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Transliminality, "Thin" Boundaries and Aura Vision As A Non-Pathological Anomalous Experience



Abstract

According to occult/esoteric literatures, and some New Age thinkers identify the aura as fields which around all living. However, a psychological examination shows that people who reported spontaneous or aura/ energies might tend to have a higher level of imaginative/fantasy activity or fantasy proneness. Three specific hypotheses are tested: People who report seeing "aura" (experients) have a higher capacity for (1) cognitive anomalous experiences (measured by Bell's CAPS), (2) higher transliminality, that is hypersensitivity to psychological material originating in the unconscious and/or the external environment, (3) and thinner boundaries, that is an experient's sensitivity due to permeable ego boundaries related to physiological differences in percep-tual processing, who score differently than control (non--experients). The sample consisted of 212 participants recruited through e-mailing list and interested/students of paranormal and new age topics (Age ranged from 18 to 83, M = 44.69; SD = 13.37). Data were compared on aura experients (n= 97) and non-experients (n= 115). Hypothesis were supported, that is, experients scored higher on anomalous experiences, on transliminality, and on thinner boundaries, and it was found that the transliminality was the best predictor for aura experience. It may well be that some boundaries have not good explanatory value, whilst others are simply relevant for the understanding of spontaneous paranormal experiences, such as aura viewing.

Keywords: Aura, fantasy proneness, anomalous experience, transliminality, thin boundaries

Introduction

Aura is a term used to refer to the normal electromagnetic field-forces surrounding the body, and also as a visual measure of the state of the health of the physical body, as a field subtle, multicoloured, luminous radiations said to surround living bodies as a halo or cocoon (Thalbourne, 2003). According to occult/esoteric literature and some New Age thinkers identify the aura as electromagnetic fields, which around all living and many nonliving objects is purportedly demonstrated through Kirlian photography (Krippner & Rubin, 1974; Lindgren, 1995a, 1995b; Moss, 1979). Many anecdotal observations suggest that 'aura reading' may be relevant to unconventional medical diagnosis, some psychic claimants have also reported aura vision as part of their overall pattern of psychic experiences (e.g., Garrett, 1939; Swann, 1975, pp. 21-22). There are also reports in the literature in which an anomalous 'glow' surrounding a human body was claimed to have been perceived collectively (Alvarado, 1987).

People who reported spontaneous or aura/energies might tend to have a higher level of imaginative/fantasy activity or fantasy-proneness. Parra (2010) predicted that those who reported an aura vision experience would score higher than nonexperients on the imagery (visual and tactile), hallucination (visual and tactile), and fantasy proneness, absorption/dissociation, and cognitive-perceptual schizotypal, which were significantly confirmed except those concerning visual and tactile hallucinations. Parra concluded that persons who "see" auras are likely to have a rich imaginal life. Alvarado and Zingrone (1994) also found that the aura group would claim more vividness of visual imagery and more imaginative and fantasy-related experiences than the control group. In addition, the aura group had a significantly higher frequency of such claims as seeing apparitions, experiencing ESP in dreams, having mystical experiences, out-of body experiences, and seeing with

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eyes closed than did the control group.

Another drawback of assessing perceptual anomalies by extrapolating exclusively from the context of clinical psychiatry is the overreliance on hallucinatory phenomena that occur in the visual and auditory modalities. Likewise, alterations in sensory intensity, rather than the experience of discrete perceptual phenomena, are not normally covered by existing scales. Another legacy of clinical psychiatry is the lack of coverage of perceptual anomalies associated with temporal lobe disturbance, to paranormal beliefs and experiences, as well as to anomalous perceptual phenomena in nonclinical participants (Persinger & Makarec, 1987). Thus, there is a need for a comprehensive scale capable of measuring a range of sensory experience, covering both clinical and nonclinical populations.

Bell, Halligan and Ellis (2006) designed the *Cardiff Anomalous Perceptions Scale* (CAPS) to measure perceptual anomalies. Critically, it is not dependent on the clinical psychiatric context and considers subjective experiences from a range of different perspectives of insight awareness (including knowing that the percept is "not really there," the percept seeming strange or unusual, or the percept being a nonshared sensory experience). Moreover, CAPS includes items pertaining to distortions in perceptual intensity, to experiences in all appropriate sensory modalities, and to sensory experiences traditionally associated with temporal lobe disturbances. Following the usefulness of their inclusion in the PDI (Peters, Joseph, Day, Garety, 2005; Peters, Joseph & Garety, 1995) we also included dimensional ratings to measure associated distress, intrusiveness, and frequency for each experience endorsed.

