

A SURVEY OF DISSOCIATION, BOUNDARY-THINNESS, AND PSYCHOLOGICAL WELLBEING IN SPIRITUALIST MENTAL MEDIUMSHIP

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ABSTRACT: The purpose of this study was to explore the personality and psychological wellbeing of Spiritualist mental mediums compared to nonmedium Spiritualists. A total of 159 Spiritualists (mediums = 80, nonmediums = 79) participated in a nationwide cross-sectional survey and completed measures of dissociation, boundary-thinness, psychological wellbeing, fantasy-proneness, and personality. Mediums scored significantly higher than nonmediums on psychological wellbeing, $t = 3.80$, $p < .001$, and reported lower psychological distress, $t = 3.25$, $p = .001$, but no significant differences were found between the groups on dissociation or boundary-thinness. Secondary analyses revealed significant differences for extraversion, $t = 2.01$, $p = .046$, neuroticism, $t = 3.59$, $p < .001$, and openness to experience, $t = 3.21$, $p = .002$, but not for fantasy-proneness, agreeableness, or conscientiousness. Findings suggest that mediumship is not associated with a reported incidence of dissociative experiences or pathology. Results are discussed in relation to previous research that has proposed the mediumship role may serve a therapeutic function.

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Mental mediums claim to receive information in the form of auditory, visual, or somatic perceptions that are not available to others. This information ostensibly derives from deceased persons and therefore is purported to demonstrate evidence of survival after death (Roll, 1960). however, the status of this evidence is controversial even when it may seem subjectively impressive to the client, because the conditions under which information is generated make it difficult to distinguish between explanations in terms of fraud (cf. Hyman, 1977), unintentional self-deception (cf. Roe, 1991), some as-yet poorly understood form of extrasensory perception (Braude, 1992), actual contact with discarnate spirits (Gauld, 1983), or some combination of these. Despite these difficulties, recent quantitative investigations into mediumship have tended to focus on a proof-oriented approach, intended to demonstrate whether or not an explanation in terms of discarnate survival is tenable (e.g., Beischel & Schwartz, 2007). however, such work has proven equivocal, with some researchers favouring a survival explanation (e.g., Schwartz, Geoffrion, Jain, Lewis, & Russek, 2003; Robertson & Roy, 2001; Roy & Robertson, 2004) whereas others have rejected it (e.g., O'Keeffe & Wiseman, 2005), and there seems little prospect of a consensus while positions are so entrenched. These approaches have

also tended to neglect important process-oriented questions regarding mediumship such as whether there are any necessary or sufficient attributes that appear to define the role of a medium or characterise the mediumistic experience.¹ The current research was intended to redress this by putting to one side the issue of the authenticity of mediumship, focusing instead on whether it is possible to generate a character profile of those likely to report such experiences.

Mental mediumship can be defined as the ostensible communication with deceased persons, which suggests novel forms of interaction that are not well understood in terms of current psychological theory. This is of interest to psychologists not least because it is their task to investigate, and account for, reports of anomalous belief and experience (Cardena, Lynn, & Krippner, 2000) but also because experiences commonly reported by mediums include phenomena (for example, hearing voices and seeing visions—see Garrett, 1949, p. 83; Piper, 1929, p. 12) that could be interpreted as symptoms of a serious “mental disorder,” such as “schizophrenia” according to the Diagnostic and Statistical Manual of Mental Disorders (DSM-IV-R; American Psychiatric Association, 2000).

Furthermore, trance mediumship, which has been described as an “advanced form of mental mediumship” (Gauld, 1983, p. 29), often involves mediums entering a deep trance state in which they may lose awareness of their surroundings, experience amnesic periods, and “take on” the personality and mannerisms of a communicating spirit; phenomena that have been associated with “dissociative identity disorder” (DID) (cf. Braude, 2003). Although mental mediums generally remain in a focused and waking state throughout mediumship demonstrations, they “may be in a slightly dissociated² state” (Gauld, 1983, p. 25) and they may also report the presence of two or more distinct identities or personality states in the form of spirit guides or controls, phenomena that have also been associated with diagnostic criteria for DID according to the DSM-IV-R. However, not all dissociative experiences need be regarded as pathological; Waller, Putman, and Carlson (1996) have differentiated between pathological and nonpathological forms of dissociation and acknowledge that mediumistic experiences involving hypnotic states, altered states of consciousness, and trance phenomena that presumably involve dissociation could fall into the latter category. The present study gave an opportunity to explore this notion by determining whether the occurrence of mediumistic experiences³ was associated with wellbeing or psychological distress.

¹ The situation is improving and in recent years a number of researchers have expressed a greater interest in articulating the process by which mediumship is developed and/or carried out (see, for example, Beischel & Rock, 2009; Emmons, 2000; Gilbert, 2010; Rock & Beischel, 2008; Rock, Beischel, & Cott, 2009; Roxburgh, 2011).

² Dissociation is defined as “an unusual disconnection or disengagement from the self and/or the surroundings” (Cardena, 1994, p. 23).

³ Of course, we can have no guarantee that mediumistic experiences occurred as reported, but this is a limitation of any work that surveys experiences.

There have been few systematic attempts to explore the psychology and wellbeing of self-labeled mediums and none to have focused on UK samples. Reinsel (2003) conducted a survey in the US to test the suggestion that mediumship might be analogous to DID by asking whether mediums score within the normal range on personality measures or show signs of psychopathology. Mediums scored significantly higher than controls, $p < .05$, on the Depersonalization Severity Scale (DSS), which measures the intensity and frequency of depersonalization experiences, such as feeling detached or unreal, and also scored significantly higher than controls on measures of absorption, $p < .01$, and temporal lobe symptoms, $p < .05$. However, there were no significant differences between mediums and controls on the Mental Health Inventory (MHI-17) or on the Somatoform Dissociation Questionnaire (SDQ-20), which measures physical symptoms that are reported more frequently in individuals with DID compared to other psychiatric diagnoses. Reflecting on the finding that mediums scored significantly higher than controls on one measure of dissociation (DSS) but not another (SDQ), Reinsel suggests that dissociation among mediums is not clinically severe and/or that their dissociative experiences are not related to childhood trauma. In addition, she proposes that future research investigating mediumship and dissociative experiences should use a more general measure of dissociation.

