Learning from the Spirits: Candomblé, Umbanda, and Kardecismo in Recife, Brazil

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ABSTRACT

Brazilian spiritistic religions have developed along elaborate historical and cultural trajectories with spirit mediumship as a central feature of ritual practice in Candomblé, Umbanda, Kardecismo, and similar groups. In these studies, several Brazilian spiritistic practitioners who worked as mediums were interviewed and, in some cases, tested with psychological measures for dissociation using the Dissociative Experiences Scale, for absorption using the Tellegen Absorption Scale, and for sexual orientation using the Kinsey Scale. Few significant gender differences were noted in these measures. In two cases, psychophysiological measures were employed including electroencephalography, heart rate, skin conductance, and electromyography. In general, the research participants scored highly on measures of dissociation while scoring in the average range on absorption (using U.S. norms). The psychophysiological results indicated that for the two spiritistic practitioners investigated overall peripheral autonomic nervous system activation was negatively associated with sympathetic cortical level deactivation. The data suggested a psychophysiological incongruence between the central nervous system and the peripheral nervous system functioning on the part of the two practitioners. However, the two variables were positively associated and congruent in data obtained from a control subject. Interview data identified five ways in which mediums received their “call to heal,” visions, dreams, and unexpected incorporations being the most frequent factors cited. One medium who engages in surgical procedures was observed; tissues were collected from ten clients and were found to be consistent with the site of the surgery. In conclusion,
it is apparent that mediumship is a complex phenomenon, one deserving of further investigation by anthropologists, psychologists, and sociologists interested in human consciousness, in indigenous health care, and in the psychophysiology of practitioners who claim to work under the direction of spirit entities.

**Keywords:** mediumship, African-Brazilian religions, dissociation, absorption, psychophysiology

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**Cultural Background**

In Brazil, mediumship is a central component within the ritual practice of what can be termed its “spiritistic religions.” Mediumship involves the belief in the bodily incorporation of spiritual agents and/or the channeling of information from the “divine world” to the “material world,” often for therapeutic purposes. In the United States, “mediums” are conceptualized somewhat differently from “channelers”: the former group focuses on communication with the dead and the latter with a broader scope of “entities” or purported “sources” of information. Mediums and channelers both purport to be able to receive information that supposedly does not originate from consensual reality (e.g., from living persons, media, their own memory). Some writers in the United States (e.g., Hastings 1991; Klimo 1998) use the term medium to refer to practitioners who purportedly obtain this information from deceased persons, and channelers to practitioners who claim to obtain information from other “spiritual entities” (e.g., deities, “nature spirits,” inhabitants of “other dimensions”) as well.

Mediumship is typically induced during so-called altered states of consciousness (perhaps better described as “patterns of phenomenological properties,” Rock and Krippner 2007). These “states” (or “patterns”) play an important role in the rituals of spiritistic religions, that is, those African-Brazilian religions in which “spirits” (most of whom “accompanied” slaves to Brazil during the diaspora) occupy a central role, for example, Batuque, Caboclo, Candomblé, Kardecismo, Macumba, Tambor de Minas, Umbanda, Xango. Permeating these religions’ mythologies are stories about a “Sky God” and his intermediaries, the orixás (also spelled orishas), who symbolize the primordial forces of nature. These orixás are believed to be powerful and terrifying, but also similar to humans in that they can be talked to and pleaded with, as well as cajoled through special offerings. The orixás and less powerful entities (e.g., exus and pombajiras who are “lower” spirits; caboclos or Brazilians of mixed Indian, European, and African heritage; crianças or spirits of babies or young children; pretos velhos or spirits of elderly slaves, or even of one’s ancestors or former “incarnations”) can take hold of the mind and body of a human through acts of voluntary “spirit incorporation,” which were central features in African ritual practice.
African religious practitioners gained access to the “divine world” in three ways: by making offerings to the orixás; by “divining,” or foretelling the future with the help of an orixá; and by incorporating an orixá, ancestral spirit, or other entity who—when benevolent—would warn the community about possible calamities, diagnose illnesses, and prescribe cures. The “medium” through whom these spirits spoke and moved typically performed this task voluntarily. The “trance,” or pattern of phenomenological properties (such as the medium’s dissociative capacities and his or her capacity to become absorbed in the task) required for the voluntary gift of the medium’s mind and body to the orixá or spirit, was brought about by such practices as dancing, singing, and drumming. The practice of allowing the orixá to “inhabit” one’s body not only survived the transition from Africa to Brazil but occasionally made use of new-world indigenous techniques of mind alteration, such as the use of strong tobacco or other psychotropic plants (Haviser 2006; Villoldo and Krippner 1987).

Of all the Brazilian spiritist movements, Candomblé (or, more accurately, the Candomblês, given the variety of forms it has taken in different parts of the country) is the one that most closely resembles the original religions of Africa, retaining the original names and worship of many West African orixás (Bastide 1960, 1971). In Candomblé, devotion is typically reserved for only the orixás and exús, which reflects its African heritage. The name Candomblé seems to have been derived from *candombe* or *gandombe*, a community dance held by the slaves who worked on coffee and sugar cane plantations in Brazil.

Among the other most prominent spiritistic movements are Umbanda and Kardecismo. Kardecismo or Kardecism, which is also called Espiritismo or Spiritism, owes more to the teachings of Allen Kardec, a French pedagogue, than to the African traditions. Umbanda gives a greater emphasis to Brazil’s Christian heritage than to the African orixás. In some parts of Brazil, Santo Daime, a religious movement using a psychoactive tea, ayahuasca, as a sacrament, has added elements of Umbanda to its services, demonstrating the syncretization that has characterized most postcolonization religious movements in Brazil (Giesler 1985). In fact, the Roman Catholic Church has spawned the Culto aos Santos, the Cult of the Saints, which is suffused with healing rituals reminiscent of African-Brazilian practices. Pentecostal Protestantism (e.g., Wood et al. 2007) has little use for the African-Brazilian religions but encourages its adherents to become “seized by the Holy Spirit” as an alternative to African-based spirit incorporation. All of these religious movements can be classified as “ecstatic religions” (Lewis 1971) because they deliberately foster shifts in their adepts’ patterns of phenomenological properties. As a result, these shifts provide opportunities for direct contact with the divine world, albeit with the use of a cosmology that varies from group to group.
Candomblé, Kardecismo, and Umbanda, as the three major spiritistic groupings (Hess 1994), can be differentiated along an ethnic/class-oriented continuum of Brazilian spiritism. Umbanda is situated at the center of this continuum—with cultos de nação (cults of African nations, such as Candomblé) at one extreme and the “more European” Kardecism on the other. Umbandistas typically draw from a broad range of beliefs and practices associated with either the “magical” African-Brazilian pole or the “faux scientific” European-Brazilian pole. The ethnic makeup of these religious groups has historically reflected this continuum; with Candomblé appealing mainly to African-Brazilians typically found in the poorer segments of Brazilian society, Kardecismo appealing to middle-class European-Brazilians, and Umbanda appealing to a more varied mixture of ethnicities though still coming primarily from Brazil’s lower socioeconomic classes. However, descriptions of ongoing changes in ethnic and class demography in each religious group (Brown 1994) defy any rigid categorization along these lines and testify to the fluid religious landscape in Brazil. Along a spiritual continuum, however, the three groupings represent a commonality of belief in the realm of the spirit, the power and efficacy of spirit agents, and the ability of human clients to interact with and embody these agents through the ritualized methods of spirit incorporation (Krippner 1989).

