well as individuals who make remarkable recoveries from illnesses thought to be terminal, demonstrating the model's usefulness in the study of anomalous healing.<sup>18</sup>

Further support for Wickramasekera's model came from experiments that used scores on Kragh's Defense Mechanism Test to predict ESP success. A meta-analysis of these experiments showed at a high level of significance that the more defensive subjects had lower ESP scores.<sup>17</sup> In the experiments reviewed, the more open subjects had higher ESP scores, suggesting that thin psychological boundaries would be conducive to anomalous experiences as well as placing individuals at risk for somatization.

**O**n the relation of boundaries to ESP, the existing literature suggests two predictions. One is that people who tend to protect themselves by putting strong boundaries between themselves and the outside world will also tend to shut off input from ESP. The other is that people who are comfortably open to the world are likely to respond to ESP input. The theory was tested after a Rorschach measure had been devised for barrier (strong boundaries) and penetration (openness). Schmeidler and Leshan turned to the records of ESP subjects who had already taken the Rorschach, and divided them, on the basis of their ESP scores, into one group with high scores and the other groups with scores very close to the chance level.<sup>18</sup> When all the Rorschach protocols were mixed together, then scored blind for barrier or penetration, the expected difference appeared. Subjects with high ESP scores showed more penetration responses in relation to their barrier responses; subjects with scores that stayed near chance had a higher ratio of barrier responses; the difference was significant. The method was unusual because ESP success was taken as the independent variable. It predicted (or rather, in this case, postdicted) the personality difference. Most research along these lines first measures personality, then makes predictions about ESP scoring. Earlier, Schmeidler had reported a link between high ESP-scoring and lack of pathological signs on the Rorschach among participants who accepted the possibility of psi.<sup>19</sup>

When factor-analyzed for larger populations, the Boundaries Questionnaire (BQ) yields a percipience/ clairvoyance subscale that is associated with purported psychic experiences such as knowing someone else's thoughts and feelings, having precognitive dreams, and having a vivid capacity for memory and imagination. The link between "scoring thin" and reported psychic experiences is not hard to conceptualize as the former has been characterized by unusual empathy, and fluidity of thought, imagery, and emotion. Schmeidler

and other parapsychologists have long noted the “sensitivity” and “flexibility” characterizing psychic claimants.<sup>20</sup> Richards, in a review of the literature, observed that reported psi often occurs in dynamic emotional and interpersonal contexts.<sup>21</sup> Persons with thin boundaries may be more sensitive to faint psychic impressions and thus be able to develop strong interpersonal bonds conducive to interpersonal psi phenomena.

## RESEARCH QUESTION

The question posed by this study was “For psychic claimants, is there a significant correlation between DES and BQ scores?”

The Dissociative Experiences Scale (DES),<sup>22</sup> and the Boundary Questionnaire (Hartmann, 1989),<sup>23</sup> along with several other measures, were used in an earlier study of 7 psychic claimants by Krippner, Wickramasekera, Wickramasekera, and Winstead.<sup>24</sup> In the latter study, a significant relationship was reported between the tendency to dissociate on the DES and scoring thin on the BQ ( $r = .78$ ,  $p < .01$ , 2-tailed, 5 degrees of freedom (df), and it was suggested that the two measures may tap into similar capacities. In addition, the results of the study indicated that these psychic claimants fell into the high risk category for somatization.

This type of study is important in light of the reported illnesses often characterizing psychic claimants. Several “remote viewers” who were research participants in classified U.S. governmental studies became seriously ill or suffered deaths at an early age.<sup>25</sup> There are no data regarding how representative such high profile cases are of psychic claimants as a group. However, numerous reports of this nature over the years lend urgency to this investigation.