In an unpublished dissertation, Laria (1998) used the Dissociative Experience Scale (DES) to compare Cuban Spiritist mediums with individuals who had mental health problems and controls, and similarly found that normal dissociative experiences could occur at high levels of intensity and frequency without any associated psychopathology. Individuals with mental health problems reported significantly higher levels of dissociation than both mediums and controls. Moreover, although nonsignificant, mediums reported higher levels of dissociation than controls but had better health status and fewer traumatic experiences than individuals with mental health problems. Laria also explored the personality trait "boundary-thinness," which is characterised by openness, sensitivity, and shifting between states of consciousness (Hartmann, 1991; Simmonds-Moore, 2009), and found that both individuals with mental health problems and mediums scored at significantly higher ("thinner") levels than controls. There were no significant differences between individuals with mental health problems and mediums, although individuals with mental health problems scored at thinner levels than mediums.

Seligman (2005) undertook a year-long field study with Candomblé mediums in Brazil. She found no significant differences between mediums and nonmediums on the State Trait Anxiety Inventory (STAI) or emotional distress as measured by the Questionário Morbidade Psiquiátrica dos Adultos (QMPA). Mean scores on the DES for three religious groups were significantly higher than for two control groups, although there were no differences between the medium group and the religious groups,

suggesting no association between mediumship and dissociation. Moreira-Almeida and colleagues have compared mediums randomly selected from different Kardecist Spiritist centers in Brazil and individuals with a diagnosis of DID, and found that average scores on the Social Adjustment Scale (SAS) were higher for mediums but that scores on the Self-Report Psychiatric Screening Questionnaire (SRQ) indicated a lower prevalence of mental health problems in the medium sample (Moreira-Almeida, Neto, & Cardena, 2008; Moreira-Almeida, Neto, & Greyson, 2007). However, better results could have been a consequence of Spiritist group membership as Moreira-Almeida et al. (2007) note that higher levels of education and religious involvement have been associated with better mental health, so one cannot be sure that the results are due to mediumship experiences per se. Secondly, we might speculate that since mediums at Spiritist centers in Brazil have to attend a 2-year course, this may serve to screen out unstable individuals or provide social support that could give rise to a sample that presents as healthier. These concerns draw attention to the need to control for spiritual belief by including a comparison group of persons who share the mediums' cultural beliefs and community support but report no mediumistic experiences. Taken together these studies suggest that individuals who have high levels of dissociative experience may be able to remain functional where they can draw on a supportive community or where cultural resources are available that allow them to understand their experience as "normal." It is also clear that these studies show that mediumistic experience is not necessarily associated with generalised poor mental health, which undermines explanations of mediumistic experience as being caused by some underlying mental disorder.

Trance channeling shares some features of mediumship as it characterised by individuals claiming to have direct experience, whilst in a trance state, of an independent intelligence whose purpose is to promote spiritual teachings (Klimo, 1987). Differences between individuals with a diagnosis of DID and trance channeling have been investigated by Hughes (1992). Using the Dissociative Disorders Interview Schedule (DDIS) and the Dissociative Experiences Scale (DES), Hughes compared trance channelers, DID-diagnosed individuals, and a healthy group. Results indicated that trance channelers gave DES scores that were significantly lower than those for the DID group and more in line with scores obtained by the healthy group. Similarly, scores on the DDIS suggested that dissociative experiences in trance channelers did not reach pathological levels. However, it remained to be seen whether this generalised to other forms of mediumship, so we were interested to see whether nontrance mediumistic experiences were associated with elevated scores on the DES.

In attempting to identify other variables that might distinguish persons likely to report personal mediumistic experiences from those who share a similar belief system but do not report direct experiences, we were interested to consider fantasy-proneness. This trait was characterised by

Wilson and barber (1982) as including a profound involvement with fantasy and imagination, and a tendency to live life in a make-believe world, where the difference between reality and imagined experiences are often blurred. Wilson and barber (1982, p. 109) suggest that fantasy-prone individuals might have been “over-represented among famous mediums, psychics, and religious visionaries of the past.” Indeed, autobiographies and personal reflections of prominent mediums commonly contain reports of imaginary friends, a sense of alienation, and vivid sensory imagery (e.g. Garrett, 1968, pp. 22–24; Leonard, 1931, p. 11). In addition, given that the study aimed to explore the character profile of mediums, it was considered appropriate to include a general measure of personality.

In summary, the present study was designed to explore whether the psychological profile of mediums involved in Spiritualism differed from Spiritualists who do not practise mediumship. Given that previous studies were conducted with mediums in the USA, Brazil, and Cuba, planned analyses in the present study with UK mediums were conservatively set as two-tailed. We hypothesised that Spiritualist mediums and nonmediums would differ on measures of dissociative experiences, psychological wellbeing, psychological distress, and boundary-thinness. Further exploratory analyses were intended to investigate possible differences on other personality variables, including fantasy-proneness, extraversion, neuroticism, agreeableness, conscientiousness, and openness to experience.

Method

Materials

The survey included a cover letter containing a brief introduction to the research, information on ethical issues, a prepaid return envelope, a separate envelope in which to place personal details (to express interest in a later interview study), contact details of the researcher, and a questionnaire consisting of two parts: (a) Mediumship Activity Questionnaire (not reported in this paper), which nonmediums were requested to skip, and (b) five psychological measures (see below). An ID number was placed on the cover letter and the survey itself so that participants could enquire about the results of the survey anonymously.

Measures

Dissociative Experiences Scale (DES-II). A 28-item standardized measure of dissociation where scores of more than 30 are classed as the clinical cutoff for severe dissociation (Carlson & Putman, 1993). DES is the most widely used self-report measure of dissociative experiences and is the only dissociative instrument that has been subjected to a number of replication studies by independent investigators (Ross, 1997). It has

previously demonstrated good internal reliability and test-retest reliability, Cronbach's $\alpha = .93$ to $.95$; $r = .84$ to $.93$ (Dubester & Braun, 1995). For the current data set, Cronbach's α was again satisfactory, medium sample $\alpha = .91$; nonmedium sample $\alpha = .87$.

Boundary Questionnaire (BQ-18). An 18-item short-form of the original 138-item (divided into 12 categories) boundary Questionnaire (Hartmann, 1991), which was adapted by Kunzendorf, Hartmann, Cohen, and Cutler (1997) by taking items that loaded highest on the 12 categories. This shorter version has demonstrated an alpha reliability of $.93$ and test-retest reliability of $.77$ (Hartmann, Kunzendorf, Rosen, & Gazells Grace, 2001). For the current data set, Cronbach's α was again satisfactory for the medium sample ($\alpha = .75$) but fell slightly below Kline's (1993) threshold figure of $.7$ for the nonmedium sample ($\alpha = .67$).