Thin boundaries refer to a relative connectedness of psychological processes, which is reflected in a thinking style of 'shades of grey'. Transliminality variable reflects "the hypothesised tendency for psychological material to cross thresholds into or out of consciousness" (Thalbourne & Houran, 2000, p. 861). The transliminality construct is comprised of absorption, fantasy proneness, magical ideation, paranormal belief, mystical experience, hyperaesthesia, (a "hypersensitivity to environmental stimulation", Thalbourne, 1998, p. 403). Transliminality hypothesis suggests that the immediate source of our perceptions is not our eyes or our ears, but rather the subliminal consciousness: percepts are first processed at an unconscious level (and sometimes processed extensively), and then, usually speedily, they are presented 'across the threshold' to consciousness (see Thalbourne, 2010). Overall scoring is higher among those who consider themselves to be psychic and those who are working as shamans or psychics (Krippner, Wickramasekera & Tartz, 2001). Sherwood and Milner (2004-2005) also found support for the idea that "the tendency to report psychic experiences might also be a key component of boundary structure" (p.376). The boundary construct is highly valuable in terms of understanding the factors which underpin the varieties of exceptional experiences, such as aura vision. With regard to anomalous expeirences, Thalbourne (1999) has noted that "schizotypy represents what is probably the closest conceptually and empirically to transliminality" (p. 20). Hartmann's (Hartmann et al., 2001) construct of psychological boundaries refers to a continuum of boundary thinness in the mind and brain.

Hypotheses

The novel features of the present study are to compare aura group to a control group on three psychological questionnaires. I think that the study of individual differences in aura experients is important if for no other reason than that it relates a phenomenon traditionally enshrouded in the mystery of occult traditions to more familiar forms of psychological functioning. Three specific hypotheses are tested: People who report aura vision (experients) have a higher capacity for (1) cognitive anomalous experiences (measured by Bell's *CAPS*), (2) higher transliminality, (3) and thinner boundaries (lower scores) who score differently than control (non-experients).

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Participants

The sample consisted of 212 participants, who were all well-educated and believed in psi, recruited through media our e-mailing list and interested/students of paranormal and new age topics. The ages ranged from 18 to 83 (M = 44.69; SD = 13.37). Personal experiences suggestive of paranormal experiences were reported by the majority of the participants, such as having experienced prefeelings (58%), dream recall (50.8%), and OOBE experiences (34.7%), and othe paranormal experiences (38.3%). Participation was voluntary and the they received no pay. An announcement was also placed on a web page (www.alipsi.com.ar). The announcement provided a brief explanation of the test procedure and encouraged people to have an interview with us in order to obtain more information.

Design and Materials

The *Cardiff Anomalous Perception Scale* (CAPS; Bell, Halligan & Ellis, 2006) consists of 32 self-report items designed to assess perceptual anomalies such as changes in levels of sensory intensity, distortion of the external world, sensory flooding and hallucinations. Participants were asked to rate each item using a no (0) and yes (1) format. A higher score indicates a higher number of perceptual anomalies, scores range from 0 (low) to 32 (high). The internal reliability of the CAPS is good, with a Cronbach's alpha coefficient of .87. Test-retest reliability has also been found to be acceptable (Bell, Halligan & Ellis, 2006).

The Revised Transliminality Scale presents 29 true/false items to the participant, just 29 of which are scored in a raw-score to Rasch-score transformation (Thalbourne, 1998). Transliminality has most recently been defined as a hypersensitivity to psychological material originating in (a) the unconscious, and/or (b) the external environment. "Psychological material" is taken to cover ideation, imagery, affect and perception, and thus is a rather broad concept. High transliminality tends to imply (alleged) paranormal experience, mystical experience, creative personality, fleeting manic experience, magical ideation, high absorption, fantasy-proneness, hypersensitivity to sensory stimulation, and positive attitude towards dream interpretation (Houran, Thalbourne & Hartmann, 2003; Lange, Thalbourne, Houran, & Storm, 2000). The Transliminality Scale in one or other of several forms has been administered to a large number of people in a variety of contexts, so that we now have correlations some of which are weak, others moderate, and others strong. In the strong category are three distinct variables: high transliminality is strongly correlated with "thin" boundaries, as measured by Hartmann (1991).

