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Thinking Styles of Psychic Claimants

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Abstract. A number of papers have investigated the idea of rational versus intuitive thinking and how this might relate to paranormal beliefs. Those who possess both intuitive and rational thinking styles are more likely to report paranormal experiences and subjective paranormal ability than those who express either intuitive or rational thinking. The purpose of the present study was to investigate the differences between psychic claimants (N = 49) and non-psychic claimants (N = 45) on such personality factors as Global Constructive Thinking, Emotional Coping, Behavioural Coping, and Esoteric Thinking. The sample consisted of 94 participants, all of whom believed in psi. Participants completed the Constructive Thinking Inventory and the Anomalous Experiences Inventory. The psychic claimants group had significantly higher scores on 12 out of 23 factors/facets which could not all be explained by chance. Compared to non-psychic claimants, the psychic claimants tend to have more positive attitudes; their thinking is action-oriented; they are good behavioural copers; they think in ways that promote effective action; and they are more accepting of others. At the same time, they are more rigid in their thinking than non-psychic claimants.

Keywords: Anomalous Experiences Inventory, behavioural coping, categorical thinking, Constructive Thinking Inventory, emotional coping, paranormal belief

INTRODUCTION

Thinking styles have been the subject of hundreds of research projects studying the links between personality type and different aspects of life. According to Sternberg (1997), a thinking style is not an aptitude, but rather the way one chooses to use one's aptitudes. Thinking style refers to what people prefer to do, and how they like to do it. Observing that IQ tests tend to be poor predictors of people's capacity to solve everyday practical problems or successfully negotiate major life events, Epstein and Meier (1989) began to explore a nonintellectual form of intelligence unrelated to

IQ (Epstein & Meier, 1989). They identified a nonintellectual cognitive ability which they termed constructive thinking (CT). CT is defined as a person's "ability to think in a manner that solves everyday life problems at a minimal cost in stress" (Katz & Epstein, 1991, p. 789). More specifically, CT is a form of experiential intelligence—that is, common sense information that is acquired through experience and reflects the ability to deal with problems effectively through the use of different thinking styles and behavioural and emotional coping strategies (Epstein & Meier, 1989). Epstein and his colleagues view constructive thinking as an aspect of practical intelligence and general coping ability (Epstein, 1992; Epstein & Meier, 1989) which, while distinct from measures of neuroticism (Katz & Epstein, 1991), is predictive of how productive persons become while managing stress in their lives (Epstein & Katz, 1992). CT has accurately predicted success in a variety of life domains (e.g., school, work, and interpersonal relationships) and could help to explain the relationship between personality and subjective well-being (Epstein & Meier, 1989).

A number of papers have investigated the idea of rational versus intuitive thinking and how this might relate to paranormal beliefs (e.g., Irwin & Young, 2001). In support of a relationship between intuitive thinking and paranormal beliefs, Aarnio and Lindeman (2005) found that higher intuition and lower analytical thinking contributed to higher belief, more so in women than in men. They also found that superstitious individuals accepted more violations of core ontological distinctions than skeptics did, and that ontological confusions discriminated believers from skeptics better than intuitive thinking, analytical thinking, or emotional instability (Lindeman & Aarnio, 2007). The paranormal beliefs of teachers were found to be correlated with cognitive perceptual and disorganized schizotypal thinking and intuitive thinking styles. The overall pattern of the correlations suggests intuitive thinking style and schizotypal thinking independently to paranormal belief, confirming the findings of Wolfradt, Oubaid, Straube, Bischoff, and Mischo (1999) that a statistically significant difference in paranormal belief exists between groups characterized by distinct thinking styles, although the size of the effect was small.

Wolfradt et al. (1999) also found that those who possessed both intuitive and rational thinking styles were more likely to report paranormal beliefs, paranormal experiences, and subjective paranormal ability than were those who expressed either intuitive thinking only, or rational thinking only. Correlational analyses also showed that anomalous experiences were closely related to schizotypal traits and thinking styles. Participants with a complementary thinking style tended to have higher scores on anomalous experiences and cognitive-perceptual aspects of schizotypy and self-efficacy. Intuitive thinkers scored highest on interpersonal aspects of schizotypy and interpersonal intolerance of ambiguity (Wolfradt et al., 1999).

