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# The Journal of Trans Personal Psychology

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The Journal of  
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## EDITOR'S NOTE

With this issue we officially welcome **Rosemarie Anderson** to the Journal Editorial Board, filling the post left vacant by the passing of John Levy—See our In Memoriam tribute to him in the last issue: Volume 47(1), 2015. Her opening “welcome message” guides us on a retrospective and prospective journey with regard to the past, present, and future for transpersonal research and issues a clarion call to all.

First time author with the Journal, **Tim Lomas** (from the UK), intrigued by the question of why religious traditions so highly value compassion, follows with an article on its transpersonal and transformative potential. While recognizing the value of compassion to the recipient and society, his discussion focuses on the supporter (i.e., the one offering the compassion) and the manner in which the experience can accelerate the benefactor's psychospiritual development.

Complementing and drawing from his earlier work on what he terms “kundalini-like experiences,” **Steve Taylor**, also from the UK, ventures into a discussion, replete with case quotes, of kundalini arousal and its potential relation to a release of concentrated sexual energy or energy normally expressed in that manner. He offers what he considers an “energetic theory of spiritual awakening.”

**Jayne Gackenbach** (with co-authors **Dan Swanston** and **Hannah Stark**), all from Canada, continues her seminal work on video gaming and consciousness (see Volume 40(1), 2008: Video Game Play and Consciousness Development). Findings of the article in this volume suggest that the absorbing qualities of Video Game Play and Meditation/Prayer may affect consciousness in a similar manner.

Concluding the articles are two complementary pieces of research targeting the Spiritual Emergency Scale (SES) of Goretzki, Storm, and Thalbourne, published in previous issues of this Journal. As explained by the Australian authors, their first article (**Emma J. Cooper, Adam J. Rock, Kylie P. Harris, and Gavin I. Clark**) attempts to validate the short 30-item SES. The second article (**Harris, Rock, and Clark**) attempts to validate the full length version of the SES, and the results support the 4-factor structure outlined in the first article. The authors call for more research and further refinement and modification.

Our Book Review Section opens with a review of **Jay Dufrechou's** book, *Moving through Grief, Reconnecting with Nature* by **Dorit Netzer**, followed by **Terry Marks-Tarlow**, who reviews **Manuel Almindro's** book, recently translated from the Spanish, entitled *Chaos, Psychology & Psychotherapy*. **Julie Gohman** then offers a review of *Silence: The power of quiet in a world full of noise* by **Thich Nhat Hanh** and our Book Reviews conclude with **Ilene A. Serlin's** review of *The Conditions of Love* by **Dale M. Kushner**

As always, the Books Our Editors are Reading section offers helpful information for your continuing inquiry and keeps the reader in touch with the interests and perspectives of those Editorial Board members who contribute to this section.

Apologies to our readers and subscribers, but a natural disaster of extreme flooding at the press delayed publication of this issue.

MB

Falls Church, VA

# TRANSPERSONAL RESEARCH AND SCHOLARSHIP: REFLECTIONS ON THE LAST TWENTY YEARS AND FORWARD

Rosemarie Anderson, Ph.D.  
*Palo Alto, CA*

I am delighted to join the Editorial Board of *The Journal of Transpersonal Psychology (JTP)*. Now retired and Professor Emerita at Sofia University, I have the more time to devote to the activities I love. I wish to thank *JTP* Editor, Marcie Boucouvalas, for her kind invitation to join the editorial Board, when John Levy's recent death created an open space on the editorial board.

Much has changed in the field of transpersonal psychology since 1992, when the late William Braud and I joined the Core Faculty at the *Institute of Transpersonal Psychology*, now Sofia University. Both of us had been trained as experimental psychologists and as professors had taught experimental design and conducted and supervised quantitative research for over two decades. We knew the value of precise observation, record keeping, and the statistical and analytical procedures traditionally used to study human behavior. Like other experimental psychologists at the time, we also knew the limits of experimental methods and quantitative assessments as applied to complex behaviors that are subtle, subjective, and inward and, therefore, not readily amenable to external observation or easily reported by the individuals experiencing them. Nonetheless, we both approached our new roles as Core Faculty at ITP as an adventure into possibilities and were prepared to help dissertation students conduct research using the experimental and quantitative methods we knew and had used ourselves for years. However, once at ITP, we were faced with dozens of dissertation students who wanted to study topics, such as profound grief in response to natural world, the healing presence of a psychotherapist, transformation while trekking in the wilderness, the spiritual dimensions of chronic pain, and the embodiment of the Sacred in sexual intimacies—all topics grounded in the researcher's personal experience. In advising them, our conventional training and expertise had not prepared us well to help them study these "farther reaches of human experience" as Abe Maslow (1971) put it so well. Little we suggested to them by way of experimental or quantitative approaches satisfied them—or us—because they often reduced the topics to procedures too narrow for the topics at hand.

Soon, we trained ourselves in phenomenological, heuristic, grounded theory, and narrative research methods and taught them to our students. That worked for a while. However, soon, even these qualitative methods fell short of the expansive nature of the topics studied unless we modified them to include the

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personal transformation of the researcher *as* data. Innovative methodological procedures were needed to tap the researcher's and the research participants' transformation in the course of the study. In founding the field of transpersonal research methods with our first book, *Transpersonal Research Methods for the Social Sciences* (Braud & Anderson, 1998), William Braud and I summarized the matter like so:

In transpersonal psychology—which concerns itself with issue of consciousness, alternative states of consciousness, exceptional experiences, transegoic development, and humanity's highest potentials and possible transformation—this tension between subject matter and research is strongly felt. Both students and practitioners ask whether it is possible to research the transpersonal without violating, distorting, or trivializing what we are studying. Is it possible to live, appreciate, and honor our transpersonal aspects and our most purposeful human qualities while, at the same time, conducting systematic research into these most significant facets of our being?

We maintain that it is possible to conduct significant and satisfying research on all facets of human experience—even the most sensitive, exceptional, and sacred experiences—but only if we modify our assumptions about research and extend our research methods so that they become as creative and expansive as the subject matter we wish to investigate. (p. 4)

With increasing numbers of mainstream researchers using conventional, objectivistic methods to study spiritual topics, such as mindfulness, compassion, altruism, and so on, the need for transpersonal psychologists to recognize research as a journey of transformation is more important than ever. The title of William Braud's and my second book, *Transforming Self and Others Through Research* (Anderson & Braud, 2011) expresses this understanding succinctly. Recognizing the vital dynamic of spiritual transformation as an encounter with the Sacred Other in the conduct of research and scholarship signals transpersonal psychology's unique contributions as a field—at least to psychology and the human sciences, if not to the humanities and beyond. We must differentiate ourselves methodologically as interested in understanding human experience as intimate participants. Let us do what we can do well and uniquely so.

What follows is a brief summary of the essential qualities for a transpersonal inquirer to bring to research and scholarship at this profound juncture in the field of transpersonal psychology according to my current understanding:

- *Research as Sacred Encounter.* As immediately above, the essential quality of transpersonal research and scholarship is the inquirers' encounter with the Sacred, an intention that invites personal transformation of inquirers' understanding of the topic and of their awareness in general. Whether the methods used are quantitative, qualitative, mixed methods, art-based methods, scholarly exposition, hermeneutics, or mix of these modalities, the key to a far-reaching understanding of spiritual and transpersonal topics is the inquirers' intention to engage the Sacred in the course of a study.

The degree to which the topic implicates the inquirers' personal history and their willingness to change intimates the breadth of transformation that unfolds. That is, the more commitment, personal involvement, and passion the greater the change. Usually, the changes are not in social relationships or the general circumstances of their lives but in the awareness that they bring to their interpersonal relationships and professional lives. Indeed, sometimes the changes can be dramatic and unsettling as may be the case in all change and transition.

- *A Topic That has Heart and Meaning and Implicates the Inquirer's Expertise Holistically.* Whatever method used, transpersonal inquirers study topics that hold heart and meaning for them and invite all their personal capacities and professional expertise to the engagement of the topic. Intuition and imaginal variation are especially relevant. Of course, some will say that intuition is not relevant to quantitative research but that is simply not so. As is well known among mathematicians and scientists, intuition often leads to the most surprising and important insights (Root-Bernstein & Root-Bernstein, 1999). Unfortunately, some transpersonal psychologists act as though statistics and numbers are aligned with the devil. This is not a bit helpful and seriously undermines the ability of transpersonal researchers to engage in dialogue and collaboration with colleagues in other fields who use quantitative approaches.
- *A Realistic Understanding of One's Own Level of Psycho-spiritual Development.* We cannot understand anything well that is beyond our own level of development. Typically, we cannot even hear, see, or grasp data that lies beyond our developmental awareness. However, unfortunately, it is far too easy to mistake "glimpses" of high levels of consciousness or transcendence for having "arrived" at that stage of development as a steady state of integration. Glimpses are beguiling. Therefore, I urge transpersonal researchers and scholars to acquire knowledge of several models of spiritual development and make an honest effort to be realistic about one's personal level of spiritual integration on the developmental spectrum. Humility is advised. Developmental models immediately relevant to transpersonal psychology include those of integral psychologists Suzanne Cook-Greuter (2013) and Ken Wilber (2000); organizational psychologist Brian Hall (2000); and transpersonal psychologists Hillevi Ruumet (2006), Jenny Wade (1996), and Michael Washburn (2003). If nothing else, knowledge of models of psycho-spiritual development will help the transpersonal researcher and scholar to discuss developmental implications of findings and analyses.
- *Spiritual Values of Generosity, Inclusion, Kindness, Compassion, and Humility.* In transpersonal psychology, there have been far too many combative, even vitriolic, "debates" among individuals historically identified with the field. Controversy itself is fine and healthy for any field but attack is not. Anyone who has been in the field of transpersonal psychology for a decade or so is aware of many long-standing controversies. Not only do these hostilities divide the transpersonal community but professionals outside transpersonal psychology have noticed that we do not always "walk our talk." That is, we do not always live up to the spiritual values we promote and that duplicity undermines our public credibility. What saddens me the most is that

all of these hostilities could have been avoided if the researchers and theorists involved had looked for what was valuable in the work of another and then proposed their own theories and resolutions in that larger context. Of course, spiritual development is also relevant to how one approaches potential controversy in the same way that it applies to recognizing what might be outside one's current understanding of anything.

- *Gesturing Toward the Future*. In my view, transpersonal researchers and scholars are responsible to the past, the present, and the future. From a primordial point of view, we are responsible to all the animal and hominid ancestors who lived and died to make us who we are. To the present, we are responsible to live with sacred intent and engagement in all our professional activities whatever they are. For the future, we are required to understand every day that we are dots in a passing spectacular. In the modern world, which values self-aggrandizing motives, spiritual values such as humility and spiritual discernment are rare. For myself, I follow and act as best I can from what I intuit from the future of the best of what wants to happen. I make a lot of choices every day. Each of us plays a part in this grand unfolding. As transpersonal psychologists, perhaps we can be a bit more conscious of what we're doing, what we are seeding for the future.

As a new member of the *JTP* Editorial Board, I hope to encourage articles on innovative developments in transpersonal research and theory, contribute articles on lessons learned in the course of supervising transpersonal research for over two decades, report on the Transpersonal Research Colloquium (TRC) recently held near Milan in June 2015 and the forthcoming TRC near London in September 2016, and speak ever more boldly. Thank you for the opportunity to collaborate.

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### The Author

*Rosemarie Anderson*, Ph.D., is Professor Emerita, Sofia University and co-author with the late William Braud of *Transpersonal Research Methods for the Social Sciences: Honoring Human Experience* (SAGE, 1998) and *Transforming Self and Others Through Research: Transpersonal Research Methods and Skills for the Human Sciences and Humanities* (SUNY Press, 2011). Many of her articles on transpersonal research, intuition, body intelligence, embodied writing, and spiritual development are available at <https://sofia.academia.edu/RosemarieAnderson>. Keynote addresses and videos are available on her newly launched YouTube channel, <https://www.youtube.com/c/RosemarieandersonVideo>. For current activities, visit her consulting website, [www.rosemarieanderson.com](http://www.rosemarieanderson.com).

# SELF-TRANSCENDENCE THROUGH SHARED SUFFERING: AN INTERSUBJECTIVE THEORY OF COMPASSION

Tim Lomas, Ph.D.  
*London, United Kingdom*

*ABSTRACT:* The value of compassion has often been appraised in terms of its benefits to the recipient, or its contribution to civil society. Less attention has been paid to the positive effect it may have upon the protagonists themselves, partly because compassion ostensibly appears to involve mainly dysphoric emotions (i.e., sharing another's suffering). However, driven by the question of why traditions such as Buddhism and Christianity esteem compassion so highly, in this article, a theory of compassion is proposed that focuses on its transformative potential. In particular, I argue that compassion inherently involves a process of self-transcendence, enabling people to enter into an intersubjective state of selfhood. Drawing on Buddhist and Christian ideas, I then suggest that this intersubjective state is not only an antidote to the protagonists' own suffering, but can accelerate their psychospiritual development. Thus, the article offers a new perspective on compassion that allows us to fully appreciate its transpersonal and transformative potential.

*KEYWORDS:* compassion, suffering, intersubjectivity, development, spirituality.