Mental Health Inventory (MHI-17). A 17-item scale that produces overall scores for psychological wellbeing (happiness, emotional ties) and psychological distress (anxiety, depression, loss of behavioural or emotional control). It has demonstrated good internal reliability, with Cronbach's alphas ranging between $.94$ and $.97$ (Hays, Sherbourne, & Mazel, 1995; Stewart, Ware, Sherbourne, & Wells, 1992) and a correlation of $.99$ with the overall 32-item index (MHI-32; Stewart, Ware, Sherbourne, & Wells, 1992). For the current data set, Cronbach's α was again satisfactory (medium sample $\alpha = .85$; nonmedium sample $\alpha = .87$). Psychological distress and psychological wellbeing subscales are scored and transformed to give a 0–100 range such that a high score reflects a more favourable health state (see the Rand Corporation user's manual for the Medical Outcome Study in Hays, Sherbourne, & Mazel, 1995⁴). Note that this differs from the scoring method used in the Medical Outcome Study book chapter by Stewart, Ware, Sherbourne, & Wells (1992), in which a high score represents more of that measure (i.e., a high score on psychological distress would indicate more psychological distress and a high score on psychological wellbeing would indicate better wellbeing).

Big Five Inventory (BFI). A 44-item questionnaire that measures the five personality traits of: Openness, Conscientiousness, Extraversion, Agreeableness, and Neuroticism. It has previously demonstrated good alpha reliabilities, which average above $.80$, and good 3-month test-retest reliabilities ranging from $.80$ to $.90$ (John, Donahue, & Kentle, 1991). John et al. also claim that it has demonstrated convergent validity, mean $r = .73$, with other big five measures, such as the NEO-FFI Personality Inventory (Costa & McCrae, 1985). For the current data set, Cronbach's α was again satisfactory; medium sample $\alpha = .79$; nonmedium sample $\alpha = .80$.

Creative Experiences Scale (CEQ). A brief measure of fantasy-proneness that contains 25 items to which the respondent answers "Yes"

⁴ Note that the Mental Health Inventory is labelled Mental Health Index II in this manual but it is the same scale.

or “No” (Merckelbach, horselenberg, & Muris, 2001). It has demonstrated good test-retest stability, $r = .95$, and good internal consistency, Cronbach’s $\alpha = .72$. Merckelbach et al. also claim that the CEQ has predictive validity as individuals who are known to exhibit fantasy-prone characteristics (e.g., amateur actors) display higher scores on this scale than do control individuals. For the current data set, Cronbach’s α was again satisfactory: medium sample $\alpha = .81$; nonmedium sample $\alpha = .80$.

Participants and Procedure

Spiritualist Mediums. These were operationally defined in terms of membership of a recognized national Spiritualist organization active in England, Scotland, and Wales. Contact details were available in the public domain on the Spiritualist National Union’s (SNU) website for 233 mediums that had gained either certificate (CSNU) or diploma (DSNU) awards from the organization for demonstrating their mediumship at Spiritualist churches. To encourage responses there were four stages involved in distribution of the survey: firstly, 233 packs were posted to mediums; secondly, a postcard reminder was sent approximately 2 weeks later; thirdly, another survey pack was redistributed to nonresponders approximately two weeks after sending the postcard; fourthly, mediums were also telephoned to ensure they had received a survey.

Nonmedium Spiritualists. For the comparison group, individuals who attend Spiritualist church services and/or mediumship demonstrations were targeted via random sampling of the organisation’s network of Spiritualist churches. SNU Spiritualist churches are divided into 14 geographical districts: East Midlands, West Midlands, East London, West London, Southern, Northern, South Yorkshire, North Yorkshire, Manchester, Merseyside and North Wales, South Wales, South Western, North Lancashire and Cumbria, and Scotland. Thus, it was possible to use cluster sampling (Fowler, 2002) to randomly select churches from each of these geographical regions to send surveys to, which ensured participants were represented from both rural and urban areas. Similarly, to ensure respondents were nonmedium Spiritualists, there was a question in the survey asking whether respondents were Spiritualists or not and whether they were undergoing any mediumship training; only Spiritualists who were not training to be mediums were included in the analysis.

Permission was sought by telephone from each church’s secretary or president before survey packs were displayed in the reception area for completion by those who expressed an interest. A total of 525 surveys were posted. To increase responses, a further 101 surveys were delivered in person. The purpose of the study was explained to the church president and survey packs were left in the church for potential nonmedium Spiritualists to take and complete. Some churches were visited in person so that any concerns about the research could be addressed, and this also ensured that packs

would be clearly displayed. Nevertheless, the return rate did not differ from the postal method.

Ethical Considerations

Prior to commencement, the study was approved by The University of Northampton Research Ethics Committee and ethical guidelines outlined by the British Psychological Society (2006) were strictly adhered to. Participants were asked to take part in the survey voluntarily and to allay any suspicion or fears about the nature of the research they were informed about the aims of the study and its potential use. In order to ensure confidentiality of information obtained from individuals and to encourage openness and honesty, the research did not require participants to disclose personally identifying information.

Response Rates

Out of the 233 mediums, 15 were deceased or no longer practising, reducing the actual target population to 218. Responses were received from 115 mediums (return rate = 53%); however some questionnaires were returned incomplete, reducing the viable sample to 82 (37%). Out of 626 surveys distributed to nonmediums, 130 were returned (return rate = 20%); however the total number of surveys completed correctly was 87 (14%). A Kruskal-Wallis test was conducted on initial responders ($n = 59$), reminder postcard responders ($n = 8$), and replacement survey responders ($n = 13$) in the expectation that any differences among these groups might indirectly suggest differences between respondents and nonrespondents. Results did not reveal any significant differences between groups according to the number of years as a Spiritualist, number of years as a medium, or age (in all cases $\chi^2 < 3.01$, $p \geq .22$). Perhaps more importantly, no significant differences were found between time of response on the dependent variables of interest, with all χ^2 falling below 1.68, with associated p values $\geq .20$, apart from conscientiousness, which did reveal a significant difference between time of response, $\chi^2 = 10.70$, $p < .01$. This suggests that nonrespondents did not affect the viability of the sample.