## BACKGROUND LITERATURE

### THE DISSOCIATION EXPERIENCES SCALE (DES)

The DES is a 23-item self-report questionnaire with a test-retest reliability of .84, split-half reliabilities ranging from .71 to .96, good internal consistency,

and good construct validity.<sup>22</sup> It inquires as to the frequency of dissociative experiences in the daily lives of respondents. A score of 30 or above is regarded as characterizing those who are “severely dissociative,” but only 17% of this number have been later diagnosed as suffering from dissociative identity disorder.<sup>26,27</sup> Kirmayer regards the DES as “the most psychometrically adequate and widely used measure of dissociative phenomena.”<sup>28</sup>

## THE BOUNDARY QUESTIONNAIRE (BQ)

**T**he Boundary Questionnaire was constructed to measure the personality dimensions referred to as “thin boundaries” and “thick boundaries.”<sup>23</sup> For example, adults who “score thin” tend to be open, sensitive, and vulnerable; tend to experience “twilight” states of consciousness easily, and typically involve themselves in relationships quickly. In general, they do not repress uncomfortable material or isolate thought from feeling; nor do they have ready access to the various defense mechanisms by which people who “score thick” defend themselves. There are advantages and disadvantages to both scoring thin and scoring thick. Thin boundaried people are open and creative in certain ways but may lose themselves in their own fantasy and might be emotionally vulnerable. Thick boundaried people are adaptive, well-organized, punctual, reliable, responsible, and efficient, but also may be rigid and unable to change. Neither condition, by itself, can be considered pathological.<sup>29</sup>(pp. 188-189)

### Validity Data on the BQ

Validity data on the questionnaire have been supplied by Hartmann, who notes that it correlates predictably to several scales on other personality tests (e.g., the MMPI) and has been able to discriminate nightmare dreamers.<sup>29</sup>(pp.250-254 & pp. 66-67) It includes 145 items, divided into 12 *a priori* categories, each of which was utilized for statistical purposes in this study. These categories were not analyzed separately in this study. However, all the questionnaire items pertaining to reported psychic experiences were totaled to create a “Psi Score” category we thought would be especially pertinent for the research participants. Such items included, “I see auras or fields of energy around people” and “I have had dreams that later come true.” A few additional items were added to

this category, e.g., “I have had clairvoyant experiences during which I seemed to be aware of distant events.”

### **Correlational Data on the BQ: Nightmare Frequency**

Although nightmares are often cited as a symptom of psychopathology, many studies show no significant relationship. The BQ was originally constructed to tap the characteristics often associated with the reporting of frequent nightmares. Many of Hartmann’s clients and research participants who complained of frequent nightmares were often characterized as having artistic or other creative talents, feeling vulnerable, being sensitive, and having thin, permeable boundaries in other ways as well. Hartmann explains that thin boundaried individuals may not have formed a sufficient internal barrier (or ego boundary that serves to maintain ego integrity.<sup>29</sup> As a result, such basic functions as differentiating fantasy from reality and self from other are compromised. These individuals may be more helpless and vulnerable to violations associated with their internal world as well as to their external world.

**N**o simple relationship was found by Harrison, Hartmann, and Bevis (cited in Hartmann) study between nightmare frequency and scoring thin in a group of evening students at a Boston university.<sup>29,30</sup> But when the 20 most extreme thin- and thick-scoring participants were compared, all of the thick-scoring participants either claimed they experienced no nightmares or had less than one per year in contrast with the 20 thinnest scoring participants who reported some nightmares and, in 3 cases, more than one per week. Hartmann concluded that persons who reported nightmares very frequently probably have thin boundaries, but many people with thin boundaries do not experience nightmares.<sup>29</sup>

Levin, testing a student sample, examined the relationship of nightmare frequency to the BQ and several Rorschach scales: barrier, penetration, and various boundary deficit measures.<sup>31</sup> The BQ score successfully discriminated two groups of nightmare dreamers; the frequent nightmare group scored significantly thinner than the infrequent nightmare group ( $t = 3.55, p < .001$ ). Frequent nightmare dreamers also scored higher on two of the Rorschach boundary deficit measures: contaminations ( $t = 1.98, p < .05$ ) and fabulized

combinations ( $t = 2.25, p < .03$ ). These scores correlated at moderately significant levels with overall boundary thinness. Rorschach barrier and penetration scores failed to discriminate between frequent and infrequent nightmare dreamers, but the Rorschach penetration score was significantly related to overall boundary thinness ( $r = .44, p < .05$ ) indicating that the Rorschach measure may be useful for evaluating boundary fluidity rather than nightmare frequency or psychopathology. However, these data are not consistent with Adair's study; he compared 32 patients at a mental health center to 38 evening school students.<sup>32</sup> All participants took the BQ and the Rorschach scored for barrier and penetration responses. No significant correlations between the total BQ score and the Rorschach scores were noted.