The *Boundary Questionnaire* (BQ) is a 138-item questionnaire including items about many different aspects of boundaries (Hartmann, 1989, 1991; Barbuto & Plummer, 1998, 2000), which is divided into 12 categories: Type of boundary, Sleep/wake/dream, Unusual experiences, Thoughts-feelings-moods, Childhood-adolescent-adulthood, Interpersonal, Opinions about organizations Sensitivity, Neat-exact-precise, Edges-lines -clothing, Opinions about children and others, Opinions about people-nations-groups, and Opinions about beauty and truth. The response format for each question runs from '0' (not at all) to '4' (very much so). Approximately two thirds of the items are phrased so that full endorsement (very much so) indicates a 'thin' boundary, and the remaining items are phrased so that 'very much so' indicates a thick boundary. The BQ has good test-retest reliability over six months (*r*'s of about .77 in two samples and Kunzendorf & Mauerer 1988-89, Funkhauser, Würmle, Comu, & Bahro 2001).

For aura vision experiences, the question was: "I have had the experience of seeing energy fields or lights around the body of a person" (item # 3), inspired by the English version of the *Anomalous/Paranormal Experiences Inventory* (Pekala, Kumar, & Cummings, 1992), and Palmer's (1979) survey of students in Charlottesville, VA. The question tapped two dimensions of experience: frequency (never, once, sometimes, or fre-

Table 1: FREQUENCY AND EMOTIONAL IMPACT AND EXPLANATION OF PEOPLE WHO REPORT AURAS

		Males	Females	Total
		(N= 26)	(N= 71)	(N= 97)
	One time	6 (11.3%)	14 (8.8%)	20
Frequency	Sometimes	18 (34.0%)	44 (27.7%)	62
	Frequently	2 (3.8%)	13 (8.8%)	15
Emotional Impact	Mean and SD ⁽¹⁾	1.20 – 1.84	1.22 – 1.85	1.21 – 1.84

 $^{^{(1)}}$ 0 = negative or unpleasant to 7 = positive or pleasant emotional impact.

Table 2: COMPARISON OF TRANSLIMINALITY, BOUNDARIES AND CAPS SCORES OF EXPERIENTS AND NO-EXPERIENTS

	Groups ⁽¹⁾					
	No Aura Au		ra			
Variables	Mean	SD	Mean	SD	Z	e s
1. Sensory Intensity	1.68	1.46	2.13	1.51	2.16*	.14
2. Nonshared Sensory Experience	1.61	1.30	2.12	1.38	2.67**	.18
3. Distorted Sensory Experience	1.10	1.27	1.23	1.14	1.26	.05
4. Sensory experience from an unexplained source	2.28	1.55	3.06	1.56	3.61** *	.24
5. Distortion of form of own body and of external world	.62	.91	.72	.95	0.88	.05
6. Verbal Hallucinations	.59	.85	.96	.94	3.13**	.20
7. Sensory Flooding	.70	.71	.92	.73	2.14*	.15
8. Hearing Thoughts	.37	.55	.36	.54	0.07	.009
9. Temporal Lobe	1.58	1.10	1.96	1.12	2.38**	.16
CAPS (Total)	10.53	7.27	13.46	7.05	3.00**	.20
1. Sleep/wake/dream	13.67	7.88	14.12	7.70	0.39	.02
2. Unusual experiences	17.78	8.47	21.87	9.00	2.76**	.22
3. Thoughts, feelings, moods	19.86	9.94	23.61	9.31	2.47*	.19
4. Childhood, adolescent, adulthood	9.62	3.77	11.20	3.88	2.59**	.20
5. Interpersonal	22.11	5.29	21.88	3.89	0.20	.02
6. Sensitivity	13.38	3.36	13.52	2.96	0.03	.006
7. Neat, exact, precise	17.31	4.86	17.78	5.33	0.57	.03
8. Edges, lines, clothing	31.62	6.84	32.55	6.47	1.12	.04
9. Opinions about children and others	22.15	4.59	21.20	4.33	1.35	.06
10. Opinions about organizations	21.35	4.78	22.98	4.81	2.20*	.16
11. Opinions about people, nations, groups	27.04	6.56	29.32	5.40	0.35	.04
12 Opinions about beauty and truth	14.91	3.37	15.66	3.77	1.08	.07
13. Paranormal experiences	8.91	5.46	13.54	5.40	5.58** *	.39
Boundaries (Total)	239.56	42.94	259.0 6	37.9 8	3.08**	.23
Transliminality	10.38	5.33	12.60	4.86	2.78**	.21

⁽¹⁾ Aura *n*= 97 No Aura *n*= 115.

^{*} p < .05; ** p < .01; *** p < .001 (adjusted p). Non parametric Mann-Whittney U.