Respondents

Eight responses in the nonmedium sample and one in the medium sample were removed from the final sample as outliers on the psychological distress measure, in accordance with published guidelines (Hair, Anderson, Tatham, & Black, 1998; Tabachnick & Fidell, 2001). Another participant was filtered from the medium sample due to suspected acquiescence as the person had ticked the same number on measures regardless of item

meaning.⁵ A total of 159 participants were therefore included in the sample for this survey study: 80 “Spiritualist mediums” (67.5% females; mean age = 62.50; range = 35 to 90 years) and 79 “Spiritualist nonmediums” (78.5% females; mean age = 60.96; range = 27 to 84). There were no significant differences between the groups according to age, $t(151) = .805$, $p = .422$, two-tailed or educational level, $z = -1.294$, $p = .196$, two-tailed.⁶

Results

In both samples occasional missing data (< 5%) were observed; however, no patterns were detected, so the missing values were replaced with the item mean. Differences between mediums and nonmediums on scores obtained from psychological measures used in the survey study were explored with t tests. Summary statistics from these analyses and Cohen’s d effect sizes are reported in Table 1. Mean scores for the medium sample on the DES were slightly higher than for the nonmedium sample ($M = 13.81$ and 12.99 respectively) but did not differ significantly, $t(157) = .514$, $p = .61$, two-tailed. Both groups scored higher than means reported in general population studies (e.g., $M = 7.8$, Bernstein & Putman, 1986; $M = 3.7$, Carlson & Putman, 1993; $M = 11.05$, van Ijzendoorn & Schuengel, 1996); however, according to the DES scoring system, this would not be considered as severe dissociation (see Carlson & Putman, 1993). Likewise, mean scores for both groups fall within the lower range of mean scores reported for individuals with a diagnosis of schizophrenia ($M = 10.5$ – 20.6 ; cf. Cardeña, 2008) and lower than mean scores reported for individuals with a diagnosis of dissociative identity disorder ($M = 40.7$ – 57.1 ; cf. Cardeña, 2008).

Similarly, there were no significant differences between groups for scores on the boundary Questionnaire, $t(157) = -1.345$, $p = .18$, two-tailed. However, it is interesting to note that mean scores for the nonmedium group were higher (“thinner”) than the medium group ($M = 36.59$ and 34.51 , respectively). Mean scores for both groups were lower than those found by Laria (1998) in his medium group ($M = 37.23$) and in his group of individuals with mental health problems ($M = 39.31$), but were higher than his control group of healthy individuals ($M = 32.16$).

⁵ For comparison, a Mann-Whitney analysis was performed with these outliers included in the sample and this confirmed the finding that there was a significant difference between mediums and nonmediums on psychological distress, $z = -3.717$, $p < .001$, two-tailed, indicating that their omission did not affect the pattern of results.

⁶ One anonymous referee suggested that performing a series of t tests was not very parsimonious and a MANOVA may be more appropriate. However, such multivariate analyses are not informative where outcome variables are conceptually distinct and the researcher is not concerned to identify an underlying construct (cf. Huberty & Morris, 1989). Multivariate and univariate analyses are not simply more or less parsimonious equivalents of the same analysis, but rather they address quite different research questions (op. cit.), and it is the latter that pertains here, given that we were concerned to look at effects upon a set of discrete variables.

Table 1
Means and Standard Deviations of Mediums and Nonmediums for Psychological Measures Included in the Survey

Measure/Variable	Mediums (<i>N</i> = 80)		Nonmediums (<i>N</i> = 79)		<i>t</i>	<i>p</i> (2-t)	Cohen's <i>d</i>
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>			
CEQ	9.75	4.35	8.54	4.83	1.65	.100	0.26
BQ-18	34.51	10.54	36.60	8.92	-1.34	.180	0.22
DES	13.81	11.00	12.99	9.00	0.51	.610	0.09
Openness	3.75	0.56	3.46	0.57	3.21	.002	0.51
Conscientiousness	3.75	0.51	3.68	0.51	0.92	.360	0.14
Extraversion	3.49	0.72	3.25	0.78	2.01	.046	0.32
Agreeableness	4.18	0.56	4.18	0.50	0.01	.990	0.00
Neuroticism	3.61	0.72	3.19	0.76	3.59	<.001	0.57
Wellbeing ^a	73.00	15.73	62.18	19.88	3.80	<.001	0.61
Psychological Distress ^a	87.35	9.73	81.58	12.52	3.26	.001	0.45

Note. These exploratory computations were not corrected for multiple analyses as each measure was considered on its own merit in the context of the larger study (see Perneger, 1998).

^aHigh scores on wellbeing and psychological distress subscales of the MHI-17 indicate better mental health (see Hays, Sherbourne, & Mazel, 1995).

No significant differences between groups were found on the Creative Experiences Questionnaire (CEQ), which measured fantasy-proneness, $t(157) = 1.65, p = .10$, two-tailed. Although there are no normative data for this measure, it has been suggested that scores within the 7–10 range are normal, whereas those within the 12–16 range are high (for example, fantasy role players score in this range: h. Merckelbach, personal communication, May 15, 2007). Therefore, mean scores for both groups fall within the normal range, with mediums scoring slightly higher than nonmediums (for mediums, $M = 9.75$; for nonmediums, $M = 8.54$).

As illustrated in Table 1, mediums presented as significantly healthier than nonmediums on the Wellbeing subscale, $t(157) = 3.80, p < .001$, two-tailed, and as less distressed on the Psychological Distress subscale of the MHI-17, $t(157) = 3.25, p = .001$, two-tailed. Consequently, there is no evidence to suggest that mediums experience negative mental health; in fact, they seem to have better psychological wellbeing than comparable others. Likewise, when compared with population norms from a sample of patients (experiencing hypertension, diabetes, heart disease, or depression) mediums scored more positively on both wellbeing ($M = 73.00$ compared to 69.62) and psychological distress ($M = 87.35$ compared to 83.21). However, nonmediums scored similarly for psychological distress ($M = 81.58$ compared to 83.21) and less positively for psychological wellbeing ($M = 62.18$ compared to 69.62; see Table 15 in Hays, Sherbourne, & Mazel, 1995, pp. 63–64). When compared with a majority student sample that were not experiencing particular health problems (Rabeyron & Watt, 2010), both mediums and nonmediums scored better on the MHI-17 overall score (total combined score for psychological wellbeing and psychological distress): total score for mediums = 83.13; for nonmediums = 75.87; for students = 67.80.

In exploratory analyses mediums scored significantly higher than nonmediums on measures of Openness to Experience, $t(157) = 3.21, p = .002$, two-tailed; Neuroticism, $t(157) = 3.59, p = <.001$, two-tailed; and Extraversion, $t(157) = 2.01, p = .046$, two-tailed, but no significant differences were found for Agreeableness, $t(157) = .006, p = .99$, two-tailed, or Conscientiousness, $t(157) = .924, p = .36$, two-tailed.