THE PATHOLOGIZING OF SPIRITISTIC PRACTICES

In the late 19th century, and well into the 20th century, the practice of mediumship by members of these three groups, as well as by members of several smaller sects, were identified with psychopathology by the psychiatric establishment in Brazil. Nina Rodrigues (1935) conducted extensive research on various types of African-Brazilian mediumistic practices. He considered them all the outcome of “hysterical phenomena,” allowed by the “extreme neuropathic or hysterical” and “profoundly superstitious” personality of the Negro. Xavier de Oliveira claimed that in a period of 12 years, 9.4% of a total of 18,281 patients hospitalized in the Psychiatric Clinic of the University of Rio de Janeiro suffered from psychosis that he attributed to Spiritism (1931). In 1936, Pacheco e Silva maintained that Spiritism aggravates an already existing psychosis or stimulates latent psychotic predispositions.

Two elements played a role in the psychiatrists’ viewpoint. First, the intellectuals of Brazil were attempting to create a modern Eurocentric nation, suppressing or pathologizing all “primitive” creeds and practices. Second, the psychiatrists were either Roman Catholic or secular materialists; for both groups, Spiritism was an enemy to be overcome (Moreira-Almeida et al. 2005:14).
The seminal work of Roger Bastide took a different perspective. In 1978, Bastide concluded that mental pathology explained some cases, but that possession trance is basically a sociological phenomenon. Psychiatric theory henceforth started developing cultural sensibility, also influenced by the development of transcultural psychiatry and ethnopsychiatry (Lewis-Fernandez and Kleinman 1995). Within this rubric, research data have been collected that support the position that mediumship is a skill, one that can empower its practitioners (especially if they are women in a patriarchal culture) and provide support for members of the community who are suffering from anxiety, depression, and other afflictions (Krippner 1997).

POSSSESSION AND DISSOCIATION

The term incorporation is used by the spiritistic groups in Brazil to describe situations in which practitioners allow themselves to be “taken over” by a “spirit entity,” exemplified by mediums who voluntarily allow the incorporation of an orixá. On the other hand, the term possession is used to define the experience of an involuntary takeover, one that is usually distressful, unwelcome, and that may be long lasting (Negro et al. 2002:65). The latter type typically requires the intervention of a religious specialist who can “exorcise” or “depossess” the offending agency.

However, there have been difficulties in clarifying the relationship of “possession” to concepts such as “trance,” “altered states,” and “dissociation.” In their study of the Batuque, an African-Brazilian possession tradition, Leacock and Leacock conceive of possession as “the presence in the human body of a supernatural being” and trance as “an altered psychological state” (1972:217). Although they also employ the expression trance-possession, it would be mistaken to assume that the terms are synonymous. Distinctions must be made with regard to “possession” as belief and “possession” as experience. That is, possession can refer to the belief in the potential for voluntary or spontaneous interaction with or incorporation of a benevolent and malevolent spirit. The culturally or individually construed belief, in turn, can have consequences for individual behavior as well as social interaction. Possession can also occur without the physiological alterations of consciousness associated with “dissociative trance.” The Ethiopian zâr cult, for example, blames the origins of many types of diseases and maladies on possession but then induces trance after one is said to have been possessed in order to communicate with the spirit (Walker 1972). This is also common in Umbanda and contemporary Brazilian Pentecostalism. Finally, possession can be understood in terms of “trance-possession” (i.e., “possession trance”) in which the incorporation of a spirit is experienced
concurrently with psychophysiological changes and modifications in the conscious state that are characteristic of "dissociative trance."

The anthropologist Erika Bourguignon (1976; Laurguignon and Evascu 1977), an investigator of "spirit possession," has differentiated between "possession" (in which a "spirit" produces changes in someone's behavior, health, or disposition without an accompanying loss of awareness), "possession trance" (in which someone loses conscious awareness, while the invading spirit's own behavior, speech patterns, and body movements “take over” that person evoking changes that can be observed by outsiders), and "trance" (a so-called altered state of consciousness including the loss of conscious awareness but without the presence of a spirit or other outside entity).

To further specify distinctions that need to be made in the terminology, even "possession trance" can be voluntary or involuntary, helpful or harmful. In possession trance, the intrusive spirit may be quite benevolent, bringing new insights to the possessed individual by means of "automatic writing," "channeling," or "mediumship." And, sometimes the spirit plays the role of a trickster, teaching the individual life lessons through embarrassment, playful activities, or humor. These results are quite different from those cases of possession in which an invading entity takes over a victim’s body as the result of a malevolent sorcerer's curse or simply to gratify the spirit entity's "earthbound" impulses and desires. These types of "trance" are extremely dissociative; the client manifests experiences and behaviors that seem to exist apart from, or appear to have been disconnected from, the mainstream (or flow) of his or her conscious awareness, behavioral repertoire, and self-identity (Krippner 1997:8).

**Psychophysiology and Dissociation**

From a psychophysiological perspective "dissociation" involves the disengaging of the cognitive processes from their executive, higher-order, volitional faculties (Winkelman 2000). Generalized psychophysiological correlates of what might be described as trance with dissociative aspects involve hemispheric lateralization that favors (in right-handed people) the right hemisphere (which is more closely associated with intuitive, emotive, nonlogical, spatial, imaginative thought and perception) over the ordinarily dominant left hemisphere (more closely associated with linguistic and logical-type processing). This can eventually shift toward cortical synchronization (Schumaker 1995).

Winkelman (1986) suggested that a wide range of culturally patterned induction techniques leads to generalized *parasympathetic dominance* in which the frontal cortex exhibits high-voltage, slow-wave, synchronous electroencephalography patterns (EEG; e.g., theta rhythms) that originate in
the limbic system (hippocampal–septal region and the amygdala) and proceed to frontal regions via limbic–frontal innervations. Some alterations in consciousness, such as some forms of meditation and hypnosis, do exhibit small variances in EEG patterning, and similar differences are also noticed between voluntarily and spontaneously induced states. Winkelman (1986) also indicated that the involvement of the limbic system is an important part of the neural architecture of dissociative trance. For instance, it has been implicated in the modulation of a variety of functions including basic survival drives and hypothalamic/pituitary release of neurotransmitter and endogenous opiates. The hypothalamic action, in turn, influences, among other things, dissociation trance-related hallucinations, analgesia, and amnesia. The hypothalamus also controls the sympathetic (excitatory) and parasympathetic (inhibitory) nervous systems, the latter being associated with decreased cortical excitation and increased hemispheric synchronization. Evidence also shows that parasympathetic dominance can be induced through excessive sympathetic activation; such as through drumming, dancing, and chanting, all of which are common features of ritual practice and in which the homeostatic reciprocal action of the autonomic nervous system collapses.