**A**nother study by Cowan and Levin studied the relationship between the BQ and nightmares and dream recall frequency among a group of 182 high school students.<sup>33</sup> The research participants were administered the BQ and a sleep and dreaming questionnaire that measured the rate of dream recall, the number of nightmare occurrences, and the degree of nightmares upon waking experience. Consistent with data on adults, frequent adolescent dream recallers scored significantly thinner on the BQ than infrequent dream recallers ( $F [1,122] = 6.64, p < .01$ ). These data are consistent with Harrison, Hartmann, and Bevis' data from a study on the frequency of dream recall and boundary thinness.<sup>30,29</sup> Also, the adolescents who reported one or more nightmare per month scored significantly thinner on the BQ than those reporting one nightmare, or fewer, per year ( $p < .001$ ). In addition, the intensity of nightmare disturbances also discriminated boundary thinness; adolescents indicating a higher level of nightmare disturbance scored thinner ( $F [1,68] = 15.37, p < .0002$ ). A multiple regression analysis revealed a significant relationship between overall thinness of boundaries and intensity of nightmare disturbance ( $r [169] = .28, p < .901$ ) indicating that adolescents with thinner boundaries find nightmares extremely intrusive and disturbing.

### **Correlational Studies on the BQ: Altered States**

Measures of hypnotic susceptibility have related positively to scoring thin on the BQ. Barrett administered the BQ to 200 college students as well as three hypnotic susceptibility measures: the Harvard Group Scale of Hypnotic Susceptibility, Tellegen's Absorption Scale, and the Field Inventory which



measures one type of suggestibility.<sup>34,29</sup> All three measures of susceptibility yielded significant relationships, with scoring thin on the Absorption Scale showing the highest correlation ( $r = .54, p < .001$ ). Both high hypnotic ability scores (as measured by the Harvard Scale) and high absorption scores have been theoretically and empirically linked to a higher incidence of verbal reports of ostensible psi phenomena.<sup>9-11,14</sup>

Because “lucid dreaming” is a state where a dreamer becomes aware he or she is dreaming during an ongoing dream, it is likely that a thin boundary between wakefulness and dreaming may exist for lucid dreamers. Galvin gave the BQ to 40 spontaneous lucid dreamers, 40 nightmare dreamers, and 40 ordinary dreamers.<sup>35</sup> Ordinary dreamers recalled significantly fewer dreams than the lucid dreamers or nightmare dreamers ( $p < .001$ ), consistent with Hartmann’s earlier data.<sup>29</sup>

**F**actor analysis revealed that lucid dreamers consistently scored thinner on factors referencing external boundaries and evidenced a strong dislike of explicit boundaries, while nightmare dreamers had more of a preference for explicit boundaries and were significantly more fragile as indicated by the factor analysis. Lucid dreamers were much less involved in fantasy than members of the other two groups. Like lucid dreamers, nightmare dreamers scored thin and experienced primary process material. Nightmare dreamers also had a significantly weaker sense of self as measured on a “self-coherence” subscale created from the BQ than members of the other two groups. This suggests that not only might nightmare dreamers experience themselves as fragile but they may be unable to manage internal primary process material. Thus, they may have a strong need for external boundaries to maintain a coherent self-structure. In contrast, those who are open to inner experience and have greater internal security may be prone to lucid dream experiences.

Richards asked if thin boundaries and positive emotions played roles as moderators in subjective sense of success at psi tasks in a psi conducive interpersonal environment.<sup>21</sup> A total of 67 registrants at a “psychic development and training” research project took the BQ, the Psychic Experiences Scale, the Positive and Negative Affect Schedules<sup>36</sup> to measure negative and positive affect, and a questionnaire on which they rated subjective success at psi tasks following 11 “psychic training” exercises. Overall boundary thinness was strongly

correlated with a subjective sense of success on psi tasks ( $r = .4a, p < .001$ ) and reported psychic experiences ( $r = .48, p < .001$ ). The first three categories (sleep, wake, dream; unusual experiences; thoughts, feelings, moods) correlated at exceptionally high levels with both the tasks and the reports. Positive affect on the Positive and Negative Affect Schedule showed no consistent relationships to scores on the BQ, but subjective relationship to scores on the BQ ( $r = .25, p < .05$ ) and subjective success on the psi tasks correlated significantly to reported psychic experiences ( $r = .35, p = .01$ ).