However, Irwin and Young (2001) did not find the same patterns in their study. They also noted that Wolfradt et al. failed to replicate their 1999 results in a follow-up study. In fact, Irwin and Young found that paranormal beliefs were more related to an intuitive thinking style on its own—that is, not in concert with a rational thinking style, as Wolfradt et al., 1999, found. Nevertheless, there was a trend toward a relationship between a combination of rational and intuitive thinking and New Age beliefs. These later studies did not address paranormal experiences, which should be investigated with regard to the combination pattern. Lindeman (1998) proposed that paranormal and other "pseudoscientific" beliefs are associated with a tendency to prefer the intuitive experiential style of reasoning. Some evidence bearing on this speculation has been reiterated by Wolfradt and colleagues.

Unfortunately, there are too few studies on constructive thinking in psychics. We decided to perform exploratory analyses of the relationship between claims in our dataset of extrasensory experiences and measures of constructive thinking. According to some studies (Aarnio & Lindeman, 2005: Genovese, 2005: Lindeman & Aarnio, 2007; Wolfradt, et al., 1999), high intuitive thinking and low analytical thinking predict paranormal belief. Of these, reliance on intuitive thinking played a much more important role than did low analytical thinking (Epstein, 1994; Evans, 2003; Sloman, 1996). It appeared, moreover, that people who rely on intuitive thinking are more superstitious than non-intuitive thinkers (Epstein et al., 1996; Wolfradt et al., 1999). The notion that paranormal belief, magical thinking, and superstitions belong to the realm of intuition, whereas logical and scientific thinking belong to the realm of analytical reasoning, helps explain why rational knowledge or scientific education does not necessarily diminish these beliefs and why the relationship between paranormal belief and analytical thinking found in earlier studies (Blackmore, 1997; Wolfradt et al., 1999) is weak or non-existent. Therefore, our study will focus more on individual differences in profiles of CT styles in relation to paranormal experiences and abilities rather than on beliefs as such.

Using the Constructive Thinking Inventory (CTI; Epstein & Meier, 1989), we report the test results on personality variables and thinking styles

¹ The variable "New Age Philosophy" relates to a two-factor model of paranormal belief derived from Rasch-scaling analyses of Tobacyk's (1988) Revised Paranormal Belief Scale. It is a set of beliefs that seem too consistently different in content and psychological purpose than traditional PB (see Lange & Houran, 2010; Lange, Irwin, & Houran, 2000).

² Note, however, that intuition can be understood as a sudden unconscious knowing, and there are several studies that document a very "logical" or systematic causal process for paranormal belief formation involving tolerance of ambiguity (see Lange & Houran, 1998, 1999b, 2000).

of 'psychic claimants' previously recruited for psychometry testing at the Instituto de Psicología Paranormal (Institute of Paranormal Psychology; IPP) in Buenos Aires, Argentina, and 'non-psychic claimants' who believe in paranormal events, but seldom if ever report psi experiences (see Parra & Argibay, 2008).³ We originally tested psychic ability to see if 'psychics' could distinguish between photos of dead people and photos of living people. Results showed that psi-hitting was higher in the 'psychic' group than in the 'non-psychic' group which scored at the level of mean chance expectation. The purpose of the present study was to investigate the differences between groups of psychic claimants and non-psychics claimants (using the AEI's factors 'Experience' and 'Ability') on different thinking styles, such as Global Constructive Thinking (total score), Emotional Coping, Behavioural Coping, and Esoteric Thinking. We make it clear in the present study that no test of psychic ability *per se* was conducted.

METHOD

Participants

One hundred fifty-six participants were recruited by media advertisements and a mailing list. An advertisement was also published on the internet (www.alipsi.com.ar). The advertisements contained a brief explanation of the psi test procedure and encouraged presumptive participants to contact us for an interview in order to obtain more information. Ninety-four remained (60%) for the categorization procedure (see below).

Psychic Claimants. The sample consisted of 49 participants (72% female), well-educated and believed in psi. The age range was 19 to 76 years (mean = 45 years; SD = 11 years). Seventy-eight percent of the participants did have some training in meditation or other techniques based on practicing an internal focus of attention.