Lex suggested that the “raison d'être for rituals is the readjustment of dysphasic biological and social rhythms by manipulation of neurophysiological action under controlled conditions” (1979:144). Rituals, such as those associated with possession and mediumship, therefore, not only provide psychological relief from social and environmental stressors but also are mechanisms that employ driving techniques that “tune” the nervous system through hemispheric lateralization, parasympathetic dominance, and cortical synchronization.

In a field study conducted by Don and Moura (2000), topographic brain mapping at midline scalp locations of what they referred to as “healer-medi-ums” revealed increased brain activity when the healer-mediums reported being incorporated by a spirit, compared to resting baseline conditions at midline scalp locations. These results suggest the presence of a hyper-aroused brain state associated with the possession trance behaviors of the mediums. In contrast, a small sample of patients monitored during possession trance revealed no high-frequency brain activity.

A CALL TO HEAL

Between 1973 and 1987, I visited Brazil six times, meeting over one hundred spiritistic mediums and attending some three dozen sessions in which they allegedly incorporated spirits and attempted various types of healing and counseling. Often with the help of an interpreter, I interviewed 2 Candomblé, 15 Umbanda, 14 Kardecismo, and 8 “eclectic” mediums, asking them...
how they had become adept at incorporating spirits for the purpose of alleviating physical or emotional distress of their clients. There were 22 women and 18 men in this group, and they represented a dozen cities or towns in six different Brazilian states. Various methods of socialization appeared to have operated, which I was able to categorize into five pathways that allowed the practitioners to receive their “call.”

For these individuals the most common pathway for receiving this “call” was through dreams, visions, or similar revelatory experiences in which they were called by orixás, spirit entities, or deceased relatives. Some of them reported imagery from “past lives” that motivated them to begin a training program, usually one organized by one of the spiritistic religions. Some of the research participants reported the spontaneous incorporation of a spirit guide during a religious service. A few respondents claimed to have received personal instruction from the spirit guide, rather than from a babalao or pai-de-santo (father of the spirits) or iyalarixa or mãe-de-santo (mother of the spirits) in a local Candomblé or Umbanda terreiro (temple) or Kardec healing center. This pathway was especially common among eclectic mediums, many of whom combined spiritistic doctrine with Eastern philosophy or Western psychology.

The second most common way in which some research participants received the “call” was their membership in a family that had a legacy of mediumship. From childhood, these practitioners had observed their relatives incorporating spirits and eagerly attempted to follow the family tradition. One medium, whose mother was a celebrated Kardec medium, recalled incorporating spirits when she was seven years of age. On the other hand, I interviewed several mediums who were distressed that none of their children seemed interested in becoming mediums. They consoled themselves by claiming that the “gift” often “skips a generation” or that the “call” frequently occurs later in life.

Some practitioners began to attend spiritistic services out of curiosity or because the ceremonies were spiritually satisfying to them. They volunteered for the charitable work carried on by the terreiro or healing center, spending time with the aged, the infirm, the sick, the handicapped, or the orphaned. Gradually, these individuals were assimilated into the movement and requested mediumship training.

Other practitioners were identified as potential mediums when they came to a temple or center to request assistance, or when a medium came to their aid when they fell ill. As part of their treatment, they were advised to attend mediumship classes. It was common for a person who had been diagnosed with “schizophrenia” or given some other psychiatric label to be told to avoid medication and hospitalization because it would misdirect their mediumistic “gift.”

A final pathway to the “call” was through attending lectures or reading books on spiritistic topics. Kardecismo and the African-Brazilian religions place a
strong emphasis on charitable services and altruistic attitudes, a stance that appealed to some men and women who had been successful in their career but whose life lacked meaning. Involvement in mediumship filled this existential void and provided a new avenue for the expression of their talents and capacities.

In several cases, there was an overlap of categories. In 1983, when I was in Salvador de Bahia, I interviewed Mãe Menininha de Gantois (Little Girl Mother of Gantois) who lived with her family at the Casa Branca (the White Temple), one of the oldest Candomblé terreiros in Brazil. She had just celebrated her 83rd birthday and took pleasure in telling me that her grandfather had been a slave from Dahomey, Africa, and that her grandmother, Maria Julia Nazare, was a mãe-de-santo who had helped found the first Candomblé temple in 1830. Mãe Menininha had a series of visions and dreams that she interpreted as a “call” to mediumship. Although her father objected, she followed the “call”; as she told me, “Once the orixá calls, there is no other path to take.” If one spurns the “call,” disaster, sickness, or mental illness might follow.

A PAI-DE-SANTO IN RECIFE

In 1989, the results of this survey were published, and in 1990 I met Pai Ely (Father Eli), born in 1932 as Manoel Rabelo Pereira, a pai-de-santo in Recife, Brazil. I visited his terreiro or temple, the Lar de Ita, several times between 1990 and 2006, making observations and conducting interviews with him and members of his congregation. I was especially interested in Pai Ely because he conducts both Candomblé and Umbanda services in the Center and is well versed in both traditions. I published a case study describing his “call” and his practice, noting that his temple was one of the first to eliminate the practice of animal sacrifice, which had been a holdover from colonial times (Krippner 1998/1999).

Formerly, Pai Ely had been a bank executive. When he was in his early 40s, he began to see and hear spirits and orixás. He was uncomfortable with these phenomena and fought the presence of the entities, especially when they told him that he was being “called” to become a healer. As a result of this incident and those like it, Pai Ely began to transform his social identity from a bank executive to a pai-de-santo.

Pai Ely told us that his teacher, Master Oascati, a man in his 70s at the time of our visit, lives in Benin, Africa. Master Oascati once told Pai Ely that he must constantly work on himself, trying to obtain clearer and purer information from the orixás. Master Oascati explained that it is extremely easy for one’s own biases, experiences, and fantasies to contaminate the spiritual message. In Pai Ely’s words, “The orixá paints only one small part of the picture; the medium
must paint the rest.” As a result, the client receives no “pure” information; according to Pai Ely it is unusual for more than 25 percent of the orixá’s message to get through. Furthermore, many of the messages are from exús, pombajiras, or “lower” ancestral spirits, not orixás; these entities are not “illuminated beings” and may unknowingly distort information or deliberately play tricks on the mediums and their clients. To prepare to receive the orixás and “higher” spirits, Pai Ely will usually engage in meditation or group prayer (Borges 1992; Krippner 1998/1999).

The Psychophysiology of Two Mediums

In 1999, my colleagues and I enlisted Pai Ely’s cooperation for a psychophysiological study of his mediumship. Another well-known Recife medium, José Jacques Andrade, agreed to participate, and we utilized the services of a local tour guide and translator (E.O.S.), who was not associated with any of the local spiritistic movements, as an age-matched control because when one works with individuals with special abilities, it is useful to make intracultural comparisons (Murphy 1969).

All three research participants signed informed consent forms (designed by the Saybrook Institutional Review Board), and both practitioners encouraged us to use their actual names. Each of the mediums also received permission from his spirit guides to participate in the investigation, and we dubbed the spirits our “co-researchers.”

