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# MIRROR-GAZING FACILITY AND PSI: EXAMINING PERSONALITY MEASURES

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#### ABSTRACT

There are many points of comparison between psychomanteum experiences and accounts of hypnagogic/hypnopompic imagery, which might suggest that both could be conducive to ESP. In this paper we report on our attempts to study personality variables, as measured by the NEO-PI-R, with a group of individuals recruited to participate in psychomanteum ESP testing at the Instituto de Psicologia Paranormal in Buenos Aires. The sample included 128 participants, of whom 91 (72%) were female and 37 (28%) were male (mean age = 47.25; SD = 12.02). Our prediction of a positive correlation between the index of prior psi experiences and Extraversion was confirmed. However, our prediction of a positive correlation between the Psi index (count of paranormal experiences) and Openness to experience was not confirmed, except the facet Feelings (Openness), that is Openness to inner feelings and emotions. An inspection of the comparisons found between psi/psychomanteum performance and personality aspects did not confirm the trends found in previous work on the relation between personality and performance at an experimental psi task.

#### INTRODUCTION

The mirro-gazing procedure termed 'psychomanteum' was developed by Dr Raymond Moody to facilitate reunion experiences with deceased individuals, as a means of addressing the feelings surrounding bereavement. In recent years, a number of researchers have employed psychomanteum chambers to try to facilitate reunions between participants and their deceased loved ones (Archangel, 1994, 1997; Hastings, 1999; Moody, 1994; Moody with Perry, 1993; Radin & Rebman, 1996; Roll & Braun, 1995; Moody & Archangel, 2001). Previous research suggests that mirror-gazing is efficacious for the facilitation of anomalous experiences, such as apparitional experiences. Radin (2001) noted at least five possible hypotheses about the psychomanteum; one of these is the telepathic hypothesis, which suggests that intense telepathic rapport may affect brain functioning, causing the telepathic communication to be perceived as though it was projected from outside the body. Sometimes this may take the form of a sender's image, as is often reported in cases of crisis telepathy (Gauld, 1977; Parra, 2006). Other hypotheses are neurological, perceptual, psychokinetic and the ghost hypothesis.

One possible explanation for psychomanteum apparitional experiences is that they encourage hypnagogic-like imagery whose content may be strongly influenced by the needs, motivations and expectations of the participants. Hypnagogic/hypnopompic imagery is what occurs during the transition states between sleep and wakefulness, and it can be brought about through mild sensory deprivation or habituation (Mavromatis, 1987; Schacter, 1976; Sherwood, 1997). There are many similarities and differences between psychomanteum experiences and accounts of hypnagogic/hypnopompic imagery (Sherwood, 2000), and the latter has already been claimed to be psi-conducive

(Braud, 1978; Honorton, 1974). However psychomanteum experiences might offer an even more conducive environment for investigating psi than other hypnagogic experiences, because the method is more interactive, more emotional and potentially has more of an impact on the participants.

Archangel (1997) concluded that personality types influence the likelihood of facilitated reunions and other paranormal encounters. In her study, 58 participants reported discarnate visits and 10 did not, with 96% of Intuitive/ Feeling personality types reporting an after-death contact, as measured with the Myers–Briggs Type Indicator (MBTI). Roll (2004) attempted to extend Moody's findings by exploring psychological factors related to these experiences. Forty-one participants completed three questionnaires before the workshop, among them the Psi Experiences Questionnaire (PEQ) and the Inventory of Childhood Memories and Imaginings (ICMI). Roll found that nine of the participants (22%) reported strong reunion experiences. A positive relationship was found between reunion experiences during the workshop and reports of prior contact with the departed, as reported on the PEQ.

Terhune and Smith (2006) tested the hypothesis that the incidence of such experiences is a function of the demand characteristics of the procedure. Individuals who were given suggestions for anomalous experiences, relative to those who were not, reported a greater number of visual, and a suggestively greater number of vocal, hallucinations. The experience of a descriptively dissociative phenomenological state during the psychomanteum experiment was the strongest predictor of the reporting of anomalous experiences, but only correlated with the experience of anomalous perceptions in the suggestion condition. Experients of visual apparitions were found to differ significantly from non-experients in their preference for a visual cognitive style independently of condition.