Compassion has an enigmatic, sphinx-like quality. On the one hand, its etymology defines it as a negative emotional state, deriving as it does from the Latin terms *com* (with) and *pati* (to suffer). As Schulz et al. (2007, p.6) put it, compassion involves "a sense of shared suffering, combined with a desire to alleviate or reduce such suffering." This would seem to identify compassion as a dysphoric experience, energising the person into striving to reduce or eliminate this state. And yet, it is not uncommon to find compassion heralded in affirmative terms as a desirable quality. For instance, in Compton's (2005, p.4) *Introduction to Positive Psychology*, compassion sits happily in an 'A-Z' of topics alongside undeniably 'positive' qualities and outcomes such as happiness, creativity and savouring. Going further, many religious and spiritual traditions, from Christianity (St. Thomas Aquinas, 1273/1981) to Buddhism (H.H. the Dalai Lama, 1997), exalt compassion in the highest possible terms as the most important and elevated of human qualities. The question driving this article then is, given its seemingly dysphoric qualities, why is compassion so *valorised* by most major religious and spiritual traditions? Certainly, it is generally recognised in society that compassion is conducive to civic harmony and the upholding of the social contract (Porter, 2006). However, when Buddhism is expressly defined as a "religion of compassion" (Price, 2010, p.53), clearly compassion holds some deeper significance beyond simply contributing to the creation and maintenance of a lawful society.

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In this article then, one explanation for the significance of compassion is offered, based around the issue of personal identity. In essence, I argue that feelings of compassion serve to shift one's sense of identity from an individualised locus to a more 'intersubjective' mode of being. This shift is of crucial significance for the esteem in which compassion is held, for the following sequence of reasons: (a) traditions like Buddhism regard individualised modes of selfhood as the fundamental cause of unhappiness, with attachment to and pre-occupation with one's limited 'ego' being the root of suffering, (b) overcoming or transcending this narrow sense of selfhood is therefore the key to alleviating such suffering, (c) cultivating compassion – i.e., identifying with another person and sharing in their feelings – is a powerful and direct way of overcoming/transcending such selfhood, and (d) therefore, while ostensibly involving negative emotions, at a deeper level, compassion serves to alleviate one's own suffering, and engenders psychospiritual development. This theory will be elucidated here over the course of three sections. In the first section, I examine some of the ways in which compassion has been conceptualised, both in contemporary academia and in religious/spiritual traditions. The second section then introduces various models of selfhood, and suggests that in contrast to the 'individualistic' sense of self that many people commonly experience, compassion allows one to experience self-transcendence and enter into a more 'intersubjective' mode of identity. Finally, I explore how self-transcendence and consequent intersubjective selfhood may be beneficial to wellbeing, with potentially profound consequences in terms of psychospiritual development.

## COMPASSION

This first section elucidates various perspectives on compassion, to better understand the nature of the concept. I begin by highlighting contemporary academic perspectives, before engaging with views from religious/spiritual traditions such as Buddhism and Christianity (since, as emphasised above, the key question driving the formulation of this article is why these traditions place such great emphasis on compassion). Most contemporary psychological models of compassion construe it as being multifaceted. For example, Neff (2003, p. 224), a prominent theorist on compassion, defines it as "being open to and moved by the suffering of others, so that one desires to ease their suffering." Unpacking this definition, one can see that compassion is understood as comprising multiple components. For instance, Ozawa-de Silva, Dodson-Lavelle, Raison, Negi, Silva, and Phil (2012) suggest that compassion includes (a) cognition (the ability to empathically recognise emotions in others), (b) emotion (experiencing sympathetic distress), (c) motivation (the will to reduce the other's suffering); and (d) behaviour (a consequent action). Thus, according to this formulation, compassion not only encompasses conceptually related qualities such as empathy ("an emotional reaction in an observer to the affective state of another individual" [Blair, 2005, p.699]) and sympathy ("feelings of sorrow or concern for another's welfare" [Eisenberg & Miller, 1987, p.92]), but is arguably more comprehensive in that it also involves motivation and behaviour (Eisenberg, 2002). (I say arguably since some models

of empathy also include behavioural components e.g., Morse, Anderson, Bottorff, Yonge, O'Brien, Solberg, & McIlveen [1992].) Thus, in compassion, one *suffers with* the other, and acts to relieve his or her suffering as if it were one's own (which, in a sense, it *is*, since one is sharing in their suffering).

A large proportion of the academic work on compassion is focused on simply accounting for and justifying its existence. Much of this work defines its task in the context of evolutionary theory, a perspective which theorists are frequently compelled to address. That is, for many scientists and philosophers, compassion is a perplexing phenomenon, since it appears to challenge the evolutionary principle of *universal egoism* (Batson, 1991), which holds that living beings have only managed to thrive in evolutionary terms by focusing on their own self-serving interests. From a strict evolutionary biology point of view, caring for others who do not share our genes goes against one's reproductive prerogatives (Workman & Reader, 2014), as famously encapsulated in Dawkins' (1976) notion of the *selfish gene*. Some models purport to explain this seeming paradox through the overlapping notion of *rational choice* theory (Ostrom, 1998): as with evolutionary biology, this theory also views human behaviour as ultimately motivated by self-interest; compassion is thus understood and explained as ultimately serving some self-interest. For example, Cialdini, Schaller, Houlihan, Arps, Fultz, and Beaman (1987) argue that people act compassionately primarily to reduce their *own* feelings of distress (evoked by the other's pain). Similarly, Trivers (1971) argues that compassionate acts can be self-serving since they help the actor to cultivate a good reputation, thereby increasing the likelihood that the actor will be reciprocally rewarded in future.

However, such rational choice explanations are undermined somewhat by the very *existence* of the compassionate impulse; that is, even if people are motivated to help others in order to reduce their own distress, as Cialdini et al. (1987) contend, this interpretation does not explain why they feel distress in response to the other's suffering in the first place. As Batson (1991) points out, with compassion people are first and foremost genuinely moved by another's distress, even if other motives subsequently contribute to their decision to respond. The existence of this primordial empathy is reflected in the recent discovery of mirror neurons (Gallese, 2001) – here researchers have found that brain regions that are activated when a person experiences an emotion are likewise activated when the same emotion is observed in another person (Preston & De Waal, 2002). Recognising the primacy of empathic concern, Batson (1991) has formulated an 'empathy-altruism' hypothesis; this position holds that, in contrast to the universal egoism model, people can and do genuinely care for the wellbeing of others, regardless of whether it benefits them personally. This perspective can still be interpreted in evolutionary terms, albeit in a way that diverges from the classical universal egoism stance; as Goetz, Keltner, and Simon-Thomas (2010, p.351) put it (in the context of a recent theoretical review), it appears that "compassion evolved as a distinct affective experience whose primary function is to facilitate cooperation and protection of the weak and those who suffer." As will be discussed below, this benign view of human nature is shared by traditions such as Buddhism, which

sees people as being fundamentally compassionate (H.H. the Dalai Lama, 2002, p.70) – even if this nature can get corrupted or obscured.

However, even if it could be argued that compassion was a *natural* and inherent feature of humanity, this in itself would not be sufficient to justify the recommendation that one *should* be compassionate. Claims to naturalness are not in themselves grounds for valorisation; after all, many undesirable traits, such as aggression, can likewise be construed as ‘natural’ (Book, Starzyk, & Quinsey, 2001). Furthermore, one can even find theorists who argue *against* the utility and value of compassion. For instance, there is an ‘anti-compassion’ tradition in philosophy, associated most prominently with Nietzsche, (1887/1969), who argued that it is ultimately detrimental to both giver and recipient (since it hinders the latter from developing self-sufficiency). Expressing a different concern, drawing on the examples of the American and French revolutions, Arendt (1963) cautioned that compassion (e.g., for people marginalised by the powerful) could easily morph into violence (against the powerful). Then there are those who simply highlight the potential burden of compassion upon the giver – so-called ‘compassion fatigue.’ Here there is a wealth of literature revealing the potential emotional strain borne by people in long-term caring roles, from those looking after family members (Figley, 1997) to people in the helping professions (Schulz et al., 2007). While the latter concern does not undermine the value of compassion – rather, it shows the importance of carers themselves receiving compassion and support – it still gives pause for thought in terms of arguing that one *should* be compassionate.

However, contrasting these cautionary perspectives, one can find numerous voices – from diverse areas of enquiry and scholarship – advocating for the value of compassion. The most obvious argument in favour of compassion is that it benefits the recipient, as highlighted in empirical studies from applied disciplines, from medicine (Scott, 2013) to management (Frost, 1999). A related point – one that is arguably even more fundamental from a societal perspective – is that compassion may be one of the key conditions for civilisation itself. For instance, Schopenhauer (1840/1995) saw compassion as the foundation for all morality, and the solution to the “great mystery of ethics” (p.144). Schopenhauer disagreed with philosophers such as Kant (1785/2002), who suggested that morality was upheld through people rationally assenting to a system of laws, as reflected in Kant’s notion of the categorical imperative (i.e., act in ways that you would will to become a general law). In contrast, Schopenhauer felt that the only viable foundation for a moral framework was the blunt fact that people care in some basic way about the wellbeing of others.

Building on Schopenhauer’s insights, Ozawa-de Silva et al. (2012, p.158) identify compassion as “the most stable foundation for a secular ethics,” since it is based on the “fundamental human aspiration” towards happiness, and thus “transcends religious, cultural, and philosophical divides.” Moreover, Ozawa-de Silva et al. have developed a practical form of ‘cognitively-based compassion training’ to help engender exactly this kind of ethical sensibility. Indeed, recent years have seen the development of a number of compassion training

programmes, and of major research centers specialising in compassion, like Stanford's Center for Compassion and Altruism Research and Education. This center has created a nine-week Compassion Cultivation Training (CCT) intervention, which a randomised controlled trial found to be effective in promoting the three main 'domains' of compassion (compassion for others, self-compassion, and receiving compassion) (Jazaieri et al., 2013). Other relevant programmes include Compassion Meditation Training (Ruchelli, Chapin, Darnall, Seppala, Doty, & Mackey, 2014) and Loving-Kindness Meditation (Fredrickson, Cohn, Coffey, Pek, & Finkel, 2008).

However, from a motivational perspective, somewhat more intriguing and potentially powerful are indications that compassion also benefits the giver too. Reporting on the same CCT randomised controlled trial as Jazaieri et al. (2013), Jazaieri, McGonigal, Jinpa, Doty, Gross, and Goldin (2014) found that CCT resulted in participants experiencing increased happiness, as well as decreased worry. Indeed, Galante, Galante, Bekkers, and Gallacher (2014) conducted a meta-analysis of 22 randomised controlled trials of compassion-based meditation techniques and found that these were effective at reducing self-reported depression and enhancing positive emotions in the protagonist. Going further, while compassion may involve empathic feelings of distress, it is possible that it may, at the same time, also be *pleasurable* in a paradoxical way. For instance, it has been noted that many dramatic forms, such as Greek tragedy, draw their power from articulating themes of suffering; while these themes can elicit a compassionate response from viewers, at the same time they may facilitate a type of catharsis that can be deeply relieving and redemptive (Stanford, 2014).

Relating to this latter point, perhaps the most powerful articulation in favour of compassion can be found in religious and spiritual traditions, such as Buddhism and Christianity. In these, compassion is not only upheld as a strong basis of morality, as per Schopenhauer (1840/1995), but is asserted as being of fundamental benefit and importance to the giver themselves (in a way that seems to go far beyond the utility suggested by Galante et al. (2014)). Taking Buddhism first, the importance of compassion (*karuṇā* in Pali) is underlined by the fact that it is one of the four core qualities (*brahma-viharas* – literally 'divine abidings') upheld as being central to psychospiritual development, alongside loving-kindness (*mettā*), sympathetic joy (*muditā*), and equanimity (*upekkha*) (Hofmann, Grossman, & Hinton, 2011). Moreover, compassion is often constructed as being pre-eminent among these four virtues. For example, Buddhism is often described as a "religion of compassion" (Price, 2010, p.53), with H. H. the Dalai Lama calling compassion the 'essence' of Buddhism (Barad, 2007). Why this may be the case will be explored in the third section of this article; for now though, we might briefly note the words of H. H. the Dalai Lama (1999, p.75), who suggested that if we cultivate compassion, we "will discover that when we reach beyond the confines of narrow self-interest, our hearts become filled with strength. Peace and joy become our constant companion[s]."

Compassion is likewise exalted in Christianity. For instance, in his Epistle to the Corinthians, St. Paul wrote that the three great theological virtues were faith, hope and charity. Now, although charity was chosen by the translators of

the King James Bible as an equivalent of the Greek *agape*, as Hitchens (2011) and others have suggested, *agape* is arguably better rendered as compassionate love. Similarly, St. Thomas Aquinas (1273/1981) presents compassion (*compassio*) – frequently used interchangeably with its synonym mercy (*miser cordia*) – as the ‘interior effect’ of *agape*. That is, since *agape* is a ‘theological virtue’ – i.e., “a virtue infused by God into a person” (Barad, 2007, p.11) – compassion would be the human manifestation of the infusion of this virtue. Moreover, as with Buddhism, compassion is presented as pre-eminent among the theological virtues. As St. Paul memorably put it, “So faith, hope, love [agape] abide, these three; but the greatest of these is love” (Holy Bible, Revised Standard Version, 1952; 1 Corinthians 13:13). Likewise, Aquinas (1273/1981, II-II, q.31, a.4) writes, “in itself, mercy takes precedence of other virtues” (cited in Barad, 2007, p.20).