José Jacques Andrade, born in 1945, is a medium who is active in the Kardecismo movement. During a 1998 visit to his center, the Leonardo da Vinci Salon of Mediumistic Art, Krippner observed a Kardec ceremony, one which culminated in Andrade’s “incorporation” of several famous artists (e.g., Monet, da Vinci) and a few who were unknown to anyone including Andrade himself. In preparation for this occurrence, Andrade and his group sang several hymns and prayed. Andrade, nearly deaf, did little singing as he was preparing himself, through prayer, for the incorporation of his colleagues in the divine world.

Once the aid of the spirits had been evoked, Andrade dipped both of his hands into jars of paint and, with two canvasses in front of him, swiftly began to execute remarkably attractive landscapes, still life paintings, and portraits, two at a time. For example, with one hand, he produced a landscape signed “Monet,” while with the other, a still life signed “Cezanne.” The other artists represented that evening included Van Gogh, Manet, Picasso, da Vinci, Degas, Portinari, and Toulouse-Lautrec.

Andrade produced these works at an extraordinary speed, each work taking no more than ten minutes. Each painting bore at least a passing resemblance to the style of the artist being incorporated, some more than others. The artists
whose style was the most delicate were the first to be incorporated, whereas those whose brush strokes were coarser were incorporated last, when Andrade’s fingers were coated with several layers of paint. In other words, Monet and Degas would arrive on the scene before Picasso and Van Gogh.

Lima (1998) collected 107 paintings executed by Andrade between September 8, 1994 and November 7, 1995, looking for similarities in the process itself, in the product, and in the signatures of the purported artists. Dozens of different artists were represented in this collection; the most frequent being Miro (3.7% of the total), Van Gogh (3.2%), and Dali (2.3%). The paintings attributed to Miro were thought to resemble the artist’s later works rather than his earlier works. Lima reported that before beginning to paint, Andrade hesitated for about 20 or 30 seconds; the average time spent on a painting was 6 minutes, 28 seconds.

Andrade showed a preference for using his right hand, although he would frequently use both hands, producing two paintings at the same time, sometimes employing his palms as well as his fingertips. He would initiate the paintings from the center of the canvas, often with a circle, then branching into its other sections, whether painting a landscape, a person’s head, or a still life. Andrade inscribed the letter “H” in a truncated manner, independently of the artist he was “channeling.” The amount of light during the session appeared to be linked with the choices of colors; dim lighting was associated with such dark colors as black and brown, bright lighting with white and yellow, and intermediate lighting with the other major colors of the spectrum. Finally, there were many fences in the paintings, interpreted as representing Andrade’s auditory challenges.

Lins (1999) reviewed the literature on “paranormal painting,” noting that in a few cases, correspondences between the medium’s productions and those of the deceased artist were established by judges said to have been knowledgeable concerning art history. Lins created a scale for evaluating the artistic merits of these paintings: level of artistic production, diversification, length of time, peculiarities of the work, and the artist’s signature. The artistic production receives a score of 0, 1, or 2 for each item on this scale; if the total is smaller than 4, Lins would not consider it a “paranormal painting.”

Our third research participant, E.O.S., was born in 1945. He is a tour guide and schoolteacher. He had assisted one of us (Krippner) as a translator in 1993 and 1995 and was familiar with the spiritist religions of the area. We felt that the inclusion of a control participant was essential to determine if there were cultural constraints or environmental demand characteristics that could account, at least in part, for the results obtained from the two mediums. All research participants denied being on any form of medication before or during the testing (Wickramasekera et al. 1997).
INSTRUMENTS

Dissociation
The Dissociative Experiences Scale (DES) (Bernstein and Putnam 1986) is used as a screening tool for both clinical and nonclinical populations to assess the frequency and intensity of dissociation in one’s daily life. The revised version of the DES (Carlson and Putnam 1993) used in this study consists of 28 items that ask what percentage of the time (i.e., % to 100% in intervals of 10) the individual experiences certain dissociative events or perceptions. The higher the DES score, the more likely it is that the respondent has a dissociative identity disorder; however, only 17% of those who score above 30 on the DES are diagnosed with the disorder (Carlson and Putnam 1993).

Absorption
The Tellegen Absorption Scale (TAS) (Tellegen and Atkinson 1974; Tellegen 1977) appears to measure an individual’s capacity for experiences that involve both the narrowing and broadening of attentional focus. These attentional states are characterized by marked restructuring of one’s phenomenal self and one’s world (Tellegen and Atkinson 1974). Roche and McConkey (1990) call absorption a capacity to experience alterations of cognition and emotion over a broad range of situational experiences. The TAS may be a reasonably good predictor of responses to cognitive suggestions under hypnosis such as hallucinations, but a less reliable predictor of hypnotically presented ideomotor tasks (Kirsch and Council 1992). The TAS consists of 34 true or false response items; administration time is approximately 10 minutes. A Portuguese translation of the TAS (McIntyre et al. 2001) was employed in this study.

Psychophysiological Measures
Wickramasekera et al. (2001) obtained psychophysiological data from all three research participants with a portable computerized polygraph when they attended a parapsychological conference in Recife in 1999. I. and J. Wickramasekera collected the polygraph data; Krippner was present at most of the test sessions, which were held in a quiet and comfortable Recife hotel room.

The psychophysiological equipment that was used in this study measures hand temperature, heart rate, bilateral skin conductance, muscle tension (electromyography or EMG), and electrical brain activity (EEG). In other words, it records responses from both the peripheral nervous system (PNS) and the central nervous system (CNS).
RESULTS

Dissociative Experiences Scale
The DES was administered by Brazilian colleagues and was scored by Krippner, once the results arrived in the United States. Andrade obtained a score of 72, and Pai Ely obtained a score of 87, both scores place them in the “highly dissociative” category; E.O.S. received a score of 54, which also places him in the “highly dissociative” category. For example, all three respondents reported that they often “have the experience of sometimes remembering a past event so vividly that [it feels] as they were reliving that event,” but only the mediums reported that they often “have the experience of feeling that their body does not seem to belong to them.” The fact that our control participant was “highly dissociative” suggests that this trait might be cultural in nature rather than idiosyncratic.

Tellegen Absorption Scale
The Tellegen Scale was administered by Brazilian colleagues and was scored by Krippner, once the results arrived in the United States. Pai Ely obtained a score of 28, which places him in the “high absorption” category. Both Andrade and E.O.S. received scores of 21, which place them in the “medium absorption” category. For example, all three research participants claimed to be moved by songs that they enjoyed, to get caught up in the action while watching a movie, and liked to watch clouds take various shapes in the sky. However, only Pai Ely claimed to anticipate statements from other people when discussing allegedly supernatural experiences, to feel imaginary matters with such intensity that they seemed real, and for music to evoke colorful pictures in his imagination. He also claimed to think in visual images, to be able to imagine his body becoming so heavy that it would not move, and to occasionally feel “suspended in air” while listening to a band or orchestra. Because there are no Brazilian norms for either test, the results need to be viewed with caution and not overly interpreted.

Psychophysiological Results: Andrade
Andrade’s psychophysiology was measured under two baseline resting conditions (eyes open; eyes closed), then, while he was imagining “incorporating” a celebrated artist from the “spirit world,” and finally, during his return to baseline conditions (eyes open; eyes closed). Each condition lasted for 4 minutes.