Although the modern psychomanteum is not normally employed to seek ESP information, it may be that the mirror-gazing technique is psi-conducive. For example, we previously explored whether the psychomanteum encourages a psi-conducive state of consciousness (Parra & Villanueva, 2006). One hundred and thirty participants underwent two conditions, psychomanteum and non-psychomanteum ('control') condition. A CD-pool of 200 high-quality colour pictures were used as psi target. Under psychomanteum condition, psi-hitting was obtained (28.6% compared with an MCE of 25%); however, under the control condition, 26.2% was obtained. The small difference in hit rates between the psychomanteum and control conditions was significant (p = 0.02, one-tailed). A number of positive correlations were also found; for instance, participants who attained higher scores on auditory and visual hallucinations tended to demonstrate better psi-hitting (Parra & Villanueva, 2010).

#### Personality, Psi and Free-Response Tests

In recent decades there have been many questionnaire studies that have attempted to relate spontaneous parapsychological experiences to a variety of psychological variables. Some have studied ESP claims and a variety of personality and cognitive variables as correlates of parapsychological experiences (e.g. Alvarado & Zingrone, 1997; Irwin, 1985; Nelson, 1989; Zingrone, Alvarado & Dalton, 1998–99).

Many studies also have explored the relation between the personality of a subject and his or her performance in a laboratory psi experiment (Kanthamani & Rao, 1972). In a review article, Palmer (1977) argued that the positive correlation between extraversion and psi scores was well-established, while a negative correlation between neuroticism and psi scores was visible but less apparent. A meta-analysis confirmed the extraversion finding (Honorton, Ferrari & Bem, 1992). The average correlation for all experiments in this meta-analysis was +0.20).

These findings are discussed within the context of ganzfeld-psi in Bem and Honorton's well-known (1994) article. Although the correlation between extraversion and ganzfeld psi performance in the auto-ganzfeld study is virtually identical to the one found in the meta-analysis, the authors concluded that the interpretation of this relationship needs further investigation and suggested that researchers use standard measures such as the NEO-PI in future experimental work, since this instrument also measures facets within the five major personality factors which might help to unravel the processes underlying these relations between personality and psi.

In one such study of personality and psi using ganzfeld performance and the NEO-PI-R, van Kampen, Bierman and Wezelman (1994) found that those participants achieving a psi hit (N= 22) scored marginally higher on extraversion (p < 0.05) and agreeableness (p < 0.05) and significantly higher on openness (p < 0.004) than those who produced a miss (N= 54). This strongly suggests that extraversion is effective through the social processes in the experimental situation. They found all facet-scores for the openness factor contributed to the overall effect, but that three facets were independently significant: 'aesthetics', 'feelings' and 'values'.

Given these findings, we were particularly interested in testing for a possible positive correlation between psi scores, frequency of psi experiences and Openness to Experience (OE), as measured by the NEO-PI-R. OE has been considered to contain "active imagination, aesthetic sensitivity, attentiveness to inner feelings, preference for variety, intellectual curiosity and independence of judgement" (Costa & McRae, 1992, p.15). Individuals high on OE "are curious about both inner and outer worlds, and their lives are experientially richer. They are willing to entertain novel ideas and unconventional values, and they experience both positive and negative emotions more keenly than do closed individuals" (Costa & MacRae, 1992, p.15). Palmer (1996) also found a significant positive correlation between OE and a different measure of psi experience. Broughton and Alexander (1997) found a weak positive relationship between facet Activity and psi scores, which is in line with the study of Van Kampen et al. (1994), who found that this facet discriminated between hitters and missers. Van Kampen et al. also found that the Openness facet was the best discriminator for hitting and missing. Zingrone, Alvarado and Dalton (1998–99) confirmed that a number of psi experiences correlated positively with the Openness factor and to the Fantasy facet of the NEO-PI-R. They also found a negative correlation with the Order facet of the Conscientiousness factor suggesting that incidence of psi experiences may be associated to a low level of Order in the experients.