However, the question remains, *why* is compassion so valued here? As with Buddhism, this will be addressed in the third part of the article. However, for now, let us note the somewhat cryptic explanation offered by Aquinas (1273/1981, II.II q.30 a.2), who suggested that compassion involves a “union of the affections,” such that we see the suffering other “as another self” (cited in Barad, 2007, p.14). Similarly, consider the statement attributed to Jesus, when he urged: “Love your enemies, and pray for those that persecute you, so that you may be children of your father in heaven” (Matthew 5:44). The last phrase, “*so that you may be children of your father*” [my italics], seems very charged; the conditional ‘so’ appears to imply that, by being compassionate, a person might be changed in some significant way, as if ushered into a new way of being – even, as a believer might put it, sharing in the divinity of God (Smith, 2011). Although these phrases may sound unfamiliar to our 21<sup>st</sup> century ears, it is clear that such teachings are implying that, through compassion, something remarkable may happen to the giver. One way to interpret these teachings is in terms of contemporary psychological theories of identity; in particular, it could be argued that by cultivating compassion, one might experience significant changes in one’s sense of self, as the next section explores.

### INTERSUBJECTIVITY

In the first section, it was suggested that one key reason why compassion might be so important and valuable – at least to traditions such as Buddhism and Christianity – is because it may possibly lead to transformative changes in one’s sense of self. In order to fully explore this proposal in the third part of the article, this second section lays the groundwork by introducing some key ideas pertaining to identity and selfhood. One must be careful in entering this territory: the concept of the self – and related terms like identity, ego, and subjectivity – is one of the most contested and perplexing constructs in the history of thought (Gallagher, 2011). As such, it is beyond the scope of this article to give a full and comprehensive account of the various ways in which identity and selfhood have been conceptualised even within psychology (let alone in other academic fields, or throughout history). Nevertheless, one way of approaching this complexity is to suggest that there are two broad stances on

selfhood into which most (if not all) theories or perspectives fall, namely individualism and intersubjectivism (Kagitçibasi, 1997). There are two brief points to make before introducing these two stances. First, the latter term is more commonly referred to as 'collectivism' (Hofstede, 1980). However, 'intersubjectivity,' associated with the phenomenological philosophy of Husserl (1931/1999), is arguably a more useful term here, as will be argued below. Second, there are a small minority of theories/perspectives which fall outside the compass of these two stances; these include postmodern 'fragmented' models of selfhood that essentially deny the idea of any coherent sense of self, such as Gergen's (2001) notion of multiphrenia; however, these theories/perspectives have been in the minority throughout history and across cultures, and thus I will limit myself to analysis of the two dominant stances of individualism and intersubjectivism. So, I begin this section by exploring individualism – generally regarded as the predominant conception of selfhood in the West (Taylor, 1995) – before going on to introduce the notion of intersubjectivism.

It is frequently asserted that the 'Western world' – to the extent that it is legitimate to speak of such a construct (which is debatable, as will be discussed below) – is characterised by an ideology of individualism (Becker & Marecek, 2008). This term is used to capture a particular view of the self that is thought to have emerged over the course of the last few centuries in Western societies, namely, the notion that the self exists as an autonomous, discrete unit, complete unto itself. This stance regards the self as "a bounded, unique, more or less integrated motivational and cognitive universe" (Geertz, 1983, p.59) and "a centre of monological consciousness" (Taylor, 1995, p.60). From this perspective, the person is regarded as being constituted by a private, 'inner space,' in which he/she alone exists, over which he/she alone has control, and through which he/she alone acts. Of course, such perspectives generally acknowledge that other people exist (excepting philosophies such as solipsism [Pears, 1996]), but only either as external objects or interior mental representations. This view of selfhood dominates contemporary psychology, as reflected in the myriad constructs prefixed by the term 'self,' from self-determination (Ryan & Deci, 2006) to self-esteem (Cast & Burke, 2002), and all the related discourses of self, from authenticity (Taylor, 1991) to autonomy (Mele, 1995). With this individualist bias in academic psychology, it is not just that the main object of concern is the individual; rather, people are fundamentally seen as existing as separate individuals – unique, autonomous, and self-contained. The social, to the extent that it is recognised at all, tends to simply be constructed as an aggregation of individuals (Harrington, 2002).

For people living in a contemporary Western context, such individualism might seem like a natural, common sense, uncontentious way of describing the self. However, as Taylor (1995) elucidates in his influential text *Sources of the Self*, individualism is a construction that is particular to our current age and cultural context. As Taylor and others have suggested (see e.g., Heller & Brooke-Rose, 1986), this individualist conception of the self emerged during the extraordinary periods of cultural ferment and intellectual development in the West that are referred to as the Renaissance and the Enlightenment. Countering the diminished view of humanity that had held sway during the Middle Ages, the

Renaissance gave (re) birth to a confident assertion of the strength, intelligence, dignity and autonomy of humankind (Tarnas, 1991). Although this emergent perspective was the combined product of many influential thinkers, Rene Descartes' (1641/2008) deliberations on the nature of selfhood proved particularly influential. Seeking to establish a secure basis for knowledge, Descartes famously asserted that the one thing that was not subject to doubt was the fact that he was doubting, leading to the immortal statement *cogito ergo sum* (I think therefore I am). Taylor (1995, p.59) argues that Descartes' statement was pivotal in establishing the idea of 'monological consciousness' that came to dominate Western thinking over subsequent centuries – i.e., the "reification of the disengaged first-person-singular self" – to the extent that this individualised sense of selfhood is frequently referred to as the 'Cartesian I.'

Although people in the West have generally become so accustomed to viewing the self in this way that individualism has become 'naturalised' (Taylor, 1995), this is not the only way of appraising the self. We can appreciate this point – that individualism is a contemporary cultural construction that is somewhat specific to the West – by considering the way other cultures have approached the notion of selfhood. In this respect, anthropologists have uncovered variation in views of selfhood among various world cultures, both historical and current (Lomas, 2015). In doing so, the primacy and universality of the individualist perspective has been challenged. For example, focusing specifically on Vietnam, Marr (2000) suggests that the person has historically been viewed in Vietnamese culture primarily in terms of his or her location within, and contribution to, the social order. Indeed, Marr contends that the concept and label of the 'individual' only entered the Vietnamese lexicon in the 20<sup>th</sup> century; even then, it was only wielded pejoratively, where a person acting selfishly could be accused of the anti-social misdeed of 'individualism.' This notion of a more group-oriented view of selfhood in Vietnam accords with arguably the most widely researched cross-cultural generalisation within psychology: the idea that Western societies are 'individualist' whereas Eastern cultures are 'collectivist' (Hofstede, 1980). Developed initially as a societal identifier by Hofstede, and then applied by Markus and Kitayama (1991, p.224) to self-construals, this theory holds that contrary to Western individualism, Asian societies have "distinct conceptions of individuality that insist on the fundamental relatedness of individuals," where the "emphasis is on attending to others, fitting in, and harmonious interdependence with them" (p.224).

The individualist-collectivist distinction has been widely embraced, being analysed and to an extent corroborated across hundreds of empirical studies (Taras, Kirkman, & Steel, 2010). However, although it does bring a level of cross-cultural nuance to the debate, it still serves to reinforce the notion of individualism, but simply limits it to 'Western' cultures. The picture may be far more nuanced though. For a start, as critical theorists such as Edward Said (1995) have argued, the very notions of 'West' versus 'East' are themselves cultural constructions that homogenise and obscure myriad differences at a regional and local level. For instance, the idea that 'the East' lacks its own traditions and philosophies of individualism, and likewise that 'the West' does not also possess its own collectivist voices and schools of thought, is a generalising

fallacy that does disservice to the rich heterogeneity and complexity of both arenas (Spiro, 1993). Moreover, a binary 'East-West' distinction constructs these two hemispheres as if discretely bounded and hermetically sealed, overlooking the dynamic inter-transmission of people and ideas across geographical boundaries. This criticism is particularly apposite in this recent age of globalisation, which is characterised by an incredible cross-fertilisation of cultures; we have seen apparently Western ideologies such as consumer capitalism finding fertile ground in many Asian countries, while ostensibly 'Eastern' practices like meditation have attracted hugely receptive audiences in the West (King, 1999).

Thus, the notion that individualistic views and experiences of selfhood are ubiquitous or inevitable in the West has been challenged; instead, there is a growing recognition that 'intersubjective' experiences of self are perhaps more prevalent in the West than the individualist-collectivist dichotomy appears to suggest (Larsen, 1990). Various contemporary theories of identity have emerged capturing this sense of intersubjectivity. However, before discussing these, it is worth clarifying why the term 'intersubjective' is preferred here as an overarching term for these theories and perspectives than the more common 'collectivist' label. The term collectivist has become tainted by association with the horrors of totalitarian communist regimes (Conquest, 1987). This usage is connected to the notion that collectivist models of selfhood – as promoted in such regimes – tend to deny the rights of people to exist as autonomous individuals per se, rather viewing them as fungible parts of a larger collective social entity (which takes absolute precedence to their needs). In contrast, intersubjectivity – as developed and propounded by philosophers such as Husserl (1931/1999) – does not dismiss people's claims to individuality and agency; it simply recognises that their being is also formed through their interconnections with other people.

So, as noted above, there are numerous theories dealing with an intersubjective sense of selfhood. In their various ways, all these theories argue that people can come to transcend a narrow, view of selfhood – the autonomous, bounded, individual 'Cartesian I' depicted above – and learn to 'identify' with other people. (Identity is being used here in a strong sense to mean that the person experiences their own life as somehow being bound together with the life of the other person; for instance, the other's suffering is in some way the person's own suffering. Without jumping ahead of the argument, readers will be able to see that this is exactly the kind of shared emotional experience that constitutes compassion.) This intersubjective sense of selfhood has been operationalised in various conceptually overlapping models, including the intersubjective self (De Quincey, 2000), the transpersonal self (Vaughan, 1985), the dialogical self (Hermans, Kempen, & Van Loon, 1992), the permeable self (Larsen, 1990), interbeing (Nhat Hanh, 2000), 'I-thou' relationships (Buber, 1958), and identity fusion (Swann, Jetten, Gómez, Whitehouse, & Bastian, 2012). For example, De Quincey (2000, 2005) proposes three levels of intersubjectivity. The most basic, intersubjectivity-1, occurs through communication, involving the sharing of linguistic signals. This level does not presume any shared identity, but simply acknowledges the recognition of the other by

virtue of the communicative act. Intersubjectivity-2 then begins to broach the notion of identity shifts; this is the ‘communal feeling’ that one might experience when engaged in a meaningful relationship, and particularly during significant moments of interaction (e.g., making love with one’s partner). Finally, intersubjectivity-3 involves a more transformative sense of ‘shared presence’: as Gunnlaugson (2009, pp.34-35) describes it, this does involve a radical identity shift towards a “more profound transpersonal form of interacting,” in which one’s “interrelatedness with another is experienced as primary to one’s ontological constitution.”

The other intersubjective constructs cited above essentially describe variants of De Quincey’s (2000) notion of intersubjectivity-3. For instance, the Jewish philosopher Martin Buber (1958) differentiated between ‘I-it’ and ‘I-thou’ relationships. With ‘I-It’ connections – which tend to constitute the majority of people’s relationships – the other is regarded instrumentally as an object, valued only to the extent that he/she fulfils one’s own needs. Conversely, in I-thou relationships – in which the other is held in unconditional regard, as equally worthy of love, care and respect as oneself – one enters into a state of union (as per intersubjectivity-3). As Buber (1965, p.170) put it, “In an essential relation the barriers of individual being are breached and the other becomes present, not merely in the imagination or feeling, but in the depths of one’s substance, so that one experiences the mystery of the other being in the mystery of one’s own.” Somewhat similarly, although focusing more on alignment with a particular in-group, the construct of identity fusion describes a “visceral feeling of oneness with the group” that is “associated with unusually porous, highly permeable borders between the personal and social self” (Swann, Gómez, Seyle, Morales, & Huici, 2009, p.995). Hermans’ (2001) notion of the ‘dialogical’ self concentrates more on the internalisation of other people as constituent parts of one’s own identity – with parallels to Gergen’s (1991) notion of the ‘saturated’ self – in which others come to “occupy positions in a multivoiced self” (Hermans, 2001, p.250). Thus, Hermans (2003, p.90) conceptualises the self as a “dynamic multiplicity of voiced positions in the landscape of the mind, intertwined as this mind is with the minds of other people.” Finally, Thich Nhat Hanh’s (2000) notion of interbeing articulates the central Buddhist philosophy of ‘dependent co-arising’ (Nakagawa, 2000); this teaching holds that all things (including people) lack independent existence, but instead are fundamentally interrelated to and dependent upon all other things for their existence and identity (this teaching will be returned to below).

Without wishing to minimise the nuanced differences between these different constructs, they all depict an intersubjective sense of selfhood, in which one experiences a transformed sense of identity that incorporates other people in some way. In speaking of such a transformed sense of selfhood, one must be careful, since psychopathologies such as schizophrenia are also often explained in terms of the disruption and even “dissolution” of self-other distinctions (Parnas, 2000, p.117). However, without denying the possibility that there can be dysfunctional intersubjective experiences of the self, what theorists such as Buber (1958) and De Quincey (2000) are describing in speaking of intersubjective selfhood is the *transcendence* of one’s narrow self-identity,

rather than an obliteration of it. Again, in referring to transcendence, one must also be precise about the meaning of this term. In this context, one can usefully draw upon the definition formulated by Hegel (1807/1973, pp.163-164), who suggested that to transcend means “at once to negate and preserve.” As Wilber (1995) explains, what is negated is an exclusive identification with a particular view of self. However, the old sense of self is not totally lost: it is preserved, but is now set in a larger experiential framework that means it is ‘seen through.’