To fully interpret the meaning of these observed differences, we need to take into account any shared variance that might exist between predictor variables given that some of the measures are conceptually related. Table 2 presents zero-order correlations between predictor variables. As expected, Psychological Distress scores are significantly correlated with those for Psychological Wellbeing (indeed scores on these two subscales are sometimes combined to give a single overall score for the MHI-17). However, there are also significant correlations with DES, Agreeableness and Neuroticism. When these are controlled for by treating them as covariates in an ANCOVA analysis, the main effect of group membership is reduced but remains significant, $F(1, 154) = 4.19, p = .042$. Psychological

Table 2
Zero-Order Correlations Between Predictor Variables to Identify Common Variance

	DES	BQ	PW	PD	Op	Co	Ex	Ag	Ne
Dissociative experiences (DES)									
Boundary Thinness (BQ)	.099 (.215)								
Psychological Wellbeing (MHI-17, PW)	-.049 (.542)	-.054 (.497)							
Psychological Distress (MHI-17, PD)	-.270 (.001)	-.002 (.981)	.550 (.001)						
BFI Openness	.210 (.008)	.145 (.068)	.063 (.433)	.036 (.656)					
BFI Conscientiousness	-.090 (.258)	-.119 (.134)	.216 (.006)	.117 (.141)	.070 (.383)				
BFI Extraversion	.042 (.602)	.089 (.263)	.110 (.167)	.087 (.277)	.217 (.006)	.222 (.005)			
BFI Agreeableness	-.259 (.001)	-.031 (.696)	.206 (.009)	.214 (.007)	.048 (.550)	.348 (.001)	.165 (.038)		
BFI Neuroticism	-.162 (.041)	-.072 (.366)	.424 (.001)	.506 (.001)	.111 (.163)	.266 (.001)	.189 (.017)	.240 (.002)	
Creative Experiences (CEQ)	.158 (.046)	.550 (.001)	.111 (.164)	.072 (.368)	.239 (.002)	-.024 (.762)	.185 (.019)	.069 (.391)	.058 (.464)

Wellbeing scores are significantly correlated with Conscientiousness, Agreeableness, and Neuroticism; when these are treated as covariates in an ANCOVA analysis, the main effect of group membership is again reduced but remains significant, $F(1, 154) = 7.04, p = .009$. boundary thinness scores were not found to differ between mediums and nonmediums. however, when covariation with the CEQ is taken into account by treating the latter as a covariate, this difference becomes significant, $F(1, 156) = 7.60, p = .007$, with nonmediums presenting with thinner boundaries than mediums when fantasy-proneness is controlled for (adjusted mean bQ score for mediums = 33.79, for nonmediums = 37.33). Originally there was no difference between mediums and nonmediums on dissociation scores, and this remains the case when the variables of Psychological Distress, Openness, Agreeableness, Neuroticism, and Creativity are treated as covariates, $F(1, 152) = .35, p = .554$.

It was noted that mean number of years as a Spiritualist for mediums ($M = 34.54, SD = 15.86$, range = 9 to 78 years) was significantly higher ($p < .001$) than for nonmediums ($M = 19.01, SD = 17.75$, range = 1 to 70 years). To explore whether number of years' involvement with the Spiritualist community might explain other observed differences between mediums and nonmediums, partial correlations were performed that controlled for the effects of age, which showed that number of years practising as a medium was not associated with wellbeing, $pr = .076, p = .527$, or psychological distress, $pr = .053, p = .660$, and number of years as a Spiritualist was not associated with wellbeing, $pr = .180, p = .129$, or psychological distress, $pr = -.009, p = .936$. For nonmediums, number of years' involvement with Spiritualism was also not associated with wellbeing, $pr = .225, p = .09$, or with psychological distress, $pr = .189, p = .160$. The correlations for mediums and nonmediums do not differ significantly for wellbeing, $z = 0.26$, or for psychological distress, $z = 1.10$.

One referee of this paper suggested that given the preponderance of females in this sample (albeit that this might reflect actual sex differences in mediumship), some of the significant differences identified may be particular to female mediums. To evaluate this suggestion we reanalysed the data using a two-way ANOVA with gender as a second independent variable. For psychological wellbeing there was a main effect of group membership, $F(1, 150) = 14.57, p < .001$, but no main effect of gender, $F(1, 150) = .27, p = .60$, and no interaction, $F(1, 150) = 1.35, p = .25$. For psychological distress there was again a main effect of group membership, $F(1, 150) = 7.11, p = .009$, but no main effect of gender, $F(1, 150) = 1.87, p = .17$, and no interaction, $F(1, 150) = .23, p = .63$. For openness to experience there was a main effect of group membership, $F(1, 150) = 6.00, p = .015$, but no main effect of gender, $F(1, 150) = .21, p = .64$, and no interaction, $F(1, 150) = .05, p = .82$. For psychological wellbeing there was a main effect of group membership, $F(1, 150) = 14.57, p < .001$, but no main effect of gender, $F(1, 150) = .27, p = .60$, and no interaction, $F(1, 150) = 1.35, p = .25$. For neuroticism there was

a main effect of group membership, $F(1, 150) = 13.04, p < .001$, a suggestive main effect of gender, $F(1, 150) = 3.80, p = .053$, but no interaction, $F(1, 150) = 1.17, p = .28$. For extraversion the effect of group membership reduced to nonsignificance, $F(1, 150) = 1.45, p = .23$, and there was no main effect of gender, $F(1, 150) = .06, p = .81$, and no interaction, $F(1, 150) = .40, p = .53$. The failure to find any significant interactions indicates that observed effects are not specific to one gender.

Discussion

Contrary to our hypothesis, analyses revealed no significant differences between a sample of Spiritualist mediums and nonmedium Spiritualists on the DES, suggesting that there is no generalised susceptibility to dissociative experience in mediums, despite the dissociative character of specific experiences that have been reported in popular mediums' biographies (for example, hearing voices and having visions—see, e.g., Garrett, 1968). However, mean scores for both groups were slightly higher than those in general population studies (Bernstein & Putman, 1986; Carlson & Putman, 1993), suggesting that Spiritualists, as a group, may be more likely to have dissociative experiences, but that levels do not reach those regarded as severe. This suggests that dissociation cannot account for personal mediumistic experiences per se. These findings are consistent with those of Laria (2000) and Reinsel (2003), who also found a lack of psychopathology in mediums but higher than average levels of dissociation. Likewise, no significant differences were found on the boundary Questionnaire; however, it was interesting to note that mean scores for the nonmedium group were slightly higher (“thinner”) than for the medium group. Given that Laria (2000) found individuals with mental health problems to score at thinner levels than mediums, it may be useful to examine the comparison group in more detail.