#### Predictions

In this paper we report on our attempts to study personality variables, as measured by the NEO-PI-R (Costa & McRae, 1992), with a group of individuals recruited to participate in psychomanteum ESP testing at the Instituto de Psicologia Paranormal in Buenos Aires. Most of this work was conceived as exploratory, designed to uncover possible relationships to test in subsequent experimental studies. We were particularly interested in testing for a possible positive correlation between psi scores and all factors and facets of the NEO-PI, but were particularly interested in Openness and Extraversion. We predicted that an index of claims of psi experiences would correlate negatively with Neuroticism (emotionally stable), and positively with Openness and Extraversion factor scores.

# METHOD

## *Participants*

The sample included 128 participants, of whom 91 (72%) were female and 37 (28%) were male. Ages ranged from 19 to 75 years (M = 47.25; SD = 12.02). Participants were recruited by announcements in newspapers and magazines and our web site in order to request an admission interview for the psychomanteum session. The participants did not receive information about characteristics related to the hypothesis of the experiment. As a part of the recruiting procedure, participants filled out a consent form. A member of the laboratory personnel acted as their sender.

# Psychomanteum Chamber

The psychomanteum room is a space of 4 metres square with a 2.35m ceiling. The chamber itself is built within this larger room, with dimensions of  $1.83 \text{ m} \times 2.44 \text{ m}$  with a 2.44m ceiling, and it has no windows; the ceiling and two walls faced the outside (i.e. had no common walls with other rooms). It is located above a storage room. To help create an isolated, undisturbed setting, the selected chamber room is in a remote, second floor area of our laboratory building at the Institute of Paranormal Psychology in Buenos Aires. The walls and ceiling of the lab are painted matt black to reduce light reflections. The chamber itself is electromagnetically shielded.

The walls of the psychomanteum chamber were constructed out of 2-inch  $\times$  4-inch wood studs, <sup>5</sup>/8-inch wood studs, <sup>5</sup>/8-inch wallboard, and R11 fibreglass insulation. To form a rudimentary electromagnetic shield inside the chamber, the floor, walls and ceiling are completely covered with aluminum insulation, and then checked throughout for electrical continuity. The insulation consisted of a sheet of <sup>1</sup>/16, 99% pure aluminum, a quarter-inch air spacing consisting of plastic bubblewrap, and then another sheet of <sup>1</sup>/16 aluminum. The walls and ceiling of the chamber are covered by black velveteen fabric to create a dark, featureless interior, and the floor is covered with a black carpet.

A reclining chair and a wall mirror (1m<sup>2</sup>) were brought inside the chamber and positioned for optimum comfort and viewing angles. Because the chamber is essentially a darkroom, a dim incandescent articulated lamp was placed behind the reclining chair, facing down, to provide some illumination so that

the participant could see the mirror. A dimmer control for this lamp can be operated outside the chamber to adjust illumination levels.

# Target Pool

AP constructed a pool of aproximately 200 attractive pictures arranged into groups by topic such that pictures in each subgroup were numbered from 1 onward. A collaborator, JV, who had no contact with the participants and the sender and almost none with the experimenter, used digits from a RAND Corporation table (1955) to select, separately and sequentially, pictures within subgroups. After this, AP delivered to JV the CD with the pictures re-clustered and divided by groups, who then selected randomly one picture (as target) and after that three decoys. The picture target came from different subgroups (for example, a horse from the subgroup *animals*, a baby sleeping with his mother from the subgroup *people*, a church from the subgroup *religion*, and Popeye and Olive from the subgroup *humoristic cartoons*).