Overall, the data suggest that individuals who experience their thin boundaries in a positive manner may be more open to psychic experiences, and that nightmare frequency needs to be explored in relationship to experiential reports of psychic phenomena.

## RESEARCH METHODOLOGY

### INSTRUMENTS AND SUPPLEMENTAL DATA SHEET (SDS)

All research participants were administered the Dissociative Experiences Scale (DES) and the Boundary Questionnaire (BQ).<sup>22,23,29</sup> Research participants also completed a Supplemental Data Sheet (SDS, Appendix I) consisting of questions designed by Hartmann:

1. Hours of sleep on an average night
2. Number of dreams remembered per month
3. Number of nightmares remembered per year
4. Number of sleepwalking incidents remembered per year
5. Number of tooth grinding incidents remembered per year
6. Number of night terrors per year
7. Number of other unusual events at night per year

Four additional items were added:

- The term “psychic” applies to me;
- The term “healer” applies to me;
- The word “channeler” applies to me;
- The word “intuitive” applies to me.

Research participants were asked to circle numerals from 0 to 4, following the same directions given for the Boundary Questionnaire: Please try to rate each of these statements from 0 to 4; 0 indicates “no,” “not at all,” or “not true of me,” while 4 indicates “yes,” “definitely,” or “very true of me.”

**T**hese terms were heuristically derived on the basis of common self-descriptions given to one of the investigators by psychic claimants over the years.<sup>37</sup> Psychic claimants who refer to themselves as “psychics” generally claim to have one of more psi abilities, e.g., clairvoyance, precognition, psychokinesis, telepathy. Psychic claimants who state that the word “healer” applies to them believe that they have anomalous healing abilities. Those who use the word “channeler” consider that they have mediumship abilities and that “spirits” or some other type of discarnate entity speak, write, or work through them. “Intuitives,” in general, take the position that they have anomalous abilities to counsel others regarding their personal or professional problems. Admittedly, there is an overlap in these terms, and no standard definitions have been formulated.

A research participant was classified as a “psychic” if he or she gave a self-rating of “3” or “4” on the SDS, and the same criterion was used to classify research participants as “healers,” “channelers,” and “intuitives.” In that way, it was possible for a psychic claimant to be classified in multiple ways.

Those research participants who gave no self-ratings of “3” or “4” were classified as “non-claimants.” In addition, the self-rated numerical scores for the four self-descriptions on the SDS were added together for each participant to yield a “Psi Score.”

## RESEARCH PARTICIPANTS

Some psychic claimants utilize their purported abilities to earn a living. By the beginning of 1998, six occupational titles had been entered on the comput-

erized Cal-JOBS system in the state of California, *i.e.*, counseling parapsychologist, intuitive consultant, intuitive counselor, transpersonal counseling psychologist, transpersonal therapist, parapsychologist. Cal-JOBS was created to coordinate employers and employees, and these job titles are cited on the Internet. Many of the psychic claimants who served as research participants for this study were employed or self-employed under these or similar job titles.<sup>38</sup>

The names of the 34 psychic claimants (24 women, 10 men) who served as research participants in this study were obtained from several sources: (1) a workshop in Hawaii conducted by two of the investigators (SK and IW), (2) a medical research study of "distant healing," (3) a course conducted in California by one of the investigators (SK), and (4) a file kept by one of the investigators (SK) consisting of names of psychic claimants who offered to participate in parapsychological research.

**A**ll research participants completed a form assuring informed consent, and the study was approved for the protection of human subjects by the Saybrook Institutional Review Board. Whenever possible, the two instruments (DES, BQ) and the SDS were administered personally or in small groups by two of the investigators (SK, IW) or by an assistant, April Thompson (AT). When distance prohibited personal test administration, research participants completed the instruments at home and mailed the completed forms to AT.