³ This paper relies on self-reports on psychic abilities and experiences to distinguish psychics claimants from non-psychic claimants. Therefore, self-reported psychics *believe* they have psychic ability; we do not state that they actually have psychic ability. Thus, the results from this study do not necessarily reveal the thinking styles that characterize people who actually have psychic ability. The results might only reveal thinking styles that characterize people who *believe they* have had psychic experiences and/or *believe they* have psychic ability.

Non-psychic Claimants. The sample consisted of 45 participants (82% female), all of whom were also well-educated and believed in psi. The age range was 22 to 76 years (mean = 49 years; SD = 14 years).

Ouestionnaires

Constructive Thinking Inventory (CTI; Epstein, 1998). The CTI is a 108item self-report inventory that assesses constructive and destructive beliefs and thinking patterns. We used the Spanish version, which includes the 5point Likert-rating scale (Epstein, 2001). It is appropriate for ages 18-80 in individual or group format, and takes 15-30 minutes to administer. The CTI is based on Epstein's Cognitive-Experiential Self-Theory, according to which people have two fundamental adaptive systems—that is, an "experiential system" that automatically learns from lived experience and a "rational/intellectual system" that operates by conscious reasoning (see Epstein with Brodsky, 1993). The items were grouped into the following six main categories: (1) Emotional coping; (2) Behavioural coping; (3) Categorical thinking; (4) Esoteric thinking; (5) Personal superstitious thinking; and (6) Naïve optimism. Since the CTI cannot be hand-scored, a computer scoring program is included with the CTI Introductory Kit. The individual's responses are entered into the software, and the program scores the protocol, automatically generating a report with raw scores and gender with a profile of the results.

Anomalous Experiences Inventory (AEI; Gallagher, Kumar, & Pekala, 1994). We used the American version, which we translated into Spanish. It is a 70-item self-report inventory that maps five major dimensions (or subscales) of subjective experience. The inventory (AEI) contains items concerning anomalous/paranormal experiences and beliefs, use of drugs and alcohol, and fear of the paranormal/anomalous. The AEI subscales showed some convergent validity when correlated with selected personality measures. The AEI's experiences, belief, and abilities subscales correlate significantly with traits related to experience seeking and fantasy proneness. It may be particularly helpful in identifying different types of people for research on psi-related abilities in the laboratory.

Procedure

The participants met during two-hour workshops, free of charge, organized at the IPP. Experimenters A.P. and J.C.A. aimed to create an informal social atmosphere, engaging in friendly conversation with the

participants before the test. Participants completed the Constructive Thinking Inventory (CTI) and Anomalous Experiences Inventory (AEI). After completing the questionnaires the participants took part in a formal psychometry session (see Parra & Argibay, 2008, for results of the psychometry test).

Categorization Procedure

We used the following criteria to split the sample into Psychics Claimants/Non-Psychics Claimants: Participants who scored ≥ 75 (median score) on the factor "Abilities" on the *Anomalous Experiences Inventory* (AEI) were categorised as the Psychic Claimant group (N=45; 28%) (i.e., "I can influence or change an event by concentrating on that event" or "I am able to see auras surrounding peoples' bodies"). Participants who scored ≤ 25 (median score) on the factor "Experiences" (AEI) were categorised as the Non-Psychic Claimants group (N=49; 31%)—that is, people who had fewer spontaneous psi experiences (and, of course, no ability or control over them—that is, "I often seem to become aware of events before they happen," or "I often know what others are feeling or thinking without them telling me"). The "Belief" scale was not used because 100% of the sample were paranormal believers. Sixty-two participants were excluded.

RESULTS

Descriptive statistics are given in Table 1. The two groups were about equal in size, and the actual score ranges were close to the corresponding theoretical ranges. Cronbach Alpha values were mostly high, although the Fear and Use of Drugs and Alcohol values ranged from only .61 to .64. Mean scores were significantly different between groups on Experiences, Abilities, and Beliefs.

Table 2 shows the differences between the psychic claimants and non-psychic claimants on CTI factors and facets. Twelve out of 23 (52%) statistical comparisons were significant. Applying the 5% rule, we would expect no more than 1 of 23 tests to be significant by chance. These 12 are highlighted in bold in Table 2. For these 12 significant findings, effects size differences, given as Cohen's d, are all moderate to high, ranging from .33 to 1.26.