During the first baseline (eyes open) condition, Andrade demonstrated about a 5° Fahrenheit discrepancy between mean temperature in his left hand (mean: 80.77, standard deviation (SD): 0.25) and his right hand (mean: 85.55, SD: 0.31). When Andrade was asked to close his eyes and relax (for 4 minutes), there was a
change in temperature in both his left hand (mean: 79.57, SD: 0.10) and his right hand (mean: 83.88, SD: 0.19).

When Andrade was asked to imagine “incorporating” an artist, his left hand temperature dropped an additional degree (mean: 78.79, SD: 0.17). However, his right hand temperature barely changed (mean: 83.46, SD: 0.18). When instructed to stop the imagination task and relax, first with eyes open and then with eyes closed, Andrade’s temperature continued to drop in both his left hand (mean = 77.59, SD: 0.13) and his right hand (mean: 81.64, SD: 0.15).

Mean frontal EMG baseline readings from an eyes open condition were high (mean: 7.8 microvolts, SD: 1.9). When instructed to close his eyes and relax, Andrade’s frontal EMG actually increased (mean: 8.5 microvolts, SD: 0.4). This result was contrary to expectations. When instructed to close his eyes and imagine “incorporating” an artist, Andrade’s mean frontal EMG jumped to 12.5 microvolts (SD: 2.2). When told to stop imagining, to open his eyes, and to relax, his mean frontal EMG dropped to 6.0 microvolts (SD: 0.2). When told to close his eyes and relax, his frontal EMG increased to 8.6 microvolts (SD: 1.0). Again, this result is paradoxical. However, Andrade’s increase in frontal EMG under this condition is consistent with a hypothesis of increased muscle tension in his head during the eyes closed condition, possibly driven by intrusive cognitions and/or affect.

Andrade’s heart rate data are also consistent with the hypothesis of intrusive events occurring in the eyes closed conditions. His mean heart rate always increased modestly in the eyes closed conditions (mean: 61.3 beats per minute, SD: 1.5 beats), and particularly during “incorporation” (mean: 63.4 beats per minute, SD: 2.0). Andrade’s mean heart rate dropped when he opened his eyes (mean: 55.8 beats per minute, SD: 2.2). In general, Andrade’s heart rate is quite low for a person of his age and increased only modestly during the imagination task.

Paradoxically, Andrade’s mean skin conductance level (SCL) dropped across the entire session independent of any of the other conditions and instructions. Temperature was higher on the left side of Andrade’s body across both baselines as well as during the imagination task. Generally, there was a greater sympathetic activation in his left hand than in his right hand.

The EEG data showed an increase in the percentage of theta brain waves from the eyes open to the eyes closed baseline conditions, but a drop in alpha percentage. During the imagination task, there was an increase in the percentage of alpha comparable to the eyes open condition. Paradoxically, this increase in the percentage of alpha was also associated with a sustained increase in beta percentage, even after the imagination task was completed.

In general, the psychophysiological data obtained from Andrade reveal several incongruent findings. (1) There was a general reduction in SCL across conditions. Because SCL is a measure to sympathetic activation or withdrawal, it is paradoxical to find it associated with peripheral vasoconstriction and
increased EMG during the imagination task that might typically be thought of as a relaxing condition. Both sets of data suggest increased sympathetic activation in these response systems. (2) The increase in muscle tension during the eyes closed imagination condition and the associated increase in the percentage of alpha activity during imagination are also paradoxical. These two measures (EMG and alpha EEG) are typically negatively correlated, not positively correlated.

We concluded that there were markedly specific incongruences in the peripheral and central physiological response systems. In other words, there were deviations during Andrade’s imagination condition that were discrepant from what is typically seen during an eyes closed imagination condition. This supports a previous finding that physiological incongruences are frequent outcomes of testing sessions with people claiming “mediumistic” abilities (Wickramasekera 1991). Not only are there incongruences between the mediums’ verbal reports and behavioral observations but between their psychophysiological response systems as well.

**Psychophysiological Results: Pai Ely**

Pai Ely’s psychophysiology was measured under two baseline resting conditions (eyes open; eyes closed). Then, while he was imagining “incorporating” a discarnate entity from the “spirit world,” and finally, during his return to baseline conditions (eyes open; eyes closed). Each condition lasted for 4 minutes. Pai Ely later reported that he had imagined incorporating a “gentle” *preto velho*.

During baseline conditions before the imagination task, Pai Ely’s EMG, EEG, and SCL measures were quite normal, but his heart rate was high (mean: 90 beats per minute). His hand temperature was discrepant when the left and right hand sides of the body were measured (left hand mean: 90.0; right hand mean: 88.0). When Pai Ely was asked to close his eyes and relax (for 4 minutes), the results were similar. Hence, even before initiating the imagination task, there were notable incongruences between two of Pai Ely’s psychophysiological responses (i.e., hand temperatures), and an unusual result on another measure (i.e., heart rate). Standard deviations for each of the above mean scores were estimated as less than 1.0.

The first collection of data during the imagination condition was confounded by motor artifacts and could not be used. Pai Ely’s imagination is very vivid, and he moved his hands and arms frequently, as he does when actually “incorporating” discarnate entities. This behavior is consistent with his high score (i.e., 28) on the TAS. When Pai Ely was asked to restrain himself while imagining that he was incorporating a discarnate entity, his left hand and right hand temperature remained stable. However his percentage of theta brain waves increased in both the left and right cortical hemispheres. In addition, his EMG, SCL, and heart rate increased during the imagination condition and remained elevated relative to the earlier baseline data.
In other words, this research participant displayed incongruences between major physiological response systems, particularly during the imagination condition. Significant sympathetic activation was observed in the autonomic nervous system (ANS), but relaxation was noted in the central nervous system (CNS). The ANS and CNS typically function in a more integrated manner. These incongruent responses, therefore, are atypical.

Psychophysiological Results: E. O. S.
In the case of E.O.S., there were fewer discrepancies between CNS (e.g., EEG) and ANS (EMG, SCL, heart rate) response systems. All scores were in the normal range and were essentially congruent. However, there was a large increase in EEG $\alpha$ wave percentage in both eyes closed conditions. This finding is consistent with E.O.S.’s score of 21 on the TAS; although in the “medium absorption” category, it was exactly the same as that of one of the practitioners (Andrade). The EEG data are probably consistent with E.O.S.’s hypnotic ability, although this was not tested. However, studies of the association of absorption with measured response to hypnosis demonstrate only a moderate relationship (Spiegel 1990).

Discussion
Absorption and Dissociation
Individuals who score highly on the Tellegen Absorption Scale tend to report becoming fully absorbed while they are watching a movie, television program, or theatrical performance. They also tend to be able to suspend disbelief and to become empathic (Wickramasekera II and Szlyk 2003), especially when their companion (or, at times, a complete stranger) is undergoing stress. Those individuals scoring high on absorption have many traits in common with highly hypnotizable people, deriving meaning from body language and personal mannerisms (Fernandez 2001).

This description is especially applicable to Pai Ely who deals daily with people under stress. There are members of his congregation, as well as many outsiders, who come to him for relief of some real or imagined misfortune, interpersonal conflict, or health problem. A frequent method of treatment involves incorporation of entities from the “spirit world,” sometimes requesting that they give advice and aid, and at other times intervening to stop their purported malevolent actions against Pai Ely’s clients.