# Questionnaires

Neo Personality Inventory Revised (NEO-PI-R; Costa & McRae, 1992). This was designed to provide a general description of normal personality relevant to clinical, counseling and educational situations. We use the Spanish standarized version of the inventory and its Argentine version. Based on the Five-Factor model of personality, the NEO-PI-R comprises 243 items; the 240 facet and domain items are rated on a 5-point scale (3 validity items are also included). NEO-PI-R items and materials were designed to be easily read and understood. The five domains (factors) measured by the NEO-PI-R provide a general description of personality, while the facet scales allow more detailed analysis. These five factors and their facet scales include: Neuroticism (anxiety, hostility, depression, self-consciousness, impulsiveness, vulnerability), Extraversion (warmth, gregariousness, assertiveness, activity, excitement-seeking, positive emotions), Openness to Experience (fantasy, aesthetics, feelings, actions, ideas, values), Agreeableness (trust, modesty, compliance, altruism, straightforwardness, tender-mindedness), Conscientiousness (competence, selfdiscipline, achievement-striving, dutifulness, order, deliberation). Form S is designed for self-reports. This may be used to supplement self-reports or as an alternative. Internal consistency coefficients range from 0.86 to 0.95 for domain scales (Costa & McRae, 1992), and from 0.56 to 0.90 for facet scales. Stability coefficients ranging from 0.51 to 0.83 have been found in three-year, six-year, and seven-year longitudinal studies of the original NEO-PI factors (Costa & McRae, 1992). The NEO-PI-R has been validated against other personality inventories and projective techniques. The test may usually be completed within 45 minutes.

The Participant Questionnaire. Used to collect general information about the participants' background, demographics (gender and age) and psi experiences, such as telepathy (e.g. "Have you experienced physical sensations of another person at a distance?"), clairvoyance (e.g. "Have you had, while being in a house or any other place, the vivid impression of picking up mentally an event that occurred there, without having previously any knowledge or sign that would permit you to deduce something about that event?"), and 'token

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object' effect experiences (e.g. "Have you had, when in contact with some object, vivid impresions about that object—or about its owner—without having previous knowledge or without any indication that would permit you to deduce something about such an object?" and "Have you had the experience of seeing the photograph of a person not present at that moment and to have vivid impressions about him or her, without previous knowledge or any signs that would permit you to deduce something about that person?"). The PQ comprises 5 items rated on a 4-point scale (Never, Once, Sometimes, Frequently).

# Participant's Testing Procedure

Participants received an information pack before the session. This included a four-item previous psi experience questionnaire designed by the authors. General information on the research program was also delivered. AP greeted participants at the door when they arrived and attempted to create a friendly and informal social atmosphere. AP engaged in conversation with the participants before the session. The experimenters sought to encourage a positive mood in participants during the selection of the target picture.

In the psychomanteum condition, participants underwent a 9-minute recorded relaxation exercise before the target-viewing period, which included autogenic phrases (Jacobson, 1974). This was recorded using the voice of one of the experimenters (AP). The participant was positioned in the reclining chair directly in front of a wall mirror. The instructions and relaxation exercises were delivered in a slow, soothing but confident manner with classical music (Antonio Vivaldi's *Double Concerto*, Largo G Minor) in the background. The auditory stimulation was given by a 33-minute white-noise CD, generated for this experiment. In the control condition, the experimenter instructed the participant to "remain with eyes closed, quiet, waiting for mental impressions for a twenty-three-minute period". Participants were free to choose a relaxation technique. Music and white noise were not used.

The experimenter left the room once the experiment began and returned when the target viewing period ended. The experimenter remained silent in Room B, and timed the session period using a chronometer. The participant stayed in the session room and the experimenter indicated the target-viewing period twice to the sender using a caller (i.e. beeper). The target picture remained on the computer screen for twenty-three minutes.

The receiver did not provide an ongoing mentation during the sending period, but rather each participant was asked to verbalize his or her mental impressions (i.e. mentation) as much as possible after he or she exited the psychomanteum. Many participants felt better speaking after, rather than during, the time they were in the psychomanteum (see Moody & Archangel, 2001).

Mentations were tape-recorded by the experimenter. As participants did not have to verbalize during the session, the collection of mentation was easier as it could be transcribed directly from the tape recording (see Parra & Villanueva, 2006, for details). Immediately after the psychomanteum session, each participant was asked to verbalize his or her impressions as much as possible. They were audio-taped by the experimenter.

## Sender's Procedure

The target was selected once the experimenter (AP) and participant were in the psychomanteum room, and the three decoys were selected before AP and the subject came to the sender's room. During all of this procedure, the sender remained alone in his room. The sender's room is approximately 100ft from the receiver's room, and this distance as well as the building construction prevents communication—whether intentional or not—between sender and receiver.