As hypothesised, a significant difference (with a small to medium effect size) was found between mediums and nonmediums on the measure of mental health, with mediums scoring significantly higher on psychological wellbeing and lower on psychological distress.⁷ Furthermore, when controlling for age, correlations confirmed that number of years as a Spiritualist did not identify a relationship with better mental health. We might speculate that mediums could have entered the profession with a predisposition for positive wellbeing and low psychological distress, and

⁷ Given that mediums experience phenomena that could be pathologised as a mental disorder, it could be argued that they are more motivated to present themselves as psychologically healthy, and this could have contributed to observed differences between mediums and nonmediums. Therefore, it would be useful in future work of this type to include a measure of social desirability. However, it is worth pointing out that authors of the Mental Health Inventory-17 (labeled Mental Health Index II in the RAND manual; Hays, Sherbourne, & Mazel, 1995) report efforts to control for social desirability, such as reversing item response choices and avoiding value-laden words.

increased age and involvement with Spiritualism had no impact on this. Alternatively, adoption of the mediumship role and associated status could have affected wellbeing in a positive way and remained a “buffer” throughout their career. Seligman (2005) has similarly argued that distress is experienced by individuals prior to their involvement with Candomblé mediumship but is given a new positive meaning by their initiation into mediumship, together with the accompanying change in status, power and respect that is associated with the role. Seligman suggests that the process of redefining one’s identity and social support associated with the mediumship role may serve a therapeutic function. This model implies that (a) the act of mediumship reframes experiences and (b) that improvement of psychological wellbeing increases with time spent as a medium.

Although our data might be consistent with the first prediction of the model, they could not be claimed to support it because we have no information about the mediums’ wellbeing or understanding of their experiences prior to their involvement with a formal system of mediumship; what would be required is a longitudinal study that tracks individuals as they progress from neophyte to qualified practitioner, and/or a phenomenological study that explores mediums’ understandings of their lived experience and allows them to reflect on the factors that affected their development as a practising medium (for example, using interpretative phenomenological analysis; see Smith, 1996). Although the current research findings are not consistent with the second prediction of this model, our sample of mediums is relatively experienced, having completed training programmes and won awards so that any primary effect of immersion in this subculture could already have occurred. It would be informative to replicate this study with less experienced members of mediumship organizations. Whatever the interpretation, it seems clear that mediums’ experiences that might leave them susceptible to a diagnosis of schizophrenia or DID are not associated with generalised poor mental health.

The finding that mediums scored higher on neuroticism when compared with nonmediums presents as somewhat contradictory given the possible connection of mediumship with positive mental health. However, as mediums overall also scored higher on extraversion, it could be that the mediumship (demonstration) role acts as a defence mechanism or outlet for unpleasant emotions, and/or that mediums are characterized by a dual facet personality: in one respect they are sociable and assertive, identified by their willingness to publicly demonstrate mediumship but, on the other hand, they also experience negative emotional states and are vulnerable to stress. A limitation of this study, in relation to the extraversion finding, is that participants were mediums who demonstrate their mediumship at Spiritualist churches and give private readings, which may not be representative of the population of mediums as a whole. It may be that only the more extraverted are drawn to platform demonstration and thus go through the process of having their experiences validated. Therefore, it

would be interesting to explore whether mediums that only conduct private readings score similarly.

Lastly, although no significant differences were found between mediums and nonmediums on the fantasy-proneness measure, mediums did score significantly higher on openness to experience, which is characterised by intellectual curiosity, active imagination, aesthetic sensitivity and attentiveness to inner feelings. However, these exploratory findings should not be considered conclusive unless they are replicated in future research.

To conclude, what has emerged from this study is that there are clear differences between Spiritualist mediums and nonmediums that seem deserving of further exploration. The findings confirm previous research which has consistently demonstrated that mediums do not present as being more prone to generalised dissociation symptoms. In light of these data, it does not seem tenable to characterise mediums as psychologically unhealthy or dysfunctional. In addition, the finding that mediums did not score high on a measure of fantasy-proneness suggests that their reported experiences cannot easily be explained in terms of an over-active imagination. This certainly does not lead by default to a supernatural explanation for these experiences, but does suggest that our accounts of the mediumship experience need to be more sophisticated than hitherto.

Although the survey method enabled us to generate and confirm hypotheses about the mediumship phenomenon, there remain unanswered questions regarding the process and nature of mediumship. This highlights the need for future research to consider more personal or idiosyncratic perspectives and to gain insight from mediums themselves, thus providing a more detailed and richer understanding of the mediumship phenomenon, which may shed light on the pathways to mediumship and the context within which mediums define themselves as a medium.

References

- American Psychiatric Association. (2000). *Diagnostic and statistical manual of mental disorders* (4th ed. text revision). Washington, DC: APA.
- beischel, J., & Rock, A. J. (2009). Addressing the survival versus psi debate through process-focused mediumship research. *Journal of Parapsychology*, *73*, 71–90.
- beischel, J., & Schwartz, G. E. (2007). Anomalous information reception by research mediums demonstrated using a novel triple-blind protocol. *Explore*, *3*, 23–27.
- bernstein, E. M., & Putman, F. (1986). Development, reliability and validity of a dissociation scale. *Journal of Nervous and Mental Disease*, *174*, 727–735.
- braude, S. E. (1992). Survival or superpsi? *Journal of Scientific Exploration*, *6*, 127–144.
- braude, S. E. (2003). *Immortal remains: The evidence for life after death*. NY: Rowman & Littlefield.