Andrade did not make as high a score on the TAS as did Pai Ely but does not have to deal as extensively or intimately with clients as does the pai-de-santo. In other words, the high score on the TAS might be related to the frequency with which the two practitioners engage in “spirit incorporation.” When Andrade
incorporates his artistic colleagues from the divine world, he often becomes so absorbed with the task that he claims not to recall the details when the discarnate entities leave the scene.

In an earlier study with seven “advanced students” at the Ramtha School of Enlightenment in Yelm, Washington, each member of the group scored in or near the top half of the TAS distribution. Their mean score of 28.6 falls at the 85th percentile. One research participant made a score of 33, falling at the 98th percentile (Krippner et al. 1998). The TAS was part of a battery of psychological tests administered, each of them measuring the “capacity to enter altered states of consciousness” (p. 14), a capacity that was found to characterize all seven of the students through subsequent interview data.

Hageman (2007) worked with 39 students at the same school, as part of a larger study involving 202 research participants. She reported that 67% (n: 26) fell into the “high absorption” category, 31% (n: 12) fell into the “medium absorption” category, and only 2% (n: 1) fell into the “low absorption” category. Re-tests during and after the training sessions detected an increase in absorption (as measured by the TAS) in all categorical levels. This school provides a standard curriculum for all of its students, one that emphasizes spiritual self-healing, as well as activities that involve considerable imagery training.

Hageman’s (2007) group also took the Dissociative Experiences Scale (Carlson and Putnam 1993); their scores were normally distributed at the beginning of the training sessions, but slightly over 20 percent received scores placing them in the “highly dissociative” category. Most of these “highly dissociative” students had also made high scores in absorption on the TAS (p. 174). In addition, most of the seven “advanced students” studied by Krippner et al. (1998) fell into the “highly dissociative” category of the Dissociative Experiences Scale. Negro et al. (2002) reported that the Kardec mediums they studied in São Paulo, Brazil, attained high scores on the Dissociative Experiences Scale, and that there was a positive association between mediumship training and the control of the dissociated experiences. The two mediums in this study also attained high scores on the Dissociative Experiences Scale and had been practicing mediumship for several decades. Their capacity for dissociative self-experiences may thus play an important role in their ability to practice as a medium through differentiating and dissociating their normal identity states during their hypnotic-like procedures (Krippner 2005).

Sociocognitive theorists of dissociation and hypnosis would probably suggest that these mediums’ phenomenological experiences during mediumship are created in accordance with their previous expectancies and beliefs about the role of being a medium and other contextual variables (Lynn et al. 1997). The sociocognitive perspective on dissociation thus seems to be illustrated in Pai Ely’s belief that as much as 75 percent of his experience during mediumship may be the result of his own biases, experiences, and fantasies. Pai Ely’s de-
scription of his process of discernment of “pure” from “contaminated” information does seem to capture the sociocognitive explanation of how a person might construct a role and personal narrative about dissociative trance experiences as a kind of “believed-in imaging” (Sarbin 1998).

We could also mention here that neo-dissociation theorists of hypnosis and dissociation might look at the importance of the hypnotic-like procedure (Krippner 2005) itself in facilitating access to the self-experience of the channeled cognitive subsystem or identity state (Hilgard 1986). A neo-dissociative theory or ego-states theory would show that an explanation of mediumship would probably highlight the normal polypsychic nature of human identity (Frederick 2005) so that it probably should not be too surprising that we might be able to encounter another ego state within us during a hypnotic-like procedure. Our experience of this normally inactive ego state may thus be activated by the hypnotic-like procedures of mediumship whether or not that ego state actually represents the presence of a spirit or deity. These theorists might then speculate that a simpler explanation of mediumship could be derived through focusing on the origin of the channeled identity as stemming from ego states or cognitive subsystems that are not properly integrated within the mediums’ normal experience of identity. Probably everyone has some trickster-like phenomena hidden away within their self-experience that they may not normally elicit but which mediums seem to develop as part of their training (Krippner 2005). This polypsychic aspect of human identity may significantly contribute to the difficulty Pai Ely described in discerning pure from contaminated information along with sociocognitive factors. However, our data merely illustrate the sociocognitive and neo-dissociative perspectives on mediumship whereas a host of many other factors (including actual spirit incorporation) may actually play a role as well.

**Physiological Measures**

People with incongruences between CNS and ANS responses have been described by Wickramasekera (1986a) as living episodically in two worlds, one in which they are critical, rational, and practical, and another into which their fantasy and emotional reactivity expands and deepens. As such, they are often “at risk” for somaticization, that is, psychosomatic illnesses. Both sets of descriptors apply to Pai Ely, the *pai-de-santo* in our investigation who attained a “high absorption” score on the TAS. Not only does Pai Ely incorporate discarnate entities; he manages a large and successful enterprise, the Lar de Ita Center.

Wickramasekera’s descriptors apply to some extent to the other psychic claimant, Andrade, who also displayed CNS/ANS incongruences, although receiving a TAS score in the “medium absorption” category. His duties at the Kardec temple are not as demanding as those of Pai Ely, nor does he spend the amount of time incorporating entities, as does the *pai-de-santo*. When we
visited the Kardec temple, we observed a few dozen people in attendance; in contrast, Pai Ely’s Candomblé/Umbanda temple was filled with several hundred people during each of our visits. In addition, we observed that Pai Ely has a team of mediums and trained assistants at his disposal at the temple.

Wickramasekera’s (1991) descriptors do not particularly apply to the control research participant, E.O.S., who received a TAS score in the “medium absorption” category and displayed no noticeable CNS/ANS incongruences.

According to Wickramasekera (1986b, 1991), incongruences between CNS and ANS response systems are common among spiritual practitioners. It is taken for granted that some practitioners, especially self-styled “mediums” and “channelers,” will demonstrate incongruences between their behavioral observations and verbal reports. For example, they might appear calm and composed but speak of calamitous events from their clients’ “past lives,” from the lives of their clients’ deceased relatives, or from scenarios of their clients’ purported futures. In addition, they might claim to feel relaxed, even though their physiological tests indicate that they are under tension.

Associations between TAS and incongruence are inconclusive at this point, but this is a topic deserving additional research, especially if the TAS could be administered as part of a more extensive test battery with mediumistic practitioners as the research participants. For example, it would be useful to administer the Creative Imagination Scale (Wilson and Barber 1978) to test for fantasy-proneness, and the Hartmann Boundaries Questionnaire (Hartmann 1991) to evaluate thinness and thickness of psychological “boundaries.”

**Forty Recife Mediums**

In 2006 my colleagues and I collected data from 20 female and 20 male mediums who performed their services at the Lar de Ita Tempe in Recife. Each medium signed an informed consent form, was asked a number of demographic questions, and was administered the Dissociate Experiences Scale (DES), the Tellegen Absorption Scale (TAS), and Kinsey Scale (which assigns respondents to one of several sexual orientation categories). Each participant received US $10.00 compensation (Krippner et al. 2007).