The SDS allowed for the determination of mean age, educational level, marital status, and a description of research participants' work activities. It also permitted tabulation of sleep habits: Hours slept on an average night, number of dreams remembered per month, number of nightmares remembered per year, number of sleepwalking incidents remembered per year, number of tooth grinding incidents remembered per year, number of night terrors per year, and number of other unusual nighttime events per year.

For the total group of 24 women and 10 men, the mean age was 51.69 (range: 41-69). Of the 34 research participants, 10 were single (or widowed), 13 were married, 6 were divorced, 1 was separated, and 4 were living with a "significant other." Three had stopped their education at the high school level, 5 reported "some college," 5 had a college degree, 4 had some graduate education, and 17 had a graduate degree. In other words, the group as a whole was well educated, with women outnumbering men by more than two to one.

Work activities ranged from “student” (2 individuals) to “physician” (1 individual) to “retired” (1 individual). Seven members of the group described themselves as “healers”; 6 as counselors or psychotherapists; 3 as physical therapists or nurses; 3 as writers; 3 as artists; 2 as teachers, 2 as workers in electronics or computers; 4 as a buyer, clerk, realtor, or salesperson. Several had more than one profession but the above figures cite what seemed to be the most prominent vocational self-descriptions.

Fifteen women and 8 men described themselves as “psychics”; their mean age was 51.05. Eight were single, 8 were married, 5 were divorced, and 2 were living with a “significant other.” Seven had completed college, and 11 additional individuals had gone on to complete a graduate degree.

For those describing themselves as “healers,” there were 22 women and 9 men, with a mean age of 51.67. Nine were single, 12 were married, 6 were divorced, 1 was separated, and 3 were living with a “significant other.” Eight had completed college, and 16 additional individuals had completed a graduate degree.

For the self-described “channelers” there were 10 women and 6 men, with a mean age of 52.53. Five were single, 7 were married, 3 were divorced, and 1 was living with a “significant other.” Five had completed an undergraduate degree, and 7 a graduate degree, the lowest proportion of the four groups.

In the case of self-described “intuitives,” there were 24 women and 9 men with a mean age of 51.34. Nine were single, 13 were married, 6 were divorced, 1 was separated, and 4 were living with “significant others.” Eight had an undergraduate degree and 17 a graduate degree.

The 5-point self-description scale was used to determine overlaps among the four groups. If a psychic claimant was self-described as a “healer,” he or she was likely to also be self-described as an “intuitive” ( $r = .46, p < .01$ ) but not as a “psychic” ( $r = .18$ ) or a “channeler” ( $r = .12$ ).

If a psychic claimant was self-described as a “channeler,” he or she was likely to be self-described as a “psychic” as well ( $r = .35, p < .05$ ), but not as an “intuitive” ( $r = .27$ ) or a “healer” ( $r = .12$ ).

“Psychics” were somewhat inclined to describe themselves as “intuitives” ( $r = .30$ ) but not at a statistically significant level ( $p < .10$ ). In other words, “intuitive healers” and “psychic channelers” emerged as two potentially useful self-descriptors. There was little overlap between the self-descriptors “channeler” and “healer.” One way to interpret these findings would be to consider channeling as information-based, while intuition and healing involve service to others. Different practitioners might be associated with each of these functions.

The total group reported a mean of 7.1 hours slept per night (range: 5.0 to 8.5 hours), a mean of 13.3 recalled dreams per month (range: 1 to 50 dreams), a mean of 3.4 recalled nightmares per year (range: 0 to 25 nightmares), none recalled sleepwalking incidents, a mean of 3.2 recalled tooth grinding incidents per year (range: 0 to 52 incidents), a mean of 3.4 recalled night terrors per year (range: 0 to 100 night terrors), and a mean of 8.9 recalled additional unusual nighttime events per year (range: 0 to 100 events).

A comparison group was not created for this study because there is an extensive research literature on the DES and the BQ, allowing comparisons to be made.

## DATA ANALYSIS

Pearson product-moment coefficients of correlation ( $r$ ) were computed between the DES and the BQ. For all participants and for each of the four self-descriptions, both the DES and the BQ score were correlated with the seven SDS items designed by Hartmann regarding sleep events.