TABLE 3: CORRELATIONS BETWEEN SPIRITUALITY, EMOTIONAL IMPACT, TRANSLIMINALITY, ANOMALOUS EXPERIENCES, BOUNDARIES OF PEOPLE WHO REPORT AURAS

	1	2	3	4	5
1. Spirituality	-				
2. Emotional impact (Aura)	.07	-			
3. Transliminality	19*	25**	-		
4. Anomalous experiences	.08	.24***	59***	-	
5. Boundaries	.22**	.27***	67***	.55***	-

*p < .05; *** p < .01; *** p < .001 (adjusted p)

Hypothesis 1 was that experients would score higher on anomalous experiences (measured by Bell's *CAPS*), which was supported: the mean for experients was significantly higher than for non-experients (see Table 2). Experients also scored higher on Sensory intensity, Nonshared sensory experience, Sensory experience from an unexplained source, Verbal hallucinations, Sensory flooding, and Temporal lobe subescales. Hypothesis 2 was that experients would score higher on transliminality, which was supported: the mean for experients was significantly higher than for non-experients (see Table 2). Experients also scored higher on Unusual experiences, Thoughts-feelings-moods, Childhood-adolescent-adulthood, Opinions about organizations, and Paranormal experiences subscales. Hypothesis 3 was that experients would score high transliminality, which was supported: the mean for experients was significantly lower (toward "thinner") than for non-experients (see Table 2).

As a final post hoc analysis, a number of correlations explored relationship between Transliminality, Anomalous experiences, Boundaries, and also Spirituality and Emotional impact to see auras. I found 8 (80%) out 10 correlations. People who scored thinner boundaries tended to score lower on Spirituality (Rho=.22) and Anomalous experiences (Rho=.55) buth higher on Emotional impact (Rho=.27) and Transliminality (Rho=.67). People who scored Anomalous experiences tended to score higher on Emotional impact (Rho=.24), and Transliminality (Rho=.59). People who scored higher Transliminality tended to score slighly lower on Spirituality (Rho=.19), and stronger low on Emotional Impact (Rho=.25) (Table 3).

Binary logistic regression was used to evaluate what is the best predictor for aura experience. Partly due to the problem of co-linearity, after verifying the technique's requirements, a forward Wald method was applied. For the sample of 212, the results of the best model found that the Transliminality was the best predictor for aura experience (yes/no) [β = .07, Wald = 2.77; df = 1; p = .09; R² = .10], but only to a weak degree. The rest of the variables contributed nothing further to the prediction. Analyses of the psychological measure frequencies for (positive) emotional impact (Mean= 2.44; SD = 1.47) was overall non-significant. Just if Anomalous Experiences (CAPS) is excluded out the regression, Transliminality remains the best predictor [β = .09, Wald = 4.81; df = 1; p = .028] with a higher β . This suggests that Transliminality may underlie the differentiation of the two groups of subjects.

Discussion

The present study examined the differences between persons who do and do not report aura vision experiences on anomalous experiences, transliminality and boundaries measures. The main analyses confirmed the three hypotheses. The results showed a higher level of anomalous experiences, transliminality and "thinner" boundaries than in non-experients. Much recent research should be considered in relation to other

variables in order to ascertain the way in which boundaries are thin and that moderating factors on boundary thinness should be considered in terms of better understanding their relationship with aura vision and other exceptional experiences.

People who reported to see auras experienced higher on sensory experience from an unexplained source (e.g. strange feelings in the body, distorted sounds or unusual ways), verbal hallucinations (e.g. voices saying words or sentences), sensory flooding (e.g. difficult to distinguish one sensation from another), and temporal lobe experiences (e.g. time changes, the feeling or being uplifted). The results suggest that persons who experience auras are likely to have significantly higher on schizotypy and synesthesia than non-experients (Glicksohn, 1990; Irwin, 1985). The neuropsychology of aura vision reports should also receive attention. One possibly fruitful line of research to follow is that of Persinger (e.g., 1988), who has explored the relationship between temporal lobe signs and claims of psychic phenomena. Perceptual illusions, afterimages, contrast effects, or entopic phenomena (the perception of spots or 'floaters' in the line of vision for which the experients has no physical explanation) have also been offered as explanations for aura reports (e.g., Dale, Anderson & Wyman, 1978; Fraser-Harris, 1932; Neher, 1980; Owen & Morgan, 1974). Sensory intensity (e.g. sounds are much louder than they normally would be), nonshared sensory experiences (e.g. hear voices, smells or odors, and see things that other people cannot) also scored higher in aura experients.