## Judgement Procedure

Both experimenter and participant then went into the sender's room, where the participant was seated in front of the computer screen to complete the judging procedure. Participants viewed the four potential targets (the actual target and three decoys) presented in random order on the computer screen. The alternatives were rank ordered according to their perceived similarities to impressions experienced in the psychomanteum, with a rank of 1 representing the highest correspondence and 4 representing the lowest correspondence. The judgement procedure lasted between five and ten minutes depending on the participant. Record sheets were individually signed by each participant.

#### RESULTS

The aim of the Parra and Villanueva (2006) study was to explore whether the psychomanteum technique is a psi-conducive state of consciousness. The *Z*score test was used to determine if there were significant differences between psychomanteum and non-psychomanteum conditions (see Parra & Villanueva, 2006, for details). It was hypothesized that this experiment would offer support in a positive direction for the psychomanteum condition. In the psychomanteum condition (N = 128), 40 hits (30.5%) were obtained, where  $P_{MCE} = 25\%$  (Binomial Exact z = 1.33, p = 0.09). Although this hit rate only nears significance, under the non-psychomanteum (control) condition, the hit rate was lower and not significant, 38 hits (29.2%; z = 0.92, p = 0.179).

Table 1 gives *t*-test analyses comparing the scores on the personality factors of those who scored hits (participants who ranked the target in first place) and missers (participants who did not rank the target in first place). We can see from this that hitters and missers could not be discriminated on the basis of any of these measures.

# The Psi Index

We constructed an index, or count, of psi experiences (called the Psi Index) for each subject based on the frequency of prior psi experiences. The Psi Index had a range from Never (no experiences reported), Once, Sometimes, and Frequently. This index was correlated with the factors and facets of the NEO-PI-R. The Psi Index had a mean of 2.89 (N = 128, SD = 1.63). The mean Psi Index of females (N = 91, M = 2.87, SD = 1.55), was slightly lower than the mean Psi Index for male participants (N = 37, M = 2.96, SD = 1.66).

# Table 1

NEO-PI-R	Group*	Mean	SD	t	p
NEUROTICISM	missers hitters	80.47 82.58	22.37 23.18	-0.40	0.6
	missers	14.74	5.42		
Anxiety	hitters	14.74 16.00	5.42 5.01	1.06	0.2
		12.56	5.43		
Hostility Depression	missers hitters	12.56	5.43 5.55	-0.31 -0.71	0.7 0.4
	missers hitters	$11.88 \\ 12.79$	$5.54 \\ 5.56$		
Self-consciousness	missers	$13.94 \\ 14.26$	4.41	-0.29	0.7
	hitters		4.84		0.1
Impulsiveness	missers	16.35	4.67	0.07	0.9
	hitters	16.28	4.46	0.01	
Vulnerability	missers	10.71	3.98	-0.10	0.9
	hitters	10.81	4.85	0.10	
EXTRAVERSION	missers	108.65	13.96	0.43	0.6
EXTRAVERSION	hitters	106.98	18.69		
Warmth	missers	21.85	4.15	0.78	0.4
warmin	hitters	21.02	4.98		
Gregariousness	missers	15.47	4.86	0.70	0.4
	hitters	14.58	5.93		
Assertiveness	missers	15.85	3.66	-0.81	0.4
	hitters	16.67	4.91		
<b>A</b>	missers	19.12	3.80	0.83	0.4
Activity	hitters	18.35	4.15		
	missers	15.21	4.16	0.34	0.7
Excitement-seeking	hitters	14.81	5.42		
Positive emotions	missers	21.35	4.65	-0.30	0.7
	hitters	21.67	4.51		
OPENNESS	missers	125.21	20.98		
	hitters	123.02	15.75	0.52	0.6
	missers	21.50	5.14	1.06	0.2
Fantasy	hitters	20.12	6.05		
	missers	23.21	4.33	0.47	0.6
Aesthetics	hitters	22.70	4.91		
	missers	21.76	3.30	1.20	0.2
Feelings	hitters	20.72	4.12		
Actions	missers	18.68	3.16	0.84	0.4
	hitters	18.08	3.10		
	missers	21.15		1.05	0.29
Ideas	missers	21.13	4.62		