In addition, the Psi Score on the BQ was correlated with the DES and the seven SDS items.

A numerical tally was made of such demographic variables as gender, age, marital status, vocation, and education for each of the 4 self-descriptions. These data allowed a comparison of each category in addition to the non-claimants.

## RESULTS

There was a significant correlation ( $r = .64$ ,  $p < .0001$ , 2-tailed, 32 df) between the score on the DES and the score on the BQ. The research question was

answered affirmatively. Scoring thin was positively correlated with a strong tendency to dissociate.

There was a significant correlation ( $r = .48, p < .005$ , 2-tailed, 32 df) between scoring thin on the Boundary Questionnaire (BQ) and the number of reported nightmares per year.

For those research participants describing themselves as “psychics,” there was a significant correlation ( $r = .46, p < .03$ , 2-tailed, 21 df) between scoring thin on the BQ and the number of reported nightmares per year. There was also a significant correlation ( $r = .55, p < .01$ , 2-tailed, 21 df) between scoring thin on the BQ and the number of reported night terrors per year.

For those research participants describing themselves as “healers,” there was a significant correlation between scoring thin on the BQ and the number of reported nightmares per year ( $r = .54, p < .002$ , 2-tailed, 29 df) and the Psi Score ( $r = .36, p < .05$ , 2-tailed, 29 df).

For those research participants describing themselves as “channelers,” there was a significant correlation ( $r = .60, p < .02$ , 2-tailed, 14 df) between scoring thin on the BQ and the number of reported nightmares per year. There was also a significant correlation ( $r = .55, p < .03$ , 2-tailed, 14 df) between scoring thin on the BQ and the number of tooth grinding incidents per year. There was a significant correlation between scoring thin on the BQ and the Psi Score ( $r = .55, p < .03$ , 2-tailed, 14 df). In addition, there was a significant correlation ( $r = .60, p < .02$ , 2-tailed, 14 df) between tendencies to dissociate on the DES and the number of tooth grinding incidents per year.

For those research participants describing themselves as “intuitives,” there was a significant correlation ( $r = .48, p < .005$ , 31 df) between scoring thin on the BQ and the number of nightmares per year.

There was a significant correlation between tendencies to dissociate on the DES and the BQ Psi Score ( $r = .46, p < .01$ , 2-tailed, 32 df).

The group's mean score on the DES was 14.32. There were only two scores above 30, which is regarded as the cutoff point for those who are “severely dissociative.”<sup>27</sup>

On the BQ, the mean score was 328.38. In Hartmann's largest sample of members of the general population, the average score on the BQ was 273 (plus or minus 52), placing this group's tendency to score thin somewhat above the mean.<sup>29</sup> Even so, groups of frequent nightmare dreamers and college music students have received higher mean scores.<sup>41</sup> Therefore, the scores on these two tests for the group as a whole can not be considered a cause for undue concern.

## DISCUSSION

**T**he direction of causation cannot be determined from this study. Do psychic claimants "score thin" because of their work, or are they attracted to these endeavors because they have such capacities? The presumed lack of barriers with outside events and other people is a trait that past literature has linked with people reporting psychic experiences. Nevertheless, longitudinal research is needed to provide more definitive clarification of this issue. In addition, it should be noted that several correlation coefficients were computed, thus some significant correlations might be spurious. On the other hand, many of Hartmann's findings were replicated, especially the relationship between scoring thin and the reporting of nightmares.<sup>23</sup> However, it must be recalled that while high nightmare occurrence is associated with scoring thin, the thinness of boundaries is not necessarily associated with high nightmare frequency.<sup>40</sup>

Because of the boundary's "elemental and ubiquitous pattern that simultaneously serves as a differentiator and integrator wherever it is seen," Hartmann has used "boundary" as a metaphor that links psychology with the rest of nature.<sup>41</sup> Russek and Schwartz add that the "boundary" metaphor has the advantage of being the site of process, of relational events and patterns of energy exchanges when resonance between two different energy systems is established.<sup>42</sup> Following this line of thought, Hartmann has proposed a "trait continuum" running from very thick boundaries to very thin boundaries, suggesting this might relate to the established "state continuum" running from focused wakefulness (e.g., solving mathematical problems) at one end to "looser thought" (e.g., daydreaming, waking reverie) at the other end.<sup>43,44</sup>