- british Psychological Society (2006). *Ethical principles for conducting research with human participants*. Leicester: Author.
- Cardeña, E. (1994). The domain of dissociation. In S. J. Lynn & J. W. Rhue (Eds.) *Dissociation: Clinical and theoretical perspectives* (pp. 15–31). New York: Guilford
- Cardeña, E. (2008). Dissociative disorders measures. In A. J. Rush, M. b. First, & D. becker (Eds.), *Handbook of psychiatric measures*. (2nd ed.) (pp. 587–599). Washington, DC: American Psychiatric Press.
- <AU: PLEASE SUPPLY CARDENA, LYNN, & KRIPPNER REFERENCE TO BE INSERTED HERE>
- Carlson, E. b., & Putman, F. W. (1993). An update on the Dissociative Experiences Scale. *Dissociation*, 6, 16–27.
- Costa, P. T., Jr., & McCrae, R. R. (1985). *The NEO Personality Inventory manual*. Odessa, FL: Psychological Assessment Resources.
- Dubester, K. A., & braun, b. G. (1995). Psychometric properties of the Dissociative Experiences Scale. *Journal of Nervous and Mental Disease*, 183, 231–235.
- Emmons, C. F. (2000). On becoming a spirit medium in a “rational society.” *Anthropology of Consciousness*, 12, 71–82.
- Fowler, F. J. (2002). *Survey research methods*. London: Sage.
- Garrett, E. J. (1968). *Many voices: The autobiography of a medium*. NY: Longmans.
- Gauld, A. (1983). *Mediumship and survival*. London: Society for Psychical Research.
- Gilbert, h. (2010). A sociological perspective on “becoming” a spirit medium in britain. *Rhine Online: Psi-News Magazine*, 2(1), 16–21.
- hair, J. F., Anderson, R. E., Tatham, R. L., & black, W. C. (1998). *Multivariate data analysis*. Englewood Cliffs, NJ: Prentice-hall.
- hartmann, E. (1991). *Boundaries in the mind*. New York: basic books.
- hartmann, E., Kunzendorf, R. G., Rosen, R., & Gazells Grace, N. (2001). Contextualizing images in dreams and daydreams. *Dreaming*, 11, 97–104.
- hays, R. D., Sherbourne, C. D., & Mazel, R. M. (1995). User’s manual for the Medical Outcomes Study (MOS) core measures of health-related quality of life. Santa Monica, CA: RAND.
- hughes, D. J. (1992). Differences between trance channeling and multiple personality disorder on structured interview. *Journal of Transpersonal Psychology*, 24, 181–192.
- hyman, R. (1977). Cold reading: how to convince strangers that you know all about them. *The Skeptical Enquirer*, 1, 18–37.
- John, O. P., Donahue, E. M., & Kentle, R. L. (1991). *The Big Five Inventory-Versions 4a and 54*. berkeley: University of California.
- Klimo, J. (1987). *Channeling: Investigations on receiving information from paranormal sources*. Los Angeles: J. P. Tarcher.
- Kline, P. (1993). *The handbook of psychological testing*. London: Routledge.

- Kunzendorf, R. G., Hartmann, E., Cohen, R., & Cutler, J. (1997). Bizarreness of the dreams and daydreams reported by individuals with thin and thick boundaries. *Dreaming*, 7, 265–271.
- Laria, A. J. (2000). *Dissociative experiences among Cuban mental health patients and spiritist mediums*. (Doctoral dissertation, University of Massachusetts, 2000). *Dissertation Abstracts International*, 60, 5780.
- Leonard, G. O. (1931). *My life in two worlds*. London: Cassell & Company.
- Merckelbach, H., Horselenberg, R., & Muris, P. (2001). The Creative Experiences Questionnaire (CEQ): A brief self-report measure of fantasy proneness. *Personality and Individual Differences*, 31, 987–995.
- Moreira-Almeida, A., Neto, F. L., & Cardeña, E. (2008). Comparison of Brazilian spiritist mediumship and dissociative identity disorder. *Journal of Nervous and Mental Disease*, 196, 420–424.
- Moreira-Almeida, A., Neto, F. L., & Greyson, B. (2007). Dissociative and psychotic experiences in Brazilian spiritist mediums. *Psychotherapy and Psychosomatics*, 76, 57–58.
- O’Keeffe, C., & Wiseman, R. (2005). Testing alleged mediumship: Methods and results. *British Journal of Psychology*, 96, 165–179.
- Perneger, T. V. (1998). What’s wrong with Bonferroni adjustments. *British Medical Journal*, 316, 1236–1238.
- Rabeyron, T., & Watt, C. (2010). Paranormal experiences, mental health and mental boundaries, and psi. *Personality and Individual Differences*, 48, 487–492.
- Reinsel, R. (2003). Dissociation and mental health in mediums and sensitives: A pilot survey. *Proceedings of Presented Papers: The Parapsychological Association 46th Annual Convention*, 200–221.
- Robertson, T. J., & Roy, A. E. (2001). A preliminary study of the acceptance by nonrecipients of mediums’ statements to recipients. *Journal of the Society for Psychical Research*, 65, 91–106.
- Rock, A. J., & Beischel, J. (2008). Quantitative analysis of research mediums’ conscious experiences during a discarnate reading versus a control task: A pilot study. *Australian Journal of Parapsychology*, 8, 157–179.
- Rock, A. J., Beischel, J., & Cott, C. C. (2009). Psi vs. survival: A qualitative investigation of mediums’ phenomenology comparing psychic readings and ostensible communication with the deceased. *Transpersonal Psychology Review*, 13, 76–89.
- Roe, C. A. (1991). Cold reading strategies. *Proceedings of Presented Papers: The Parapsychological Association 34th Annual Convention*, 470–480.
- Roll, W. G. (1960). The contribution of studies of mediumship to research on survival after death. *Journal of Parapsychology*, 24, 258–270.
- Ross, C. A. (1997). *Dissociative identity disorder: Diagnosis, clinical features and treatment of multiple personality* (2nd ed.). New York: Wiley.
- Roxburgh, E. C. (2011). “It’s like a recording on a wonky tape”: Understanding spiritualist mental mediumship using interpretative