A previous study (Palladino-Negro et al. 2002) obtained scores from 110 Kardec mediums on the DES and the tri-dimensional Personality Scale, indicating that high mediumship ability was associated with their DES scores, high adaptation scores, and the alleged ability to control dissociation. Those mediums who manifested pathology were younger, had less control of their dissociation, and attained lower socialization scores.

This study was the first to use the Kinsey Scale to determine sexual orientation in a sample of mediums. Kinsey and his associates (Kinsey et al. 1948)
developed a scale to classify respondents in their historic survey of sexual behavior in the United States. Based on responses to interview questions, a score of “0” was given to those who were “exclusively heterosexual” and a score of “6” to those who were “exclusively homosexual.” Intermediate scores were given to those who were “predominantly heterosexual, only incidentally homosexual,” “predominantly heterosexual, but more than incidentally homosexual,” “equally heterosexual and homosexual,” “predominantly homosexual, but more than incidentally heterosexual,” and “predominantly homosexual, only incidentally heterosexual.” A score of “X” was given to those who were “asexual.” Although the scale has been used in numerous investigations (e.g., Steiner and Norman 1989), it is not without its critics, some of whom point out its ethnocentric bias whereas others have noted that its linearity might obscure subtle differences from person to person (e.g., McWhirter et al. 1990). The questions in the Kinsey Scale were translated by the interviewer into Portuguese for use in this study.

The mean age of the Recife mediums was 35 years for females and 35 years for males. The number of years of reported practice was 15 for females and 13 for males. The age of first incorporation was 21 years for females and 23 years for males with a range of 8 to 39 years. None of these differences were statistically significant.

On the Tellegen Absorption Scale, the mean female score was 25 and the mean male score was 26; these scores fall into the “moderate” range of U.S. norms. The mean female score on the DES was 56 and the mean male score was 47; the gender difference was not statistically significant and both means fall into the “high” range of the U.S. normative group.

There were no significant differences in educational level between females and males, although more of the females (45%) than males (20%) went further than grade school. Of the total group, 17% were university graduates; this group would be considered “literate” and “well educated” by Brazilian standards. More male than female mediums had postgraduate degrees and a “middle job” status. Almost all mediums held service industry jobs (e.g., homemakers, managers, nurses, secretaries, soldiers, teachers, writers).

On the Kinsey Scale, 75 percent of the mediums were rated as “exclusively” or “predominantly heterosexual,” 22 percent as “exclusively” or “predominantly homosexual,” and 3 percent as “equally heterosexual and homosexual.” There were no significant gender differences. However, sexuality has been conceptualized somewhat differently in parts of Brazil; if a male’s dominant mode of sexual expression involves phallic penetration, he is regarded as “macho” regardless of his partner’s gender. The structure of the Kinsey Scale overlooked this traditional concept.

A significant Pearson product–moment correlation was found between then DES and the TAS (especially for females), between job status and educational
level, between job status and DES (females only), and (females only) between educational level and degree of heterosexuality (with the more heterosexual women having higher heterosexual scores). In reviewing these data the most striking finding was that none of the mediums scored low in absorption and almost all scored high in dissociation.

Hypnotizability tends to be modestly related to absorption (Balthazard and Woody 1992), and one group of highly hypnotizable research participants was also highly dissociative (Barber 1999). Hence, hypnotizability may be a link that connects these two traits, at least as measured by the TAS and the DES. The typical medium claims to surrender control and decision making when incorporating spirits and orixás, allowing him or her to “speak” and “move” through the medium. This phenomenon would seem to require both the ability to dissociate and the ability to become absorbed in a task, two traits that might seem to be contradictory. The ability to reconcile these two skills demonstrates the complexity of a medium’s performance and is worthy of further study.

A Kardecist Medium in Abadiana

In 2005, I visited O Casa do Dom Inacio de Loyola (the House of St. Ignatius of Loyola, the founder of the Roman Catholic Jesuit Order). The Casa is located in Abadiana, a small town in central Brazil. It is the site of alleged healings performed by Joao de Faria, also known as Joao de Deus (John of God). Even though he has had only a few years of formal education, de Faria performs complicated surgeries, most of them with a scalpel or forceps but none of them with anesthetics or antibiotics (Bragdon 2002; Ravenwing 2005).

Some of the videotapes of de Faria’s “mediumistic surgery” show him inserting a surgical instrument into a client’s nasal passages. The celebrated magician James Randi (2005) has questioned the purpose of this intervention, concluding that there is no evidence that de Faria “has ever accomplished anything but revulsion by sticking forceps up a victim’s nose.” The videotaped interventions also appear to show de Faria scraping the eyeball of clients with the edge of a knife. Randi has pointed out that the sclera (the white section of the eye) is relatively insensitive to touch and doubts that the knife ever reaches the cornea. Randi noted that de Faria typically blocks the video camera with his body when it zooms in for a close-up, making a proper investigation impossible.

My visit coincided with the birthday of St. Ignatius as well as an anniversary of de Faria’s first incorporation of the saint. No mediumistic surgeries were performed during the day because the anniversary’s festivities occupied the
celebrants’ time. Some 1,000 men and women, most of them dressed in white, were present for the occasion; de Faria was seated in the Casa’s assembly hall, greeting and blessing visitors. After I exchanged a few words in Portuguese with de Faria, I was taken on a tour of the premises. My tour guide told me that de Faria, as a teenager, had a vision of a woman who directed him to a nearby Spiritist center where he discovered the books of Allan Kardec. Shortly after immersing himself in Spiritist literature, de Faria began to heal people spontaneously, often not remembering what he had done. The mediums at the Kardec center told de Faria that he had incorporated King Solomon and dubbed him “Joao de Deus,” a *nom de plume* that has stayed with him over the decades.

Later, he began to incorporate St. Ignatius as well as a number of deceased Brazilian physicians who allegedly told de Faria that they wanted to continue their work even after bodily death.

St. Ignatius is an appropriate icon for this type of work; he selected the first Jesuits for their powers of mental imagery, among other criteria. According to St. Ignatius, learning how to develop and control their visual perception and their mental imagery prepared the supplicants to pursue novel and interesting experiences as they became exemplars of will and achievement. This approach to faith was considered unorthodox at the time, and the Jesuits underwent periods of repression and persecution, especially in Brazil. According to de Faria, St. Ignatius had retained his interest in novelty after his physical death and was eager to continue his benevolent work through a medium (Krippner and Yanez 2007).

A HISTOCYTOPATHOLOGICAL ANALYSIS

Later, I collaborated with three Brazilian physicians who had obtained permission to collect specimens of tissues for histopathological analysis (Moreira-Almedia et al. 2007). I was not present when the tissues were collected but my colleagues obtained signed consent forms for all of de Faria’s clients who were involved in the investigation. Each physical intervention was recorded on video and was photographed as well. All tissues were placed in a formaldehyde solution and submitted for histocytopathological analysis by the Laboratory of Pathology at the Federal University of Juiz de Fora. Following the intervention, a clinical examination was performed, including anamnesis. A physical examination of the surgical wound was performed by my colleagues while the patients were in the recovery room. Interviews with each client obtained demographic data and each client’s belief system concerning mediumistic surgery. Six months later, follow-up questionnaires were sent to all clients whose tissues had been submitted for examination.
During both of our visits we observed no soliciting for donations or fees being charged for treatment. Various herbal remedies were often prescribed by de Faria (rather, by whatever saint or spirit was speaking through him). The cost of these remedies varied between US$1 and $2 (U.S.), and many of them contained passion flowers (so named because the bloom is shaped like a cross, reminiscent of the “Passion of Jesus Christ”). A free bowl of soup was offered to anyone who requested it; generally, several hundred bowls were consumed each day. During both of our visits, we inspected a room filled with canes, crutches, and wheelchairs—donated by grateful recipients of the mediumistic surgeries who claimed that they no longer needed these aids. During both visits, we observed no recommendation that clients should curtail or abandon their current medical treatment.