Hartmann's "continuity hypothesis" proposes that there is a connection between waking characteristics and dream characteristics.<sup>43</sup> People may engage in more thick boundaried functioning while categorizing and making distinctions, but surrender these categories and distinctions while dreaming. In terms of neural nets in the cerebral cortex, the thick boundaried end of the continuum may correspond to efficient functioning within a subsystem with little communication or spread of excitation between subsystems, while the thin boundaried end of the continuum may involve less activity within a subsystem but with more communication between subsystems.<sup>44(pp.37-38)</sup>

Psychic claimants would be likely candidates with whom to test Hartmann's "continuity hypothesis" because of their familiarity with their own alterations in consciousness, and the likelihood that many of them are functioning toward the thin-boundaried end of the continuum even while awake. This has implications for problem-solving activity, as some people may regularly engage in thick boundaried problem-solving while others produce solutions that emerge from dreams, hypnagogic and hypnopompic imagery, reverie, and other thin-boundaried conditions.

**S**ome of the psychic claimants who participated in this study appear to be candidates for Wickramasekera's "high risk" group on the basis of their tendency to "score thin" and their pronounced dissociative capacities. This tendency was especially marked among those claimants who identified themselves as "channelers" who, as a group, attained significant relationships between tooth grinding and both the DES and the BQ, as well as between the BQ and frequency of nightmares. In terms of Wickramasekera's model, these individuals would be considered more prone to somatization than those with other self-descriptions.

Notwithstanding this, "channeling" capacities need not be conceptualized as negative or pathological.<sup>45</sup> There are regimens for healthy living that emphasize appropriate coping skills and social support systems.<sup>46,47(pp.321-323),50</sup> If these recommendations are heeded, the "hypersensitivity" of "at risk" individuals can be mobilized, redirected, and become an asset rather than a liability.<sup>7-9,11</sup> These authors are concerned with enhancing a person's "balance," a goal that is common among indigenous healing traditions.<sup>49</sup> Indeed, it has been our observations that tribal shamans often reach advanced ages, maintaining their purported psychic and healing powers well into old age. The Mazatec shaman,

Maria Sabina, was in her 90s when she died while the Huichol shaman, don Jose Rios, died at the estimated age of 110.<sup>50</sup>

It is ironic that psychic claimants who purport to specialize in anomalous healing and other anomalous capacities often develop serious illnesses themselves. This study suggests that their capacity for dissociative experiences and their thin psychological boundaries often place them in a “high risk” category for somatic ailments. It also indicates that these problems are not inevitable because of the plethora of literature that details methods of prevention, self-regulation, and health maintenance.<sup>51</sup>

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## Appendix I SUPPLEMENTAL DATA SHEET

My name (or code):

My gender:

My age (optional):

My marital status: ( ) single; ( ) married; ( ) divorced; ( ) separated; ( ) not married but living with a significant other

Hours sleep on an average night:

Number of dreams remembered per month:

Number of nightmares remembered per year:

Number of sleepwalking incidents remembered per year:

Number of tooth grinding incidents remembered per year:

Number of night terrors (waking up screaming and terrified without remembering a dream) per year:

Number of other unusual events at night (e.g., out-of-body experiences, spirit visitations) per year:

Current or recent job, career, or vocation:

Education: ( ) some high school; ( ) high school graduate; ( ) some college; ( ) college graduate; ( ) some graduate education; ( ) graduate degree (e.g., M.A., M.S.W., Ed.D., Ph.D., Psy.D).

Using the same scoring system as you utilized for the test of this questionnaire, please respond to these items:

- |    |                                     |   |   |   |   |   |
|----|-------------------------------------|---|---|---|---|---|
| a. | The term "psychic" applies to me.   | 0 | 1 | 2 | 3 | 4 |
| b. | The term "healer" applies to me.    | 0 | 1 | 2 | 3 | 4 |
| c. | The word "channeler" applies to me. | 0 | 1 | 2 | 3 | 4 |
| d. | The word "intuitive" applies to me. | 0 | 1 | 2 | 3 | 4 |

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