Transliminality variable reflects the tendency for psychological material to cross thresholds into or out of consciousness (Thalbourne & Houran, 2000, p. 861). The transliminality construct is comprised of absorption, fantasy proneness, magical ideation, paranormal belief, mystical experience, hyperaesthesia, (a "hypersensitivity" to environmental stimulation, Thalbourne, 1998, p. 403). Those whose subliminal consciousness is "in ferment" are likely to experience sensory images faster and more intensely than other people. People who reported to see auras experienced higher on Unusual experiences (e.g. déjà vu experiences), Thoughts, feelings, moods (e.g. "I don't know whether I am thinking or feeling"), Childhood feelings, and other paranormal experiences. Transliminality, Anomalous experiences, Boundaries, and also Spirituality and Emotional impact also highly intercorrelated, for example, people who have thinner boundaries tend to be more spiritual, transliminal. Other studies confirmed that: Transliminality correlates positively with boundary thinness (Houran, Thalbourne, & Hartmann, 2003; Sherwood & Milner, 2004-2005), spirituality (Parra, 2012), schizotypy (Thalbourne, 1998; Thalbourne, Keogh, & Witt, 2005) and temporal lobe lability (Thalbourne, Crawley & Houran, 2003). In addition, Simmonds-Moore (2009-2010) found common variance between schizotypy, transliminality, Hartmann's boundary questionnaire and temporal lobe lability.

There is empirical support for the role of synesthesia in the etiology of the OOBE (see Terhune, 2009), apparitional experiences (Houran, Wiseman, & Thalbourne, 2002) and the perception of auras (Zingrone, Alvarado & Agee, 2009). In general, there is evidence that thinner systems are more prone toward experiencing unusual phenomena, such as aura vision, and that some forms of boundary thinness are more associated with specific forms anomalous experiences. Braithwaite et al. (2011) reported two studies which provide the first investigation of predisposition to OBEs in the normal population as measured primarily by the recently devised Cardiff anomalous perception scale (CAPS; Bell et al., 2006). OBEers reported significantly more perceptually anomalies (elevated CAPS scores) but these were primarily associated with specific measures of temporal-lobe instability and body-distortion processing.

The fact of aura experients showed higher anomalous experiences, transliminality and "thinner" boundaires is also in conceptual agreement with studies that have found that measures of fantasy-proneness seem to be successful predictors of psychic phenomena more than aura vision (Myers, Austrin, Crisso & Nickeson, 1983; Wilson & Barber, 1982). The regression used to discriminate between experients and non-experients showed that transliminality may underlie the differ-entiation of the two groups. Anomalous experiences, such as the eidetic imagery as a very vivid imagery and as hallucinatory behavior (Barber, 1982), Healy (1984) described in her discussion of auras and other phenomena as an experient's sensitivity due to permeable ego boundaries. This sensitivity, may be related to some physiological differences in percep-tual pro-

cessing may also underly it.

Some studies also suggest that aura vision would be related to cogni-tive processes involving visual and tactile hallucination and fantasy prone (Alvarado & Zingrone, 1987; Wilson & Barber, 1983, Palmer, 1979, Parra, 2010). For these reasons, I argue that aura reports are part of human experience and as such deserve and require study in and of them-selves, with and without efforts to relate auras to possible paranormal components. Irwin (2004, p. 10) says that "human experience includes a wide range of different dimensions and there are many more aspects of anomalous experiences to be studied other than ostensible paranormality." This is associated with a collection of experiences occurring internally; i.e., not perceived in a person's external reality. I might draw from knowledge contributed from all of these (and other) approaches in further understanding the full range of human experiences. More work is needed in understanding how and why such experiences are experienced differently, for example, what factors cause the experience of another personality as opposed to another self and which factors cause the experience of another personality as present inside the body as opposed to externally, as an colour lights surrounding the body.

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- *This article derives much of its content from a previous article published in the *International Journal of Neurology Research* (IJNR), vol. 1, no. 1, titled, "On the Edge of the Anomalous Experience: Out of Body Experiences, Transliminality and 'Thin' Boundaries," regarding OBEs from the same sample (http://www.ghrnet.org/index.php/ijnr/article/view/934). This article has been altered to reflect the aura experiences component of the study. The IJNR adheres to the Creative Common license Attribution-NonCommercial 4.0 International: https://creativecommons.org/licenses/by-nc/4.0/legalcode

Biography

Alejandro Parra is psychologist (UAI), Doctor of Psychology (UCES), and psychotherapist in private practice. He is teacher in Psychology at the Universidad Abierta Interamericana at Buenos Aires. He is consulted regularly by various media, radio and TV, local and international. For fifteen years (1990-2004), he was editor of the *Revista Argentina de Psicología Paranormal [Argentine Journal of Paranormal Psychology*] and, since 2006, of the *e-bulletin Psi*. Since 1993, he is President of the Institute of Paranormal Psychology, Inc. e is a member of a dozen international associations, including the Parapsychological Association (of which he is former President, 2011-2013), and is the author of twelve books.

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