Seven of these 12 (30%) were significant at $p \le .01$, which is still very high if we apply the 5% rule. These seven are: (1) Nonsensitivity facet of the Emotional Coping factor; (2) Behavioural Coping factor; (3) Conscientiousness facet of the Behavioural Coping factor; (4) Categorical Thinking; (5) Distrust of Others facet of the Categorical Thinking factor, (6)

Esoteric Thinking, and (7) Formal Superstitious Thinking facet of the Esoteric Thinking Factor.

Table 1 AEI Factors: Means, *SDs*, Range, and Cronbach's Alpha (α) Levels (N = 94)

Group	AEI	Theorical Range	Actual Range	Mean	SD	Alpha
Psychic	Experiences	.00 to .79	.17 to .79	.52	.13	.71
Claimants $(N = 45)$	Abilities	.00 to .88	.43 to .88	.54	.11	.82
	Beliefs	.42 to .99	.66 to 1.00	.86	.08	.96
	Fear	.00 to .83	.00 to .83	.13	.18	.64
	Use of drugs and alcohol	.00 to .43	.00 to .43	.04	.10	.61
Non-	Experiences	.00 to .79	.00 to .55	.17	.10	.74
Psychic Claimants	Abilities	.00 to .88	.00 to .31	.12	.10	.80
(N = 49)	Beliefs	.42 to .99	.42 to .92	.70	.13	.94
	Fear	.00 to .83	.00 to .67	.13	.15	.64
	Use of drugs and alcohol	.00 to .43	.00 to .43	.06	.10	.62

DISCUSSION

Although these results are encouraging, it is important to keep in mind the low magnitude d values as effect sizes of the scores. People claiming ability or control over psychic experiences somewhat encompass the ability to deal effectively with the inner world of feelings and the outer world of events. According to Epstein (2001):

Good emotional copers are particularly effective in dealing with negative feelings. . . . They are characterized more by peace of mind and low levels of stress than by peaks of joy. Copers are calm and centered, and they experience less stress in living than others. (p. 10)

Psychic claimants seem clearly to be open to inner feelings and emotions. Many psychic claimants seem to act more *empathically* than *telepathically*. Perhaps empathy can function alongside psi, thereby mutually enhancing the strength of these abilities. Healers and other paranormal/anomalous experients (such as psychics and mediums) seem to use emotional empathy and become absorbed in the process, often to the point of feeling that they are "merging" with the clients and sitters.

Constructive Thinking Inventory	Group	Mean	SD	t	p	Cohen's
1. GLOBAL CONSTRUCTIVE THINKING	PC	109.32	9.81	1.85	.06	.49
	Non-PC	104.97	11.12	1.00		.49
2. EMOTIONAL COPING (E)	PC	91.78	11.42	2.07	.04	.43
- 0.1 2	Non-PC	86.26	12.39	2.07	04	.43
3. Self Acceptance (SA)	PC	26.59	3.42	1.31	.19	.28
3454 JACO CO	Non-PC	25.36	4.81			
4. Overgeneralization (ANO)	PC	16.27	2.73	0.61	.54	.50
550 0 1 1 1 1 5 5 5 7 7	Non-PC	15.90	2.69			
5. Nonsensitivity (NS)	PC	26.90	4.21	2.74	.008	.66
11 M 15 2	Non-PC	24.03	5.14			
6. Absence of Dwelling (AOD)	PC	22.02	3.79	1.30	.19	.44
-	Non-PC	20.97	3.39			
7. BEHAVIOURAL COPING (BC)	PC	56.71	5.60	3.46	.001	.80
1-1	Non-PC	52.38	5.55	3.40	.001	
8. Positive Thinking (PT)	PC	15.85	2.26	2,14	.03	.50
	Non-PC	14.62	2.88			
9. Action Orientation (AO)	PC	28.93	3.36	2.17	.03	.33
	Non-PC	27.15	3.91			
10. Conscientiousness (CN)	PC	16.17	2.52	3.45	.001	1.26
	Non-PC	14.44	1.90			
11. SUPERSTITIOUS THINKING (PST)	PC	16.95	3.80	-0.91	26	22
	Non-PC	17.69	3.39		.36	.33
12. CATEGORICAL THINKING (R)	PC	45.88	8.72	2.41		750
	Non-PC	41.56	7.15		.01	.53
13. Polarized Thinking (PD)	PC	18.22	4.96	1.97	.05	.56
	Non-PC	16.31	3.55			
14. Distrust of Others (DOO)	PC	15.41	3.42	3.48	.001	.99
	Non-PC	12.77	3.35			
15. Intolerance (INT)	PC	8.88	2.54	-1.00	.31	.33
	Non-PC	9.44	2.42			
16. ESOTERIC THINKING (ET)	PC	49.68	6.01	3.80	< .001	.90
	Non-PC	44.56	5.64			
17. Belief in the Unusual (BU)	PC	23.73	3.05	2.32	.02	.33
	Non-PC	22.08	3.19	2.32	.02	.33
18. Formal Superstitious Thinking (FST)	PC	25.95	3.62	3.94	< .001	1.00
	Non-PC	22.64	3.88	3.94	100.	1.00
19. NAIVE OPTIMISM (NO)	PC	51.17	7.21	1.45	.15	.46
	Non-PC	48.90	6.78	1.43	.13	.40
20. Over-Optimism (OO)	PC	16.07	3.40	0.70	.48	.39
# 왕 왕	Non-PC	15.59	2.69	0.70	-+0	.39
21. Stereotypical Thinking (ST)	PC	9.29	2,62	0.91	.36	.50
2000 10 10 10 10 10 10 10 10 10 10 10 10	Non-PC	8.77	2.48	0.91	.50	.50
22. Pollyanna-ish Thinking (PO)	PC	25.80	3.42	1.60	.11	.30
	Non-PC	24.54	3.63	1.00	(a11)	.30
23. DEFENSIVENESS (DF)	PC	26.10	3.27	1.00	0.0	
23. DEFENSIVENESS (DF)	PC Non-PC	26.10 24.67	3.27 3.52	1.88	.06	.6