To give an example of such transcendence, imagine a mother (or a father) with her new baby. Before the birth, this hypothetical mother may have had a somewhat individualistic sense of selfhood; she may well have loved and cared for others, but her selfhood was entirely bounded to herself – she was, in Watts (1961, p.18) neat phrase, a ‘skin-encapsulated ego.’ However, after giving birth, the mother may literally experience the baby as a part or extension of herself. Of course, they no longer share the same ‘skin-encapsulated’ physical body. However, cognitively, emotionally and motivationally, the mother and baby remain essentially one: the baby’s pain is her pain; its smile is her joy. Now, this is not a ‘dissolution’ of the self: rationally, the mother can still recognise and identify herself as a separate being. This is in contrast to the baby, who has yet to develop any self-other distinction, and who *does* experience this dyadic relationship in an ‘undifferentiated’ way (Mahler, Pine, & Bergman, 2000). Thus, the mother has transcended her old sense of selfhood: it has been preserved (she can still recognise herself as a separate being), and yet negated (her identity has been enlarged to also encompass her progeny). Arguably, entering into an intersubjective state of selfhood involves just such an act of self-transcendence (or a variant of it). Now, in the third and final section, I will explore the role of compassion in this act, and more importantly, examine why self-transcendence actually *matters*.

### PSYCHOSPIRITUAL DEVELOPMENT

In the section above, it was suggested that individualism is not universal – nor indeed endemic to Western cultures – and that it is possible for people to transcend their narrow sense of selfhood and enter into an intersubjective mode of being. In this third section, I shall explore why this kind of intersubjectivity is desirable; as will become apparent, this is because it can not only help alleviate one’s own suffering, but more radically, can be a route to transformative psychospiritual development. Firstly though, let me tie the discussion on self-transcendence and intersubjectivity back to the central focus of the article, namely compassion. The contention here is that compassion is valuable because it is arguably the most direct route to self-transcendence and an intersubjective mode of selfhood. In fact, more than that, it could be said that, by definition, compassion *is* intersubjectivity: compassion is inherently intersubjective, and intersubjectivity is inherently compassionate. The very nature of compassion – i.e., sympathetic distress arising in response to another’s suffering (Ozawa-de Silva et al., 2012) – is an intersubjective experience. In any given moment or act of compassion,

however brief, one breaks out of a narrow sense of selfhood: one's sphere of concern has expanded to encompass the other person, which is the very definition of self-transcendence, and has entered into an intersubjective state of selfhood.

To take our hypothetical example of a new mother (or father), one could regard her identification with and concern for her new-born as the very epitome of compassion. Of course, this is an idealised example: not all mothers will feel such identification, and even those that do are unlikely to do so constantly (they will experience moments of selfishness amidst their care). However, this latter consideration actually gives us reason for optimism and hope: it indicates that intersubjectivity is not a trait-like all-or-nothing affair (one either possesses compassion, and exists intersubjectively, or one lacks compassion, and exists individualistically), but rather is a mode of being that one can, at one's best, enter into. Imagine a continuum, here, between total selfishness (the kind of absolute solipsistic disregard for others found in psychopathy) and total selflessness (the kind of absolute compassion manifested by a Buddha). Consider that everyone is located, by temperament and development, somewhere along this line. One can add further nuance to this idea by recognising that one's location may shift depending on certain factors, such as mood, or who the other person is: for example, if one is feeling happy, or is with a person for whom one cares deeply (as per the mother with her baby), there is likely to be movement in the direction of greater selflessness. Crucially though, through engaging in practices like compassion or loving-kindness meditation (Galante et al., 2014), one can actively *shift* oneself along the continuum towards greater selflessness, towards a more intersubjective mode of existence.

However, still not addressed is the central concern of the article: why compassion – and the resulting self-transcendence and intersubjectivity – actually *matters*, why it should be so valorised by traditions such as Buddhism and Christianity. Of course, as mentioned above, one can readily acknowledge that compassion is beneficial to the recipient (Scott, 2013), and moreover serves to uphold a moral vision articulated by these religions (Lecso, 1988). But, I raised the possibility above that compassionate acts – and the self-transcendence that such acts facilitate – may also potentially have a profound impact on the actors themselves. As H. H. the Dalai Lama (1999, p.75) puts it, if we “reach beyond the confines of narrow self-interest... peace and joy become our constant companion.” As Barad (2007, p.20) points out, the Dalai Lama is directly saying that “compassion causes peace and joy.” Considered in these final paragraphs, is why that might be the case, why compassion might be so beneficial to the actors themselves.

This is a consideration that has been largely overlooked and under-theorised in contemporary psychology. One explanation for this omission is that academic psychology is largely rooted in the dominant Western individualistic view of selfhood (Becker & Marecek, 2008), with notable exceptions such as transpersonal psychology. Thus, as Harrington (2002) argues, since compassion is fundamentally an intersubjective phenomenon that happens ‘in-between’ individual selves, it has generally remained a lacuna within Western science.

This conventional psychological perspective – centred as it is on discrete, bounded, atomistic individuals – struggles to accommodate the type of ontological shift implied by the concept of self-transcendence, and as such fails to appreciate the significance of compassion (which helps engender this shift).

So, to appreciate why self-transcendence may be valuable for wellbeing, I will finish here by considering a tradition that has given much attention to these issues, namely Buddhism (while also drawing parallels with Christianity where appropriate). Summarising a tradition as rich and comprehensive as Buddhism is beyond the scope of this article. However, it would not be inaccurate to say that Buddhism places such an emphasis on compassion – and on the self-transcendence that it engenders – because Buddhism attributes most of the suffering in this world to one specific cause: the *self* (Lomas & Jnanavaca, 2015). As we would expect with a tradition as rich and comprehensive as Buddhism, comprising as it does numerous schools of thought, it does not feature just one single perspective on the self. However, without getting lost in esoteric philosophising around subtle doctrinal differences, Buddhism generally upholds a teaching of *anatta* (a Pali term meaning no-self/soul). That is, Buddhism regards the self, *as conventionally understood*, to be an unhelpful construct, or phrased more powerfully, a destructive *illusion* (Epstein, 1988). The individualistic model of selfhood (the idea that we exist as separate, fixed, bounded entities) is not only regarded as an incorrect fiction, but a fiction that underlies much of the problems in the world. Somewhat similarly – though the parallel is not perfect – Christianity regards conventional notions of self (i.e., a self-subsisting individual ego) as a pale shadow of the ‘true’ self (i.e., a soul that can partake in the nature of God). Moreover, Christian doctrine tends to regard exclusive identification with the conventional self, and denial or ignorance of the ‘true’ self, as the root cause of unhappiness and ‘sinfulness’ (Capps, 1993).

To put this view of selfhood into context, Buddhism proposes that existence is characterised by three key qualities: *anatta* (no-self, or insubstantiality), *anicca* (impermanence) and *dukkha* (frustration or suffering) (Sangharakshita & Subhuti, 2013). All phenomena, including humans, are ultimately seen as insubstantial (they are not self-existing entities; their existence depends on a network of supporting conditions) and impermanent (they change as their supporting conditions change). A useful metaphor is that of a whirlpool in a river: the configuration of the natural environment is such that a repeating pattern of water is created; however, the whirlpool does not exist as a separate object apart from these conditions. In Buddhism, the self is regarded in much the same way; out of the on-going flux of subjective experience (the thoughts, feelings and sensations flowing through our stream of consciousness), processes such as memory and language provide the illusion of the self as a fixed entity, when really there is nothing actually ‘there.’ (In this aspect, Buddhism differs from Christianity, with the latter upholding the existence of an enduring ‘soul.’) However, Buddhism further argues that people tend to deny these two fundamental aspects of reality (*anatta* and *anicca*), and instead regard phenomena, including their own self, as stable and permanent. Crucially, this misperception is seen as the cause of the third aspect of existence, *dukkha*.

This is partly because people become attached to phenomena that are inherently subject to change; people then suffer when this change does in fact occur. It is also because, in the case of the self, attaching to the idea that one exists as a separate individual generates a constellation of destructive behaviours, whether pertaining to the drive to aggrandise the self (e.g., egotism, pride and jealousy), or the urge to defend and protect it (e.g., hatred and aggression towards anything which threatens it).

Given that it is our clinging to the notion of a separate self that is viewed as the root cause of suffering, Buddhism consequently teaches that the way to overcome suffering is by transcending the self (Ho, 1995). To return to our definition of self-transcendence, this does not mean the kind of dissolution of self-other boundaries that may occur in psychopathology (Parnas, 2000), but rather appreciating that one's narrow view of selfhood is an unhelpful construct, and 'seeing through' it (Epstein, 1988). After all, Buddhist masters are certainly still capable of clothing and feeding their 'fictional' self; yet in a deeper sense they have come to understand it as being ultimately illusory. This is the point of many Buddhist meditative practices: to understand, at a deep experiential level, that the self is 'not real'; to thus transcend this narrow sense of selfhood and to create a more expansive identity, one encompassing other people. Thus, such practices endeavour to move people *towards* an I-thou regard for the other, along the continuum towards selflessness. This is the point of practices like compassion and loving-kindness meditation, in which one is encouraged to generate feelings of love and care for others (Fredrickson et al., 2008). In an analogous way, in Christianity, people are urged to transcend their individual, conventional self, and to enter into experiences of communion – with one's 'neighbour,' with one's congregation, with the broader institution of Christianity, and ultimately with Jesus and God (Westphal, 2004).

This process of self-transcendence as an *on-going* journey of psychospiritual development, involving a continual expansion of one's intersubjective concern (Wilber, 1995). That is, transcending one's individualistic view of selfhood and developing a deep sense of care for another person – such as a parent's devotion to his or her child, as featured above, or any other dyad suffused with love – is a good start, but simply the start of a much longer and far-reaching spiritual journey, in which people may continually expand their sense of selfhood in an on-going process of transcendence (Wilber, 1995). This means not limiting our compassionate intersubjective concern to one other beloved person, but continuing to extend this outwards, encompassing all those we come into contact with, and even beyond, up to and including all sentient beings (Barad, 2007). Indeed, this expansion of care is cultivated in Buddhist practices like loving-kindness meditation – which expand 'outwards' in just such a way – and is central to Buddhist moral philosophy, which argues that we have a duty to safeguard the wellbeing and development of all beings in the universe (Lecso, 1988). Similar themes of on-going spiritual development and self-transcendence can be found in Christianity, and indeed in most religions (Westphal, 2004).

Furthermore, in considering this process of psychospiritual development, theorists have sought to give definition and form to its omega point. That is,

if self-transcendence is an on-going process – of expanding one’s circle of compassionate care, and thus of entering into an ever-wider intersubjective experience of selfhood – where does this lead? Synthesising diverse perspectives on this question, Wilber (1995) holds that many religious traditions describe the ultimate end-point of this development as an experiential union with some kind of numinous power. Monotheistic religions, such as Christianity, might describe this as sharing in the divinity of God; as the 13<sup>th</sup> -century Christian mystic Meister Eckhart (1980, p.217) phrased it, “I discover that I and God are one.” Likewise, Buber (1958) felt that the particular power of I-thou relationships was that they constituted a spiritual relationship, in which both partners entered into the ‘eternal thou,’ a supra-personal union suffused with the grace of God. Alternatively, non-theistic religions such as Buddhism might conceptualise this as union with the *bhavanga*, with the *ground of being* (Wallace, 2001). As to the nature of such a union, most reports characterise this ultimate intersubjective state of selfhood as being suffused with an overwhelming sense of love. As Wallace (2001, pp.4-5) puts it, “Buddhist contemplatives have... concluded that the nature of this ground of becoming is loving-kindness.” Although such ideas may currently sound rather radical from the perspective of conventional psychology, these kinds of reports do suggest that the cultivation of compassion may have great, even profound consequences.

#### CONCLUSION

In this article, I have advanced a theory of compassion that focuses specifically on its value to the *protagonist*. It is of course recognised that compassion can be of great benefit to its recipient(s), and indeed to civic functioning more generally (e.g., as the basis for a communal moral framework). However, less attention has been paid to its impact on the protagonists themselves, partly because it is frequently constructed as an ostensibly dysphoric emotion (involving sharing in the distress of another person). And yet, compassion is invariably valorised by religious and spiritual traditions, and indeed is frequently lauded as among the highest of all human qualities. Drawing on ideas in Buddhism and Christianity, I have argued that this valorisation is due to the way that compassion can lead to transformative shifts in a person’s self-identity that are highly beneficial to the person. In particular, it has been suggested here that compassion inherently involves a process of self-transcendence, enabling people to enter into an intersubjective state of selfhood. This intersubjective state may not only relieve the protagonists’ own suffering, but can accelerate their psychospiritual development. Given the introduction of this theory here, future work will be needed to (a) empirically substantiate the basic premise (e.g., through psychometric assessments of changes in self-identity as a result of compassion-based interventions); (b) explore how to explicitly encourage and facilitate this type of self-transcendence in the context of compassion training; and (c) examine the long-term impact of practising compassion on psychospiritual development. We have an interesting journey ahead as we begin to truly understand and appreciate the profound potential of compassion.