Means, SDs Differences Between Psi Hitters and Psi Missers of the Five NEO-PI-R Facets

Values	missers	21.68	2.94	0.00	0.07
values	hitters	21.72	3.34	-0.06	0.95
AGREEABLENESS	missers	123.79	17.65	0.04	0.00
AGREEADLEINESS	hitters	123.65	13.94	0.04	0.96
Truct	missers	19.91	4.52	0.00	0.00
Trust	hitters	19.67	4.72	0.22	0.82
Madaatu	missers	19.35	4.55	0.07	0 70
Modesty	hitters	19.65	4.79	-0.27	0.78
Compliance	missers	23.00	3.87	0.71	0.40
Compliance	hitters	23.60	3.52	-0.71	0.47
Altruism	missers	19.18	5.12		0.77
Altruisii	hitters	18.81	5.36	0.30	0.70
	missers	19.03	3.36		
Straightforwardness	hitters	18.33	3.82	0.84	0.40
Tandan mindadaaaa	missers	23.24	3.43		
Tender mindedness	hitters	23.53	2.95	-0.41	0.68
CONCLEMENTIOUSNESS	missers	117.32	17.64		
CONSCIENTIOUSNESS	hitters	116.67	17.57	0.16	0.87
Commister of	missers	19.65	3.62		
Competence	hitters	20.14	3.45	-0.60	0.54
Salf dissipling	missers	17.24	4.00	-0.52	0.60
Self-discipline	hitters	17.74	4.46		
	missers	22.50	3.94		
Achievement striving	hitters	22.60	3.83	-0.11	0.90
	missers	21.06	4.24	0.07	0.01
Dutifulness	hitters	21.30	4.57	-0.23	0.81
	missers	19.71	5.00		
Onden	modero			0.24	0.80
Order	hitters	19.42	5.15	0.24	0.00
Order Deliberation		19.42 17.44	5.15 4.11	0.24	0.61

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\* Missers N = 34 Hitters N = 43

# Psi Experiences and the Five Factors of Personality

Table 2 contains the Pearson correlations between the five factors (and individual facets) of the NEO-PI-R and the Psi Index. Our prediction of a positive correlation between the Index and Extraversion was confirmed (r = 0.16, p = 0.04, one-tailed), as well as the facet Assertiveness (r = 0.29, p = 0.001, one-tailed) on the Extraversion factor. However, our prediction of a positive correlation between the Psi index and Openness to Experience was not confirmed, except the facet Feelings (r = 0.16, p = 0.03, one-tailed). In addition, we obtained a significant negative correlation of the Neuroticism factor and the facets Depression (r = 0.25, p = 0.001), Self-Consciousness (r = 21, p = 0.007), Vulnerability (r = 0.21, p = 0.04) on the Neuroticism factor. None of the other analyses of factor scores, however, were significant. A significant positive correlation with the facet Competence (r = 0.18, p = 02, two-tailed) and Dutifulness (r = 0.19, p = 01, two-tailed) on the Conscientiousness factor was also found.

# Table 2

Pearson Correlations Between the Five Facets of the NEO-PI-R and the Psi Index\*

NEO PI R	r <sup>1</sup>	р
NEUROTICISM	-0.20	0.01
Anxiety	-0.14	0.07
Hostility	-0.13	0.10
Depression	-0.25	0.001
Self-consciousness	-0.21	0.007
Impulsiveness	-0.14	0.06
Vulnerability	-0.21	0.009
EXTRAVERSION	0.16	0.04
Warmth	0.03	0.70
Gregariousness	0.05	0.50
Assertiveness	0.29	< 0.001
Activity	0.13	0.10
Excitement-seeking	-0.02	0.80
Positive emotions	0.12	0.11
OPENNESS	0.04	0.55
Fantasy	-0.08	0.31
Aesthetics	0.08	0.31
Feelings	0.16	0.03
Actions	0.07	0.36
Ideas	0.04	0.55
Values	-0.01	0.86
AGREEABLENESS	0.01	0.82
Trust	0.05	0.50
Modesty	-0.03	0.70
Compliance	0.10	0.20
Altruism	0.05	0.46
Straightforwardness	-0.04	0.61
Tender mindedness	0.02	0.72
CONSCIENTIOUSNESS	0.14	0.08
Competence	0.18	0.02
Self-discipline	0.05	0.49
Achievement striving	0.02	0.74
Dutifulness	0.19	0.01
Order	0.10	0.21
Deliberation	0.14	0.06

<sup>1</sup> All correlations two-tailed.