Psychic Claimant group N = 45; Non-Psychic Claimant group N = 49

One interesting outcome was that the psychic claimants also had significantly higher mean scores than did non-psychic claimants on the Behavioural coping factor. According to Epstein (2001):

[Behavioral coping] has a more positive emphasis; it is actionoriented thinking. People who are good behavioral copers think in ways that promote effective action. It allows them to take on challenges and risks, as they have the confidence that things will work out well. Instead of worrying about deadlines, they get right to work; instead of punishing themselves for a mistake, they figure out how to correct it" (pp. 11-12)

Two of three facets, Positive Thinking and Conscientiousness facets, also had significantly higher mean scores than did non-psychic claimants. Optimism is a characteristic of the Positive Thinking facet. Epstein also indicates that conscientious people who are good behavioural copers are more accepting of others, more optimistic, and more action-oriented than those who are good emotional copers. Good emotional copers, on the other hand, are more self-accepting, take things less personally, and are less distressed when things do not go their way. Emotional coping and behavioural coping contribute directly to constructive thinking.

We found that the psychic claimants also had significantly higher mean scores than did non-psychic claimants on the Categorical thinking factor. Psychic claimants are more rigid thinkers than non-psychic claimants. They tend to classify people as good or bad, "for" or "against" them, "winners" or "losers". On two of the three facets, Polarized Thinking and Distrust of Others, the psychic claimants also had significantly higher mean scores than did non-psychic claimants, which implies that psychic claimants tend to be more opinionated in their thinking and also characterized by a distrust of others, and a constant suspicion that people around them think about their psychic abilities.

Finally, on Esoteric thinking, including the facets of Belief in the Unusual and Formal Superstitious Thinking, psychic claimants also had significantly higher mean scores than did non-psychic claimants. According to Epstein (2001):

Superstitious thinking refers to beliefs about unusual and paranormal phenomena and standard superstitions . . . and includes believing in traditional superstitions (breaking a mirror, walking under a ladder, having a black cat cross your path), good-luck charms, astrology, ghosts, extrasensory perception, and mind control. (p. 11)

However, personal superstitious thinking, as used in the CTI, does not refer to traditional superstitions, but to personal superstitions; thus, psychic claimants are not likely to believe that talking about the prospect of success will prevent them from succeeding. Epstein also indicates that Esoteric thinkers believe in ghosts, flying saucers, thought control, and astrology, and that these phenomena can allow them to bypass their rational mind and contact their experiential mind, which in certain circumstances can be advantageous. We stress that our findings at this stage are exploratory, not confirmatory, and it remains to be seen which if these findings are valid, and which are the products of chance.

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