My colleagues recovered tissues from ten clients and were able to interview six of them in the recovery room. All six declared that they were Roman Catholic and believed that they could be assisted by de Faria’s interventions. No sign of infection of the surgical wound was noted despite the fact that the interventions were performed in nonsterilized conditions in an open room with dozens of spectators. All six clients reported that they had been awake and aware during the mediumistic surgeries; one woman with cancer mentioned experiencing pain during a breast incision, but a man whose molar tooth was extracted claimed that the intervention was painless.

The six-month follow-up yielded completed questionnaires from all six of the clients. Four reported “significant improvement” and two reported “no improvement” (one for retinal hemorrhage and one for chronic sinusitis). One of those reporting improvement claimed that he was able to resume his sports practice, an activity that he had been forced to curtail due to disabling back pain. Another client, suffering from a macular cyst and idiopathic abdominal pain, reported a marked improvement in her visual acuity and abdominal condition. The histocytopathological analysis for all ten clients found that their tissues and cells were compatible with the body of the client and were fairly compatible with their site of origin. Apart from one lipoma, the tissues were healthy, without discernable pathology.

The lack of pain reported by five out of the six clients who were interviewed could be explained, at least in part, by Chaves and Barber’s (1974) model of acupuncture analgesia. They noted that there are few pain receptors in the superficial layers of skin; this is consistent with the observation by my medical colleagues that they did not observe any surgical interventions that reached a bodily cavity or internal organs. Stressful situations, however, can promote the release of such endogenous analgesic substances as endorphins and corticotrophin-releasing factors (Lariviere and Melzack 2000; Nickell 2007). Greenfield (1987) suspected that hypnotic-like suggestion is responsible for the diminution of pain; one is usually awake and aware during hypnosis (Barber 1999), and the
six clients interviewed all claimed to be awake and aware during the entire procedure. Hence, suggestion may be an important element in the clients’ lack of reported pain during the mediumistic surgeries.

The tissues of the two clients who reported improvement on follow-up were from the bodies of the clients but did not display an exact match with the location of the disabling condition, suggesting that the visibility of the intervention might have produced a placebo effect. The magnitude of the placebo effect in surgeries is about the same as other placebo responses (about 35%); however, because of ethical concerns it has become difficult to evaluate the placebo effect of sham surgeries (Johnson 1994) and the mechanism of the placebo is not fully understood (Gotzsche 1994).

In summary, our observations indicated that de Faria performed actual physical interventions during the time my colleagues were present. Unlike a previous study of so-called Filipino psychic surgeons in which animal blood, human blood of a different blood type than the client’s, or tissue not related to the part of the body from which they were allegedly removed (e.g., Lincoln and Wood; Singer 1990; Stevenson 1976), the recovered tissues were from the client’s body, hence no evidence of fraud was detected. Because many of de Faria’s clients claim to benefit from both his physical and nonphysical interventions and because this and similar procedures are widely used for people around the world who have no access to Western allopathic biomedicine (or who cannot afford it even when it is available), this topic deserves continued investigation (Ernst 1995; Hodges and Scofield 1995).

CONCLUSION

There are several practical implications of these data. One involves the means by which mediums access information. Another involves the health status of mediumistic practitioners. The third regards the effectiveness of their interventions. I conjecture that mediums fall into the same general categories as do Barber’s highly hypnotizable persons.

One group of mediums is highly motivated and uses whatever cognitive resources there are at their disposal to contact the divine world and retrieve information that they believe will be helpful to their clients. Another group of mediums is highly imaginative and utilizes fantasy-prone abilities to enter the divine world, bringing back what it has to offer people in distress. A third group of mediums dissociates from the material world yet has the capacity to control this dissociation and return when the needed information has been obtained. The mediums we tested seem to utilize the latter modality frequently, given their high scores on the DES. The TAS might indicate the degree to which mediums are absorbed in their task, in part, because of their high motivation.
Other measures, such as Wilson and Barber’s Creative Imagination Scale (1978), could test for fantasy-proneness. Phenomenological scales and interviews could provide further information with regard to the processes mediums use to enter the divine world, communicate with spiritual entities, and return with gifts that can help their clients manage their problems in daily living and make realistic plans for the future.

The health status of the mediums has been the topic of previous studies. In their study of Kardec mediums, Negro et al. (2002) found that those research participants characterized by extensive training attained favorable scores on measures of socialization and adaptation. However, pathological signs were detected among the group of younger mediums with less training; in addition, they evidenced poorer social support. The stress that accompanies mediumship can be modified by such “buffers” as social support systems, by programs that involve voluntary control of internal states (e.g., biofeedback, meditation), and by regimens for healthy living (see Wickramasekera 1988, 1989; Krippner et al. 2000: 59–60). There is some evidence that, at least in the United States, self-styled “mediums” and “channelers” are at greater risk than are other spiritual practitioners (e.g., “healers” and “intuitives”; see Krippner et al. 2000). If so, self-care needs to accompany the concern that these practitioners frequently demonstrate toward their students and clients.

The effectiveness of mediums is attested to by the frequency of visits by members of their community, especially in parts of the world where other methods of mental health care are virtually absent or exorbitantly expensive. Much of their performance as healers and counselors is comparable to that of a dramatic performance, one that evokes the body’s self-healing mechanisms (Lynn et al. 1997). Natural explanations suffice to explain most of the effects we observed, and it is likely that—as is the case in groups of other practitioners—fraudulent and self-serving practices are sometimes encountered. However, the interview data we elicited, the mediums’ standing in their communities, and the fact that tissues removed during mediumistic surgery matched the site of their removal argue for the integrity and sincerity of this sample.

The notion that mediums could be health care resources is ignored or ridiculed by much of mainstream Western medicine and science (Littlewood 2007). However, ridicule occurs at the peril of those clients whom they serve and for whom mediumistic counsel, advice, and even surgery is either a last resort or the only available option. Additional research along all three of these lines could more fully demarcate the advantages and disadvantages, the limitations and delimitations, and the process of outcome of what mediums, and their contact with the divine world, have to offer. In addition, Brazilian mediums, as well as those from other cultures, represent a population that is a potential reservoir for untapped data for students of the anthropology, psychology, and sociology of consciousness.
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Wickramasekera, I., S. Krippner and I. Wickramasekera II.

Wickramasekera, I., S. Krippner and J. Wickramasekera

Wickramasekera II, I.E. and J. Szlyk
Wilson, S.C. and T.X. Barber

Winkelman, M.

Wood, C.H., P. Williams and K. Chijiwa