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# EFFECTS OF VIDEO GAME PLAY VERSUS MEDITATION/PRAYER IN WAKING AND DREAMING EXPERIENCES

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*ABSTRACT:* Gackenbach (2008) hypothesized that video game play (VGP) may offer similar effects on consciousness as the practice of meditation. Based on various attention findings with both practices, VGP and meditation/prayer (M/P) were examined through the context of dream reports, change blindness tasks, and subjective reports of the effects of each practice in waking life. Although the dream content evaluation results were mixed, performance on the waking attention task was superior for gamers while self-reports of activity effects were highest for the M/P group. Experienced gamers reported experiencing higher levels of dream control in comparison to M/P practitioners. There was also a marginal difference found in dream lucidity favoring the M/P group. Gamers still reported more lucidity than controls. These findings imply that the absorbing qualities of VGP and M/P may share a similar role in their effects on consciousness.

*KEYWORDS:* video games, meditation, prayer, attention, change blindness, absorption, mindfulness, dreams, lucid dreams.

Today, technology is a gateway to various experiences that were previously either unavailable or more difficult to attain. Accordingly, it is worthwhile to examine some of the transpersonal implications of technology use. In her 2008 study, Gackenbach hypothesized that video game play (VGP) may offer some of the same effects as the practice of meditation based on findings in the early gaming literature (Greenfield, 1996) as well as her dream lucidity and control research on gamers and meditators (Gackenbach, 2006, 2008; Gackenbach & Bosveld, 1989). Furthermore, previous research that has examined meditation and video games independently has shown interesting parallels between the two practices.

Video gaming and lucid dreaming have both been associated with improved spatial skills (Gackenbach, Heilman, Boyt, & LaBerge, 1985; Sims & Mayer, 2002; Subrahmanyam & Greenfield, 1994). The high attention and absorption reported by video game players (Boot, Kramer, Simons, Fabiani, & Gratton, 2008; Glicksohn & Avnon, 1997-98) is reminiscent of similar effects in meditation (Holzel & Ott, 2006; Weinstein & Smith, 1992). Meditators have been found to have high levels of lucidity in sleep (Gackenbach & Bosveld, 1989; Hunt, 1989; Mason, Alexander, Travis, Gackenbach, & Orme-Johnson, 1995) as have gamers (Gackenbach, 2006). Gackenbach (2012) posits that a lengthy exposure to video games is essentially the same as being in an alternate reality,

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virtual in this case. This in turn may act as a cultural amplifier fostering alternative states of consciousness. Extant research has shown that VGP has the potential to alter a broad range of human mental functioning including significant advances in attention and cognitive ability in both the long and short term (Green & Bavalier, 2003).

When gamers are fully immersed in the virtual reality of a video game, they are experiencing what is called *presence*, defined as a felt sense of ‘being there’ in the moment. Presence may be comparable to *absorption*, a psychological construct that describes an alternative state of consciousness in waking reality (Preston, 1998, 2007). When gamers are absorbed and experience presence, they may also experience flow, where action and awareness merge, a high sense of control and temporal distortions occur, and the activity is intrinsically rewarding (Csikszentmihalyi, 1990). Gamers’ experiences, in turn, may be analogous to the mindfulness states found during deep meditative states (Gackenbach & Bown, 2011).

In a 2011 study conducted by Gackenbach and Rosie, gamers experienced a sense of immersion and presence that appeared to parallel what they experienced dreaming. Thus, the similar states of consciousness experienced in a virtual gaming world and a biological dream world may translate to greater control in the video game world and, subsequently, to greater ego control in the dream world. This speculation draws upon the Game Transfer Phenomena (GTP) concept (Ortiz de Gortari & Griffiths, 2012); in video games immersion triggers subsequent emotions, thoughts and behaviors that are transferred from the virtual gaming world to reality and dreaming. The potential effect video games have on attention/absorption opens a window that may give more people access to previously unavailable aspects of consciousness (Gackenbach, 2012). Therefore, video games today may be considered self-sufficient cultural amplifiers that support the growth of consciousness.

### MEDITATION/PRAYER

Meditation is an essential component of Eastern spiritual disciplines as well as many Western contemplative religious traditions. Practitioners train in meditation as a means to expand their conscious awareness of their global surroundings, optimize states of psychological well-being and heighten overall consciousness (Walsh, 1983). Neuro-cognitive research suggests that meditation is capable of facilitating long-term attentional and emotional benefits (Lutz, Slagter, Dunne, & Davidson, 2008). Furthermore, Holzel and Ott (2006) found that psychological absorption predicted meditative depth more strongly than years of practice. In his 2009 article, Shapiro suggested matching subjects of the same demographic on alternative attentional practices for the purpose of understanding how meditation affects consciousness. Thus, VGP may be conceptualized as a viable alternative practice, as gaming requires high levels of attention.

There are other elements of gaming that also show similarities to meditative practice. On a physiological level, it has been shown that casual video games

(e.g., *Bejeweled 2*, *Bookworm Adventures*, *Peggle*) can significantly decrease tension, depression, anger, fatigue, confusion, and physical stress while simultaneously increasing mood state and vigor (Russoniello, O'Brien, & Parks, 2009). These findings support the similar functional relationship shared by various video game genres and different meditation forms. Gackenbach (2008) asserts that while both meditation and gaming can induce trance-like states, video games cater to a larger population with immediate rewards and engaging stimuli. Alternatively, meditation requires individual patience and perseverance, and, while it offers a deeper transcendence, it is, consequently, less accessible.

Praying, like meditation, is a spiritual practice that affects practitioners' consciousness. Research has shown that those who pray regularly experience various benefits, such as reducing stress, pain, depression and anxiety (Laird, Snyder, Rapoff, & Green, 2004; McCullough, 1995). Egoless prayer may work similarly to certain forms of meditation, namely, meditation that facilitates the negation of ego and opens the individual to a transcendent state, which is physiologically or psychologically beneficial (Brown & Ryan, 2003). The state of being egoless appears to be a key component in both prayer and meditation. Both may enhance focus and mindfulness, which is described as looking deeply into the present and paying attention as if it really matters. Hoffman and Hoffman (2006) argue that mindfulness is another key component in both prayer and meditation. Therefore, since prayer has been shown to improve quality of life similar to the benefits of meditation, some forms of prayer have been used as synonymous to meditation in this inquiry.

## DREAMS

In addition to the apparent influence of video games on waking consciousness, video games may also play a functional role in the emulation of threat simulation typically experienced in dreams (Gackenbach & Kuruvilla, 2008; Revonsuo & Valli, 2000). Nightmares in particular have been suggested to have the evolutionary function of training the individual to deal with threatening events within a biologically fabricated alternate reality. Experienced video game players tend to be less victimized by nightmare scenarios. It has been speculated that the realistic qualities of modern video games may also serve as an electronically mediated alternative to the threat simulation experienced in dreams. Therefore, VGP may be an effective method of nightmare rehearsal in a wakened state, which helps to ease the persistence and intensity of actual nightmares (Gackenbach, Ellerman, & Hall, 2011; Gackenbach & Kuruvilla, 2008; Krakow et al., 2000). This effect may be due to the dual mechanisms of dream lucidity and control. That is, upon recognizing that one is dreaming it becomes easier to control the dream and thus not be a victim of the nightmare.

The aim of the present study was to explore the underlying similarities between VGP and meditation/prayer (M/P) with respect to their impact on consciousness in waking and dream states. Waking effects were assessed by subjects' performance on an attentional task and their attitudes towards their practice.

If no difference existed between VGP and M/P, then we would expect there to be no difference between the groups' performances. Attitudes towards these practices, however, may differ as social acceptance of M/P is generally more positive than it is for VGP. As for the dream effects, it was expected that both groups would score higher than the control group (CON) in dream lucidity and dream control but lower on nightmares (Gackenbach, 2012; Gackenbach & Hunt, 2014; Hunt, 1989).

## PARTICIPANTS

The participants were drawn from a psychology subject pool at a western Canadian university. Participating students were awarded up to 6% credit towards their overall grade: 2% for completing the laboratory session and 2% each for reporting two dreams with the accompanying questionnaires online.

Potential research participants were pre-screened through the Department of Psychology's subject management system (SONA). To qualify for participation all subjects had to report high dream recall. Three additional criteria were utilized for group assignment: high frequency of VGP but low frequency of

M/P, high frequency of M/P but low frequency of VGP and low frequency of both VGP and M/P (i.e., control group [CON]). Participants with sensitivity to computer screens or epileptic symptoms were also excluded.

Students (1,755) were pre-screened with 1,179 (67%) being female, 564 (32%) being male and 12 (1%) who declined to identify their sex. Most participants (63%) fell into the age range of 18-20, followed by 21-25 year olds (26%). Of the 1,755 students pre-screened, 344 qualified to participate in the study. This group was further reduced by students either not agreeing to participate in the study at the prescreen consent phase ( $n=17$ ) or not providing sufficient contact information ( $n=32$ ) or having emails bounced back or not responded to for laboratory session scheduling ( $n=48$ ). Thus, 247 were potential participants.

These 247 prescreened potential participants included 97 in the CON group, 76 in the M/P group, and 74 in the VGP group. Some participants, however, did not sufficiently engage in the activities designated by their group based on the prescreening, most often prayer, while others were involved in multiple activities. Accordingly, the group's criteria were narrowed. That is, the M/P group had little or no gaming, the VGP group engaged in little or no meditation or prayer, and the CON group engaged in little or no M/P practices or VGP. These were based upon the subjects' overall assessment of their behaviors collected in the pre-screening and not on specific behaviors the day prior to reporting a dream. This left 173 who actually participated in the laboratory phase of this study.

These included 114 (66%) females and 59 (34%) males. The CON group consisted of 76 participants with 58 (76%) being female and 18 (24%) being male. The M/P group contained 45 subjects with 40 (89%) being female and

5 (11%) being male. Finally, the VGP group had 52 participants with 16 (31%) being female and 36 (69%) being male. Only 117 of these 173 reported age information, with the majority of each group being 18 to 20 years of age (CON=72%; M/P=71%; VGP=64%). Another big segment of each group were 21 to 25 years of age (CON=20%; M/P=18%; VGP=34%). The remaining subjects in each group were over 25 years of age (CON=8%; M/P=11%; VGP=2%). Two-thirds of participating VGP were male, and upwards of ninety percent of M/P participants were female, demonstrating the existence of a gender bias in this sample. Sex of subject was treated as a covariate because of the small number of males in the M/P group. It should be noted that not all participants reported all data, and, thus, the number of respondents varies as a function of the dependent variable.

## MATERIALS

### Pre-Screening Inventory

This inventory assessed each participant's video game activity, meditation and prayer habits and participant's ability to recall dreams for group assignment. Three demographic questions in the pre-screening survey recorded participant's sex, age, and stimuli sensitivity. These questions were followed by video game history questions, which included frequency of play, length of play, age begun play, and current genre preference (Gackenbach & Bown, 2011). Following the video game questions, three dream recall items asked about general recall, last week's recall, and last night's recall.

Next, the M/P items were offered. Subjects were asked to indicate the frequency with which they practiced two types of meditation and six types of prayer. The two meditation types, Focused Attention and Open Monitoring, were taken from Raffone and Srinivasan's 2010 research. Focused Attention Meditation (i.e., concentration) entails the voluntary focusing of attention on a chosen object. Open Monitoring Meditation (i.e., mindfulness) involves nonreactive monitoring of the content of experience from moment to moment. There were three items in this scale including other types of meditation ( $\alpha = .62$ ). This category was for those who were run in the laboratory portion of the study. The six prayer types were taken from Whittington and Scher's 2010 study and included:

1. *Receptive prayer*, which involves passively awaiting divine wisdom, understanding or guidance;
2. *Adoration*, which focuses on the worship and praise of God, without reference to specific circumstances or needs;
3. *Thanksgiving*, where one expresses gratitude for life circumstances;
4. *Confession*, which involves acknowledging faults, misdeeds, or shortcomings (i.e., sins);
5. *Supplication*, the most common type, which involves requests for God's intervention in specific life events for oneself or others; and
6. *Obligatory*, prayers required by some religions that consist primarily of fixed prayers repeated at each worship time.

These six items had a Cronbach's alpha of .88 for those who were run in the laboratory portion of the study.

The final part of the pre-screening inventory collected participants' contact information including name, email address and phone. It was explained that this information would be kept confidential and was being collected in case a participant qualified for the full study. Participants were also asked to provide an alias, a user name that could not be connected to them directly but that allowed information gathered across the study to be collected.

### **Change Blindness Stimuli**

The perception of stimuli in the environment is limited by the attentional capacity of the perceiver. Change blindness is a perceptual phenomenon that demonstrates how the attentional awareness of an individual is determined by an individual's perceptual sensitivity to stimuli. There were six online change blindness tasks that illustrated change blindness. Each started with a 17-second tutorial explaining change blindness, followed by the change blindness task, and ended with a reveal of the change at the 48-second mark. The reveal was initiated by a blue pop-up saying "and the change is ..." after which the grey distraction screen was removed from the video. The change that occurred in the task continued to flicker, making the change more apparent. Each video was approximately 66 seconds long. The tasks were designed as a measure of participants' level of attention while viewing a change blindness task on a projection screen. The change blindness response sheet gathered the change detection time, location of change and verbal description of the change.