- phenomenological analysis. *Abstracts of Presented Papers: The Parapsychological Association 54th Annual Convention*, 21–22.
- Roy, A. E., & Robertson, T. J. (2004). Results of the application of the Robertson-Roy protocol to a series of experiments with mediums and participants. *Journal of the Society for Psychological Research*, 68, 18–34.
- Schwartz, G. E., Geoffrion, S., Jain, S., Lewis, S., & Russek, L. G. (2003). Evidence of anomalous information retrieval between two mediums: Replication in a double-blind design. *Journal of the Society for Psychological Research*, 67, 115–130.
- Seligman, R. (2005). Distress, dissociation, and embodied experience: Reconsidering the pathways to mediumship and mental health. *Ethos*, 33, 71–100.
- Simmonds-Moore, C. (2009). Personality variables in spontaneous psi research: Contextualizing the boundary construct in its relationship to spontaneous psi phenomena. In C.A. Roe, L. Coly, & W. Kramer (Eds) *Utrecht II: Charting the future of Parapsychology* (pp. 326–362). New York: Parapsychology Foundation.
- Smith, J. A. (1996). beyond the divide between cognition and discourse: Using interpretative phenomenological analysis in health psychology. *Psychology and Health*, 11, 261–271.
- Stewart, A. L., Ware, J. E., Jr., Sherbourne, C. D., & Wells, K. b. (1992). Psychological distress/ wellbeing and cognitive functioning measures. In A. L. Stewart & J. E. Ware, Jr. (Eds.), *Measuring functioning and wellbeing: The Medical Outcomes Study approach* (pp. 102–142). Durham, NC: Duke University Press.
- Tabachnick, b. G., & Fidell, L. S. (2001). *Using multivariate statistics* (4th ed.). boston, MA: Allyn and bacon.
- Van Ijzendoorn, M., & Schuengel, C. (1996). The measurement of dissociation in normal and clinical populations: Meta-analytic validation of the Dissociative Experiences Scale (DES). *Clinical Psychology Review*, 16, 365–382.
- Waller, N., Putman, F., & Carlson, E. (1996). Types of dissociation and dissociative types: A taxometric analysis of dissociative experiences *Psychological Methods*, 1, 300–321.
- Wilson, S. C., & barber, T. X. (1982). The fantasy-prone personality: Implications for understanding imagery hypnosis, and parapsychological phenomena. *Psi Research*, 1, 94–116..

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Abstracts in Other Languages

French

UN SONDAGE SUR LA DISSOCIATION, L'ÉPAISSEUR DES FRONTIÈRES ET LE BIEN-ÊTRE PSYCHOLOGIQUE DANS LA MEDIUMNITE MENTALE SPIRITE

RESUME: Le but de cette étude était d'explorer la personnalité et le bien-être psychologique de médiums mentaux spirites comparés à des spirites non-médiums. Un total de 159 spirites (80 médiums et 79 non-médiums) ont participé à un sondage national trans-sections et ont complété des mesures de la dissociation, de l'épaisseur des frontières, du bien-être psychologique, de l'enclin à l'imaginaire et de personnalité. Les médiums ont obtenu des scores plus élevés que les non-médiums sur le bien-être psychologique, $t = 3.80$, $p < .001$, et ont relaté moins de détresse psychologique, $t = 3.25$, $p = .001$, mais aucune différence significative entre les groupes sur la dissociation ou l'épaisseur des frontières. Les analyses secondaires ont révélé des différences significatives pour l'extraversion, $t = 2.01$, $p = .046$, le névrosisme, $t = 3.59$, $p = < .001$, et l'ouverture à l'expérience, $t = 3.21$, $p = .002$, mais pas pour l'enclin à l'imaginaire, l'agréabilité, et la conscienciosité. Ces résultats suggèrent que la médiumnité n'est pas associée avec davantage de témoignages d'expériences dissociatives ou de pathologie. Les résultats sont discutés en relation avec la recherche antérieure qui a proposé que le rôle médiumnique pourrait avoir une fonction thérapeutique.

Spanish

UNA ENCUESTA SOBRE DISOCIACIÓN, POROSIDAD MENTAL (BOUNDARY THINNESS) Y BIENESTAR PSICOLÓGICO EN MEDIUMNIDAD MENTAL ESPIRITUALISTA

RESUMEN: El objetivo de este estudio fue explorar la personalidad y el bienestar psicológico de mediums mentales espiritualistas en comparación con espiritualistas no-mediums. Un total de 159 espiritualistas (mediums = 80, no-mediums = 79) participaron en una encuesta nacional transversal y completaron medidas de disociación, porosidad mental, bienestar psicológico, propensión a la fantasía, y personalidad. Los mediums puntuaron significativamente más alto que los no-mediums en bienestar psicológico, $t = 3.80$, $p < .001$, y mencionaron menor sufrimiento psicológico, $t = 3.25$, $p = 0.001$, pero no se encontraron diferencias

significativas entre los grupos en disociación o porosidad mental. Los análisis secundarios revelaron diferencias significativas en extraversión, $t = 2.01$, $p = 0.046$, neuroticismo, $t = 3.59$, $p = <0.001$, y apertura a la experiencia, $t = 3.21$, $p = 0.002$, pero no en propensión a la fantasía, sociabilidad, o meticulosidad. Los resultados sugieren que la mediumnidad no está asociada a una incidencia de experiencias disociativas o patología. Discutimos los resultados en relación con investigaciones anteriores que han propuesto que la mediumnidad puede tener una función terapéutica.

German

EINE UMFRAGE ÜBER DISSOZIATION, DURCHLÄSSIGKEIT VON GRENZEN UND PSYCHO-LOGISCHES WOHLBEFINDEN BEI SPIRITISTISCHER MENTALER MEDIALITÄT

ZUSAMMENFASSUNG: Die Absicht dieser Studie bestand in der Erforschung der Persönlichkeit und des psychologischen Wohlbefindens spiritistischer mentaler Medien verglichen mit Spiritisten ohne mediale Begabung. Eine Zahl von 159 Spiritisten (80 Medien, 79 Nicht-Medien) nahmen an einer das ganze Land umfassenden Querschnittsumfrage teil und füllten Fragebögen zur Erfassung der Dissoziation, der Durchlässigkeit von Grenzen, des psychologischen Wohlbefindens, der Phantasieneigung und Persönlichkeit aus. Medien schnitten im Vergleich mit Nicht-Medien signifikant höher bei psychologischem Wohlbefinden ab, $t = 3.80$, $p < .001$, und berichteten über geringeres psychologisches Missbehagen, $t = 3.25$, $p = .001$, allerdings zeigten sich keine signifikanten Unterschiede zwischen den Gruppen bei Dissoziation oder Durchlässigkeit von Grenzen. Sekundäre Analysen ergaben signifikante Unterschiede bei Extraversion, $t = 2.01$, $p = .046$, Neurotizismus, $t = 3.59$, $p = < .001$, und Offenheit für Erfahrungen, $t = 3.21$, $p = .002$, jedoch nicht für Phantasieneigung, Umgänglichkeit und Gewissenhaftigkeit. Die Ergebnisse legen nahe, dass Medialität nicht mit der berichteten Häufigkeit an dissoziativen Erfahrungen oder Pathologie einhergeht. Die Befunde werden in Bezug auf frühere Forschungsergebnisse diskutiert, die nahe legen, dass die Rolle als Medium eine therapeutische Funktion erfüllen kann.