\* Range: No experience = 0 to Frequently = 4

#### DISCUSSION

An inspection of the comparisons found between psi/psychomanteum performance and personality aspects does not confirm the trends found in previous work on the relation between personality and performance at an experimental psi task (van Kampen et al., 1994; Zingrone et al., 1998–99). In other words, there was no evidence that the NEO-PI-R domains and facets bore any systematic relationship to psi scoring. It may be, however, that our sample was insufficiently representative because it involved screening for having experienced parapsychological phenomena and having a positive belief in the existence of ESP and similar phenomena (psychomanteum practitioners), and this could have adversely affected any underlying correlations by reducing variance.

Our prediction of a positive correlation between the index of prior psi experiences and Extraversion was confirmed. According to Costa and McRae (1992), "extraverts are characterized by positive emotions, surgency, and the tendency to seek out stimulation and the company of others, and they enjoy being with people, and are often perceived as full of energy. They also tend to be enthusiastic, action-oriented individuals." Probably, people who have more psi experiences or are willing to report them are affectionate, friendly and intimate in terms of their anomalous/paranormal experiences. They usually also have cheerful, optimistic outlooks on life in general, which might lead them to be less reticent in reporting psi experiences. However, our prediction of a positive correlation between the Psi Index and Openness to Experience was not confirmed, except the Openness facet of Feelings; that is, Openness to inner feelings and emotions.

We found a correlation between the Psi Index and the Neuroticism factor and almost all of the E facets, such as Depression, Self-Consciousness, Vulnerability, indicating low tendency to experience feelings of susceptibility to stress. This significantly negative correlation suggested to us that incidence of psi experiences may be associated to a low level of Neuroticism in the experients in this study. According to Costa and McRae (1992), individuals who score low in neuroticism are less easily upset and are less emotionally reactive; they tend to be calm, emotionally stable, and free from persistent negative feelings" (p. 18). This relationship between low neuroticism and psi scoring conceptually replicates the findings of the series of DMT-ESP studies (Watt & Morris, 1995), and adds support to the line of reasoning that initially stimulated studies of defensiveness and psi, which suggests that common factors may operate on unconscious processing of weak information, whether that information is 'extrasensory' or 'sensory' in origin.

An unexpected outcome we found us was the correlation between the Psi Index and the facets Competence and Dutifulness on the Conscientiousness factor; that is, indicating belief in one's own self-efficacy and emphasis placed on importance of fulfilling moral obligations, and the facet Assertiveness on the Extraversion factor, that is, social ascendancy and forcefulness of expression. In general terms, people with high Conscientiousness and high Assertiveness feel capable and effective, they are well-organized, neat and tidy; an observation also made by Alvarado, Zingrone and Dalton (1998–99).

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This relationship between lower scores on the Neuroticism (Depression, Self-Consciousness, Vulnerability facets of the NEO-PI-R) and high scores on the Psi Index may mean that persons who are more relaxed in their daily lives have more psi experiences or are willing to report more psi experiences than those persons who are easily affected by the surrounding atmosphere, get worried easily, are quick to anger, and easily discouraged. They often feel uneasy and embarrassed and they have difficulty resisting temptation and coping with stress. Probably, people who have more psi experiences or are willing to report them have stable moods; they often appear calm and relaxed, they are able to cope with stress around them and thus it takes more to discourage and embarrass them.

What is needed to examine fully the relevant variables in more powerful and statistically appropriate ways in a much larger data set with a sufficient ratio of N to variables to perform multiple regressions, factor analyses and other higher-order statistical tests. At this point it is our hope that active laboratories will follow our lead and analyse their participant-specific data much more fully. We would be pleased to assist with such analyses if researchers were willing to make their data available to us.

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