### **Effects of Meditation-Prayer/Gaming/Involving Activity Scale**

Reavley and Pallant's (2009) activity scale was designed for the assessment of meditation. Instructional changes, however, allowed the scale to be used for each of the three groups. The scale investigated the participants' beliefs about their absorbing practice, namely M/P, VGP, and self-defined (i.e., CON group). Questions focused on the participants' subjective experience of emotions, perceptions and sensations while engaging in their respective activities.

The scale was divided into two sections: 'experiences during the activity' and 'effects of the activity in everyday life.' Items on both scales were responded to in terms of a 7-point Likert type response scale with 1 representing *almost never*, and 7 representing *almost always*. The 'experiences during the activity' scale had 29 items, which were scored as five subscales: eight items for cognitive effects ( $\alpha=.64$ ), six items for emotional effects ( $\alpha=.75$ ), five items for mystical experiences ( $\alpha=.70$ ), five items for relaxation ( $\alpha=.60$ ) and five items for physical discomfort ( $\alpha=.59$ ). A few items included statements like "my perceptions are clearer," "I experience feelings of tension and anxiety" and "I am able to let my thoughts go and not get caught up in them." The 'effects of the activity in everyday life' scale had 35 items. It was scored in terms of seven

subscales, each of which had five items: physical ( $\alpha=.71$ ), emotional ( $\alpha=.76$ ), expanded consciousness ( $\alpha=.81$ ), social relations ( $\alpha=.81$ ), cognitive ability ( $\alpha=.77$ ), non-judgmental acceptance ( $\alpha=.70$ ) and behavioral habits ( $\alpha=.65$ ). Examples of statements included “I feel a sense of awe and wonder,” “I am more aware of body sensations and responses,” or “I am less depressed.” The Cronbach alphas for this sample were at or slightly below those suggested by the scale’s authors ( $\alpha=.68$  to  $.87$ ).

### **Dream Recall Tips Handout (Dopko, 2009)**

This handout offered various techniques for improving dream recall as well as methods for keeping a dream diary.

### **Media Use and Dream Collection Questionnaire**

This online survey was implemented using the online survey tool Qualtrics. The questionnaire probed the use of any type of electronic media, VGP, M/P, and the control activity chosen by the control group the day before the dream report. Participants then reported and completed three scales about their dreams.

Participants were asked to record their type of attentional practice (i.e., VGP, M/P, or alternate activity chosen by the CON group) and the amount of time spent on their activities the day preceding their dream recording. The level of detail about each attentional activity was asked about in similar detail as in the pre-screening inventory. Media usage, other than gaming, was collected at the beginning of the questionnaire (i.e., audio, video and interactive).

Detailed instructions were then given to the participants on how to report their dreams. Following the dream report, the first set of questions asked participants what type of dream they had drawn from (i.e., lucid, control, nightmare, bad dream, mythological, bizarre, observer, and normal) (Gackenbach, 2006). Each dream type was defined in the question and a 7-point Likert scale was used to gauge the participants’ confidence in their dream type assessment. These dream types were not expected to constitute an internally consistent scale as dream types range widely and are rarely correlated. Indeed, the Cronbach’s alpha was  $-0.07$ .

Participants assessed the intensity of a range of emotions experienced during the dream choosing field of 15 emotions (i.e., anger, awe, arousal [sexual], anxiety, fear, guilt, frustration, sadness, hatred, happiness, jealousy, embarrassment, ecstasy, downhearted, and terror) (Zadra, Pilon, & Donderi, 2006). The Cronbach’s alpha for this scale was  $.72$ . Each emotion experienced in the dream was rated on a 5-point Likert scale ranging from *not at all* to *extremely*. Finally, Kahan and LaBerge’s (1996) 10-item Meta-cognitive, Affective, and Cognitive Experiences (MACE) Questionnaire was administered. Subjects were asked in

a yes-no format if they had had the experience in their dream, and, if so, to comment. While Kahan and Sullivan (2012) reported a Cronbach's alpha for the whole scale as .68, in this sample it was .47. The subscales for this sample were four items for Self-regulation ( $\alpha=.51$ ), three items for monitoring external environment ( $\alpha=.20$ ) and three items for monitoring internal experience ( $\alpha=.08$ ). Because of the low reliability of the last two subscales, individual items were separately analyzed herein.

## PROCEDURE

All participants began by taking the pre-screening inventory. Those who did not suffer stimuli sensitivity, sensitivity to computer screens or epileptic symptoms, and had recalled a dream from last night or last week were separated into three groups. Group one reported a high frequency of VGP (i.e., nightly or several times per week) without regular M/P. Group two reported regular M/P without frequent VGP. Finally, group three included the control subjects, which were those who reported no current M/P and no daily or weekly VGP. The qualifying participants were sent an email notifying them that they were eligible to participate in the study and were given instructions to go back to the SONA system to sign up for a laboratory session.

Qualifying subjects participated in the laboratory component in their groups where possible. Participants arrived at scheduled times for their one hour laboratory session and were seated in the two front rows of the lab so that they were at approximately the same distance from the projection screen. Each seat had an envelope placed in front of it, which included the change blindness task sheet, an Effects of Attention Activity Scale (i.e., this inventory had separate cover sheets depending on the group), and a 10-response scantron sheet. The envelopes also included a dream recall tips sheet to take with them following their laboratory session. On top of the envelope was an informed consent sheet that participants filled out at the beginning of their session. On each of these sheets, the participants were instructed to include the alias used in the prescreening test.

At the beginning of each session, participants were introduced to the study and told what was expected of them prior to taking part, including the possibility of earning the 6% research participation credit. Each group of subjects was instructed in the use of the online dream collection through a PowerPoint presentation.

The laboratory sessions were run over a three and a half month period. For the first month, each group had two laboratory sessions per week, after which sessions were reduced to one session per week. The sessions for each group were spread out evenly at different time slots throughout the day.

The six change blindness attention tasks were administered to each group after the explanation of the dream report section of the study. The lights were turned off for this portion of the session in order to increase projection screen clarity.

Before engaging in the change blindness tasks, the participants completed a practice change blindness task so that they knew how to perform on subsequent tasks. For each task, participants recorded three different things: the time taken in seconds to notice the change (regardless of whether it was before or after the reveal<sup>1</sup>), the specific changes they observed in the images, and the quadrant where they observed the change<sup>2</sup>.

To conclude the laboratory session, participants completed the Effects of Meditation-Prayer/Gaming/Involving Activity Scales. Each group had different versions of the scale. Members of the control group were instructed to write down an activity that they found absorbing since they had no designated activity (e.g., VGP, M/P). Once they choose their activity, they filled out the scales in reference to that activity. All subjects filled this questionnaire out on the scantron sheet provided, writing their alias on it instead of their actual names.

Participants were sent an email invitation with the web address for their dream reporting following their laboratory session. Participants were instructed to report a dream under two conditions. They had up to two weeks to fulfill each of the two activity conditions (i.e., one: engaged in designated absorbing activity for a substantial period of time during the day; two: not engaged in absorbing activity for the most of the day) and report the follow-up dream. If they did not report their dream within 24 hours of experiencing it, they were instructed that they could not use it. Following the second dream collection participants were provided with a debriefing statement.

## RESULTS

In order to investigate any parallels between M/P and VGP both waking and dreaming information was gathered. Specifically, waking information was collected in terms of attention, which is thought to be central to both activities. The results are presented in two major sections below: waking laboratory and dream diary. The laboratory results have both performance and self-report information on attention while the dreams are reported upon in terms of self-reports and judges' assessments.

Due to space limitations the reporting includes statistically significant results exclusively with descriptive statistics offered as needed. The primary analyses were groups (M/P; VGP; CON<sup>3</sup>) by conditions—*high activity days* (HAD) and *low activity days* (LAD)—ANCOVAs with various covariates as a function of the dependent variable. While reporting of results is primarily limited to significant results, occasionally p-values of less than .1 are reported if conceptually important.

### LABORATORY RESULTS: WAKING ATTENTION SELF-REPORT AND BEHAVIOR

The change blindness task offered two measures of performance—correct quadrant and self-reported time in seconds—viewed on the screen to identify

the change in the visual stimuli. Nearly all of the participants selected the correct quadrant. Not all participants reported all information for each of the six change blindness tasks after the practice trial. Those who did numbered 159.

For those who completed both the quadrant placement and the speed reporting there was no difference on a chi-square of correct quadrant. Of the 72 CON group individuals, 67 got all of the quadrant placements correct. Forty-six of the 49 of VGP subjects had 94% correct, while 30 of the 38 M/P group members, or 79%, got all correct. However, when the wrong answers were considered the chi square was significant ( $X^2(2)=6.7, p=.035$ ). This observation was accounted for by the higher incidence of wrong answers among the M/P group (M/P=8 out of 30 or 21%; CON=5 out of 72 or 7%; and VGP=3 out of 49 or 6%). There was also a group difference in speed of reporting the change in seconds ( $F(2, 141)=4.2, p=.017$ ). The VGP group was significantly faster in recognizing the change (mean=238.3, SD=25.4, N=45) than either the M/P group (mean=249.8, SD=25.8; N=30) or the CON group (mean=251.7, SD=23.3, N=67), who did not differ from one another. The second part of the laboratory experience was taking a self-report scale measuring the effects of Meditation-Prayer/Gaming/Involving Activity. This instrument was divided into subscales assessing experiences during each group's activity (i.e., cognitive, emotional, mystical, relaxation, and physical discomfort) and the effects of that activity on their everyday lives (i.e., physical, emotional, expanded consciousness, social relations, cognition, acceptance, and behavior/habits). Responses to all but three subscales resulted in group differences, which are summarized in Table 1.

In almost all subscale measures the M/P group *believed* their activity affected their daily life, while gamers did not subscribe to such effects. Thus, the M/P group typically scored the highest on effect of their attentional practice. With regards to the subscale scores for perceptions during the activity, the M/P group was not higher on mystical experiences, and the CON group was most relaxed while also reporting the most physical discomfort along with the VGP group. This CON group finding could be due to the variety of absorbing activities they reported.

### **Online Survey**

Following the laboratory session, participants filled out online surveys twice, collecting their dreams on two separate days as well as other relevant information. The survey was completed after a day with high levels of engagement in their activity and a second day with minimal engagement. The order of filling out the surveys was up to the participant, but both required completion for credit. Information about the type and length of activities was collected primarily to verify that the self-manipulation worked. Additionally, general media type used the day prior to the dream was assessed in order to control, across groups, for its effects.

TABLE 1  
*Total Number Change Blindness Quadrant Identifications as Correct as a Function of Group*

Sex (1 = male; 2 = female)		Quadrant placement of change: All correct = 1; some incorrect = 2			Total
		1.00	2.00		
1	Group # (C=1, M=2, V=3)	1 Count	14	3	17
		% within Group # (C=1, M=2, V=3)	82.4%	17.6%	100.0%
	2	Count	4	2	6
		% within Group # (C=1, M=2, V=3)	66.7%	33.3%	100.0%
	3	Count	31	2	33
		% within Group # (C=1, M=2, V=3)	93.9%	6.1%	100.0%
Total	Count	49	7	56	
	% within Group # (C=1, M=2, V=3)	87.5%	12.5%	100.0%	
2	Group # (C=1, M=2, V=3)	1 Count	53	2	55
		% within Group # (C=1, M=2, V=3)	96.4%	3.6%	100.0%
	2	Count	26	6	32
		% within Group # (C=1, M=2, V=3)	81.3%	18.8%	100.0%
	3	Count	15	1	16
		% within Group # (C=1, M=2, V=3)	93.8%	6.3%	100.0%
Total	Count	94	9	103	
	% within Group # (C=1, M=2, V=3)	91.3%	8.7%	100.0%	

### Activity Level Manipulation Verification

The time that each group spent on their designated activities as a function of condition and group was examined in an ANCOVA with the subjects' sex as the covariate. On the response sheet provided, all participants answered all questions about day before activities. Thus, the VGP group answered questions about prayer, the CON group answered questions about gaming and so forth. In this way all of the designated absorbing activities were assessed for all participants.<sup>4</sup> This process allowed some verification of the quasi-experimental manipulation. It was found that there were main effects for length of time spent on type of activity during the day prior to the dream ( $F(1, 239)=10.5, p<.001, \eta_p^2=.02$ ): VGP, mean=1.8, SE=.111; control absorbing activity, mean=5.9, SE=.2; M/P sum mean=5.6, SE=.3). There was also a main effect for group ( $F(2, 239)=3.6, p=.03, \eta_p^2=.03$ ): CON mean=4.4, SE=.2; M/P mean=4.9, SE=.23; VGP mean=3.1, SE=.3) and condition ( $F(1, 239)=11.7, p=.001$ ): low activity day mean=3.1, SE=.2; high activity day mean=4.9, SE=.2).

In other words, the self-reported manipulation worked with more time spent on an activity reported on the high activity than the low activity days. Additionally, the VGP group reported the least activity overall, and that type

TABLE 2  
*Subscale F-values, Means, and Standard Deviations on Self-Report Effects of Meditation/Prayer, Gaming or Involving Activity Scale for Each Group*

Time	Subscale	Mean/SD/N <sup>abc</sup>	F-values
During Activity	Mystical	CON:12.9054/5.54476/74 <sup>b</sup> M/P: 18.1163/5.90887/43 <sup>a</sup> VGP:12.3000/4.99898/50 <sup>b</sup>	$F(2, 166)=15.97, p<.0001$
	Relaxation	CON: 18.8243/5.79881/74 <sup>a</sup> M/P: 16.2955/5.71648/44 <sup>b</sup> VGP: 15.2041/5.75898/49 <sup>b</sup>	$F(2, 166)=6.39, p=.002$
	Physical Discomfort	CON: 18.9178/5.63411/73 <sup>a</sup> M/P: 14.2500/4.95620/44 <sup>b</sup> VGP: 18.4200/5.54422/50 <sup>a</sup>	$F(2, 166)=11.06, p<.0001$
After Activity	Physical	CON: 23.9178/6.86123/73 <sup>a</sup> M/P: 24.5349/5.26149/43 <sup>a</sup> VGP: 18.8980/5.33559/49 <sup>b</sup>	$F(2, 164)=13.128, p<.0001$
	Emotional	CON: 23.5676/6.39581/74 <sup>b</sup> M/P: 25.9545/4.45105/44 <sup>a</sup> VGP: 20.5800/6.43044/50 <sup>c</sup>	$F(2, 167)=9.641, p<.0001$
	Expanded Consciousness	CON: 20.9589/6.92708/73 <sup>b</sup> M/P: 28.4773/4.00865/44 <sup>a</sup> VGP: 16.4694/6.11045/49 <sup>c</sup>	$F(2, 165)=46.676, p<.0001$
	Social Relations	CON: 21.8429/7.54049/70 <sup>b</sup> M/P: 27.7750/4.42306/40 <sup>a</sup> VGP: 20.3191/7.00033/47 <sup>b</sup>	$F(2, 156)=14.888, p<.0001$
	Acceptance	CON: 22.5205/6.16241/73 <sup>b</sup> M/P: 26.3636/4.76465/44 <sup>a</sup> VGP: 21.3333/6.06389/48 <sup>b</sup>	$F(2, 164)=9.640, p<.0001$
	Behavior/habits	CON: 20.2877/6.54149/73 <sup>b</sup> M/P: 23.6905/5.58957/42 <sup>a</sup> VGP: 19.1020/6.73067/49 <sup>b</sup>	$F(2, 163)=6.297, p=.002$

<sup>abc</sup> A superscript of a, b or c indicates the result of post-hoc comparisons.

of activity, playing video games by all participants, was also least reported. Further, there was a three-way interaction ( $F(2, 239)=3.9, p=.02; \eta_p^2=.03$ ) as well as a two-way interaction (length time doing a type of activity by group;  $F(2, 239)=23.6, p<.0001, \eta_p^2=.2$ ). The point of this analysis was to show that the manipulation worked; not surprisingly, the three-way interaction showed that each group did indeed do their activity more on their high than their low activity days.

### Media Use Day Prior to Dream

Media use was thought to be an especially important potential confound. This generation of college students are heavy users of media, and as such we decided to include the type and length of their media use on the day prior to the dream. A two (condition: high, low) by three (group: CON, M/P, VGP) by three (media: audio, video, interactive) ANCOVA with sex of subject as a covariate was computed. There was only one main effect, which was for condition ( $F(1, 83)=6.6, p=.012, \eta_p^2=.07$ : high activity, mean=3.1, SE=.109; low activity,

mean=2.693, SE=1.05). All two-way interactions were statistically significant: media use by condition ( $F(2, 83)=7.4, p=.008, \eta_p^2=.08$ ); media use by group ( $F(2, 83)=7.6, p=.001, \eta_p^2=.15$ ); and condition by group ( $F(2, 83)=6.1, p=.003, \eta_p^2=.1$ ). Finally, the three-way interaction was also statistically significant: media use by condition by group ( $F(2, 83)=12.6, p<.0001, \eta_p^2=.2$ ). Of primary interest is the group by condition interaction that is portrayed in Figure 1.

Expectedly, the VGP group reported the most media use on high activity days and the least on low activity days. The media use for the M/P and CON groups changed slightly as a function of activity levels. Media use was entered as a covariate in all dream analyses because of the significant impact of media use on the VGP group.

## DREAM RESULTS

This section is divided into self-reports about the dream and the dreams as coded by judges. Participants reported their confidence in the type of dream they recalled (Gackenbach, 2006), emotions about their dream (Zadra et al., 2006) and their thoughts and feelings during the dream (MACE: Kahan & LaBerge, 1996). Group by condition ANCOVAs with sex of subject, day before media use and number of words per dream<sup>5</sup> were computed on each response.

### Self-Report Data: Dream Types and Emotions

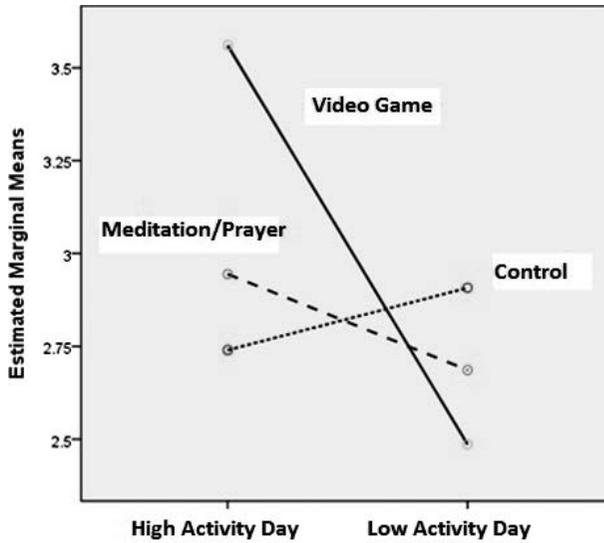
Three of the eight types of dreams asked about resulted in group differences. Specifically, M/P (mean=3.2, SE=2) reported more lucid dreams than either the CON (mean=2.461, SE=.203) or VGP (mean=2.1, SE=.2) groups ( $F(2, 230)=2.8, p=.06, \eta_p^2=.02$ ). However, for control dreams, often associated with lucidity in sleep, the VGP group (mean=2.2, SE=.16) rated their dreams higher than the other two groups, who did not differ (CON: mean=1.9, SE=.1; M/P: mean=1.7, SE=.1) ( $F(2, 225)=3.2, p=.04, \eta_p^2=.03$ ). The third dream type that showed a group effect was bad dreams. While nightmares evidenced no group difference, there was an interaction for group by condition for bad dreams ( $F(2, 227)=4.3, p=.01, \eta_p^2=.04$ ). This interaction is portrayed in Figure 2.

Here the CON group reported the opposite experience in their dreams than the other two groups as a function of condition.

Self-reported emotions experienced during the dream resulted in no group or condition differences. However, the third type of self-report data on the dreams collected, the MACE, did evidence differences and is discussed next.

### Self-Report Data: MACE

The three MACE responses regarding reflective awareness were summed while the other items were treated individually<sup>6</sup>. Thus, eight ANCOVA's, in the same



Covariates appearing in the model are evaluated at the following values: Sex (M=1; F=2) = 1.7000

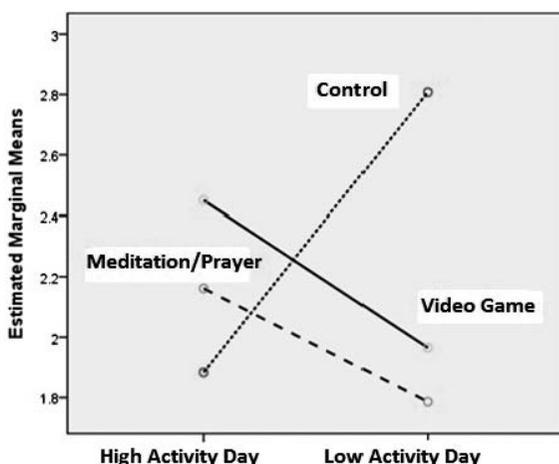
Figure 1. Mean audio, video and interactive media use self-reported the day before the dream under two conditions as a function of group.

format as previously, were computed on each of these scores. Three of these resulted in statistically significant or near statistically significant group by condition interactions (internal commentary  $F(2, 232)=2.8, p=.1, \eta_p^2=.02$ ; thwarted intention  $F(2, 232)=4.4, p=.013, \eta_p^2=.04$ ; intense emotions  $F(2, 231)=2.5, p=.1, \eta_p^2=.021$ ). These three interactions are portrayed in Figure 3.

### Judges' Dream Coding

All dreams were coded by independent judges for the presence or absence of dream elements and themes that were thought to be relevant to the major hypothesis. These included indicators of consciousness in dreams, incorporation of absorbing activities into dreams and relevance to nightmares. The explanation of each coding is detailed next, followed by each set of results.

*Judges' dream coding: Consciousness in dreams.* Coding was developed to assess consciousness in dreams. That is, the first coding sought to determine dream content relevant to the identification of elements of lucidity, pre-lucidity, dream control and perspective of the dream ego (i.e., first versus third person). Each element to be coded included a range of options in terms of certainty or types. Thus, lucidity was coded along four points ranging from clear indication that the dreamer knew they were in a dream to no such indication. Pre-lucid dreams were identified in terms of four types: talked about dreams, wondered if they were in a dream but decided not, false awakening and out-of-body experience. Dream control was coded for self along a 4-point Likert scale as



Covariates appearing in the model are evaluated at the following values: audio media day before = 3.23, audio video media day before = 2.97, interactive media day before = 2.52, words/dr = 293.53, Sex (M=1; F=2) = 1.6639

Figure 2. Self-report confidence of having had a bad dream as a function of group and condition.

well as for dreamt characters and environment. Dream ego stance ranged from entirely within the self to entirely watching. Finally, the degree to which the watcher was emotionally involved in the dream was also assessed.

The same ANCOVAs were used to assess these judges' estimates of consciousness in dreams (group by condition with sex of subject, number of words in dream, and the media use variables three days prior to the dream). There were no main effects or interactions for judges' assessments of dream control, point of view or number of pre-lucid dreams but there was an interaction, which approached traditional statistical significance levels for judges' estimates of lucidity ( $F(2, 224)=2.3, p=.1, \eta_p^2=.02$ ). This finding is displayed in Figure 4.

Because of its conceptual importance. The interaction is largely accounted for by the VGP group whose members were judged as reporting more lucidity after days with high gaming activity.

*Judges' dream coding: Incorporation of absorbing activities.* The next set of judges' coding probed for the presence of each of the three absorbing activities within the dream: VGP, M/P, or CON absorbing activity. Video game elements in the dream included any reference to, or implication of, a video game as the dream environment, as played in the dream, or as referred to in some indirect way in the dream. Additionally, selected general subscales from the Hall and Van de Castle (HVDC, 1966) dream content analysis system were coded as present or absent in terms of gaming content including characters, activities, emotions, settings and objects. Next, the Entertainment Software Rating Board (ESRB) themes for rating video games were coded for all dreams

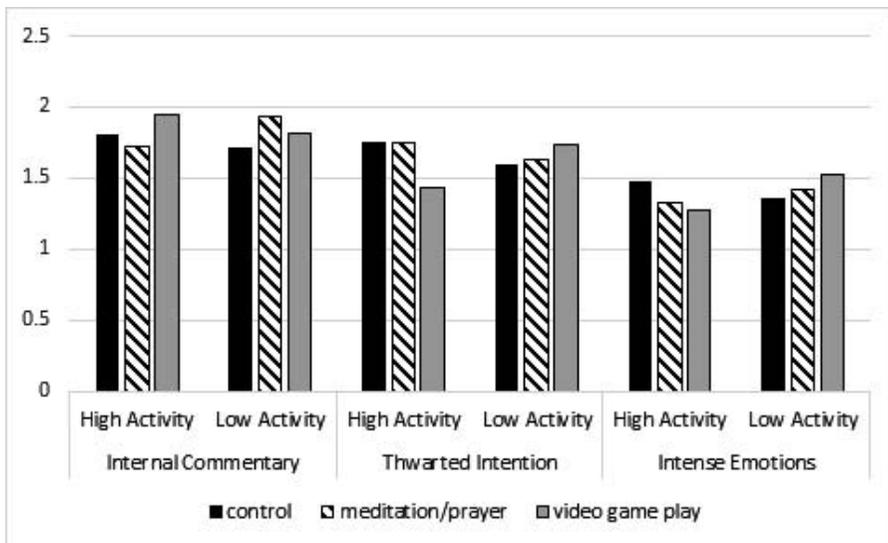


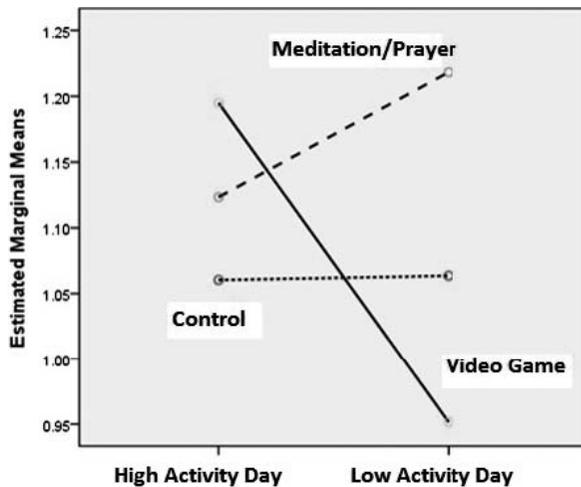
Figure 3. Mean MACE responses to dream content as a function of activity level and group.

whether or not they had gaming content. These were coded as the presence or absence of violence, sex, drugs, language, humor and gambling.

The same ANCOVAs were computed as previously. In terms of gaming in dreams and judges' dream coding, the categories of *the dream has a game in it* and *games mentioned in the dream* had no statistically significant effects. However, *the dream is a game* did result in a group main effect ( $F(2, 224)=3.1$ ,  $p=.05$ ,  $\eta_p^2=.02$ ). The VGP group's dreams were judged to be most likely to have a dream that is a game (mean=.238, SE=.059) relative to the other two groups who did not differ (CON mean=.07, SE=.05; M/P mean=.04, SE=.05).

The sums of the HVDC and the ESRB subscales were computed, and the same ANCOVA was calculated. There was a group main effect for each of the sums: HVDC ( $F(2, 224)=2.7$ ,  $p=.07$ ,  $\eta_p^2=.02$ ) and ESRB ( $F(2, 224)=3.8$ ,  $p=.02$ ,  $\eta_p^2=.03$ ). In both cases the VGP group's dreams were rated the most game like (HVDC mean=.7, SE=.15; ESRB mean=.6, SE=.08) relative to the other two groups, CON (HSRV mean=.2, SE=.1; ESRB mean=.4, SE=.1) and M/P (HSRV mean=.2, SE=.1; ESRB mean=.3, SE=.1).

Elements relevant to meditation or prayer were also coded as continuity elements. Dreams were first coded in terms of the presence of any type of M/P as defined in the pre-screening. In line with Casto, Krippner and Tartz (1999), as well as the previous game coding, this was followed by the same five subscales from the Hall and Van de Castle (1966) dream content scale. Dreams were coded separately for spiritual and religious themes in the same presence or absence format. Casto et al. (1999) added another category called Spiritual Experiences, which they defined as:



Covariates appearing in the model are evaluated at the following values: words/dr = 291.62, Sex (M=1; F=2) = 1.6638, audio media day before = 3.23, audio video media day before = 2.97, interactive media day before = 2.52

Figure 4. Judges' estimates of lucidity in recent dream as a function of group and condition.

Experiences in which a sense of direct contact, communion, or union with something that is considered to be ultimate reality, God, or the divine; and/or experiences in which one's sense of identity temporarily reaches beyond or extends past his or her ordinary personal identity to include an expanded perspective of humanity and/or the universe; and/or experiences where one appears to enter a sacred realm or condition that goes beyond the ordinary boundaries of space and linear time. (as cited in Krippner & Sulla, 2001, p. 68)

All of the meditation and prayer types of imagery, as defined in the prescreening, were counted as present or absent in the dreams. These were summed, and the resulting interaction from the ANCOVA was marginally statistically significant at  $p = .099$ . This finding was primarily due to the M/P type imagery. When a separate ANCOVA was computed on that sum alone, it improved the near statistically significant level ( $F(2, 224) = 2.6, p = .07, \eta_p^2 = .02$ ). This group by condition interaction is portrayed in Figure 5.

Given that the majority of participants prayed rather than meditated, it is not surprising that the interaction was accounted for by the M/P group on the high activity day. The next set of judges' content analysis on whether religious/spiritual dream content was present/absent counts on the five subscales of the HVDC scale. These were summed for the religious content as well as the spiritual content separately, but the ANCOVA was not significant.

Unlike the M/P and VGP groups the control group's absorbing activity was more complex as various activities could be selected. In order to determine what types of absorbing activities were entered into the online media and

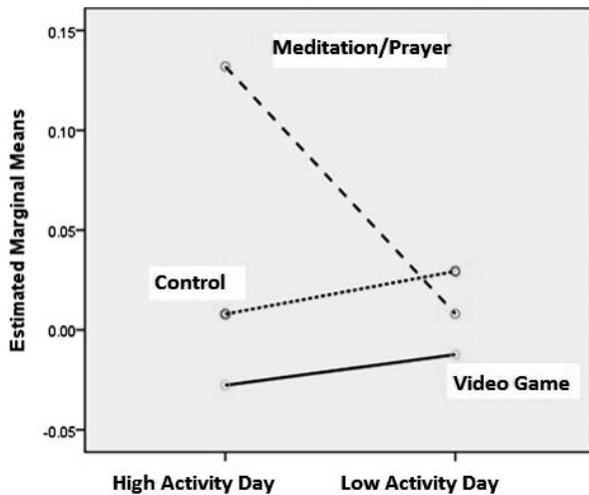
dream recording questionnaire, they were read and compiled by the primary researcher. Several groups of activities emerged: study/school, music, physical activities, relationships and watching media. Study/school was the overwhelming majority of dreamt themes. Each dream was coded for the presence or absence of each of these sorts of activities along the same five Hall and Van de Castle (1966) subscale categories used in coding the VGP and M/P activities. Therefore, a character playing music would be coded as present as an example of a music dream character. However, if the character was throwing a basketball around, it was coded as present object under physical activity type content<sup>7</sup>. All of the dreams were coded by the same two researchers, who attained 92% agreement coding the same 10 dreams.

The wide range of activities reported by the CON group participants necessitated separate ANCOVAs for each type of activity. The first ANCOVA was for the sum of school/study activities manifest in dreams using the HVDC coding as present or absent. There was a group main effect ( $F(2, 224)=3.6, p=.03, \eta_p^2=.03$ ) such that the VGP group had the least school/study imagery in their dreams (mean=.357, SE.184) relative to the other two groups. Both the M/P and CON groups, conversely, reported more school/study imagery than the VGP group but did not differ from one another (CON mean=.9, SE=.1; M/P mean=1.0, SE=.2). There was a marginally statistically significant group main effect for physical activities in the dream ( $F(2, 224)=2.4, p=.1, \eta_p^2=.02$ ). Surprisingly, the VGP group was found to have more dreamt physical activities (mean=1.7, SE=.2) relative to the other two groups (CON mean=1.1, SE=.2; M/P mean=1.0, SE=.2). While this may seem unusual when one thinks about the stereotypes of playing a video game, as secondary, and its transference into dreams, there is a lot of perceived physical activity in gaming (e.g., during virtual battles).

There were no main effects or interactions for the ANCOVA's for music or media dreamt activities. There was an interaction for relationship activities ( $F(2, 224)=2.8, p=.1, \eta_p^2=.02$ ), however, which can be seen in Figure 6.

Here the difference was accounted for by big group differences on the high activity day. More specifically, gamers dreamt about relationships the least while the control group dreamt about relationships the most.

*Judges' dream coding: Relevant to nightmares.* In addition to the consciousness in sleep and the content incorporation codings, judges coded two final types of dream content: threat simulation dream coding (Revonsuo & Valli, 2000) and central image dream coding (Hartmann, 2008). These were both assessed to examine the nightmarish or bad dream content, which has also been found in our previous work and was hypothesized to differ as a function of absorbing activity. Two judges were trained to rate the dream reports using the Dream Threat Rating Scale. Dream analysis was carried out in two phases: identification and isolation of the description of any threatening events. To ensure an adequate level of training, both judges rated dreams from Gackenbach and Kuruvilla (2008) until they reached 80% agreement with the threat simulation coding on a set of 10 dreams.



Covariates appearing in the model are evaluated at the following values: Sex (M=1; F=2) = 1.6638, words/dr = 291.62, audio media day before = 3.23, audio video media day before = 2.97, interactive media day before = 2.52

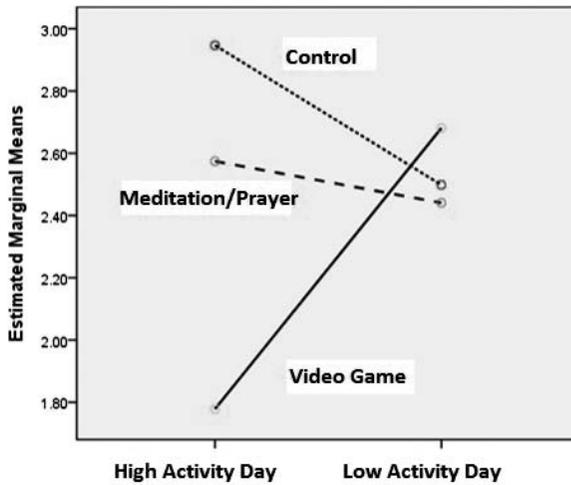
Figure 5. Sum of judges' estimates of prayer relevant imagery in dreams as a function of group and condition.

The same ANCOVA's as previously used were computed for the threat coding. Threat simulation type ranged from no threat through subjective threat to objective threat, resulting in a group main effect ( $F(2, 209)=5.3, p=.01, \eta_p^2=.048$ ) and interaction ( $F(2, 209)=5.4, p=.005, \eta_p^2=.04$ ). Figure 7 shows that both the group main effect and the interaction are accounted for by the higher threat among gamer's dreams on high activity days. This is the only threat simulation analysis where all dreams were included. The remaining results are only for those dreams that exhibited some threat. Interestingly, there were no effects on the ANCOVA for the nature of the threat in the dream, which varies in terms of coded aggression. Participation of the dream ego in the dream was also coded and resulted in a statistically significant group by condition interaction ( $F(2, 135)=4.0, p=.02, \eta_p^2=.06$ ), which is shown in Figure 7.

Gamers were more active in their dreams than participants from either the M/P or CON groups. There was a group main effect for resolution of the threat where high scores indicated positive resolutions ( $F(2, 135)=3.6, p=.03, \eta_p^2=.05$ ). Gamers were judged to have the most positive resolutions (mean=1.9, SE=.1) followed by the M/P group (mean=1.6, SE=.1) and finally, the CON group (mean=1.4, SE=.1).

The judges' last dream analysis was done using Hartmann's (2008) central imagery system. In a partial review of the central imagery in dreams research, Bulkeley and Hartmann (2011) explain the scale:

A scorer examines a dream report, decides whether there is a central image ("A striking arresting or compelling image which stands out by virtue of



Covariates appearing in the model are evaluated at the following values: Sex (M=1; F=2) = 1.6638, words/dr = 291.62, audio media day before = 3.23, audio video media day before = 2.97, interactive media day before = 2.52

Figure 6. Number of relationship activities present in dreams as a function of group and condition.

being especially powerful, vivid, bizarre or detailed”), then scores the image for “intensity” on a 7-point scale from 0 (*no image*) through 0.5, 1, 1.5, 2, 2.5, to 3 (*about as intense an image as you have seen in a dream*). When there is a CI [central image], the scorer is then asked to guess what emotion or what two emotions (from a list of 18) might be pictured by the CI. (p. 160)

One student was trained on this scale, and she reached an 80% agreement on 10 previously coded central imagery sample dreams from an earlier judge. ANCOVAs were computed on central imagery intensity and emotion sum scores. In both cases there was a statistically significant group by condition interaction (intensity  $F(2, 223)=5.4, p=.005, \eta_p^2=.05$ ; emotion sum  $F(2, 222)=5.8, p=.003, \eta_p^2=.05$ ), which is portrayed in Figure 8.

It can be seen that condition had no effect on judgments of imagery intensity for the M/P group but had a statistically significant effect on the CON and VGP groups. The VGP group was judged to have more intense central imagery after a day of high VGP while the CON group had very low intensity after a day of high activity in their absorbing activity. The opposite was true after a low activity day. With regards to the number of emotions associated with intense central imagery, the VGP and M/P groups were mimics of each other with lots of emotions on high activity days and few emotions on low activity days. The CON group showed the opposite pattern. Emotions were identified as both positive and negative, but ANCOVAs on valence resulted in no group or condition effects.

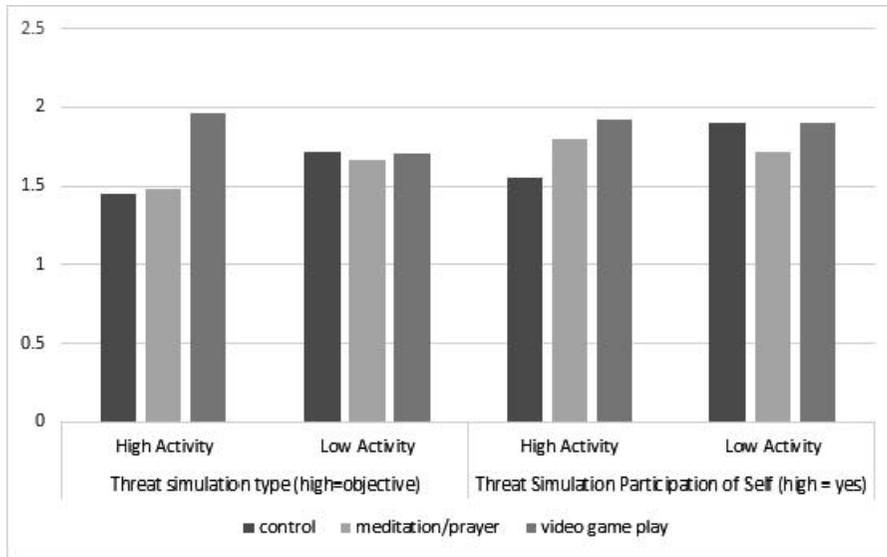


Figure 7. Degree of dream threat and participation of self in threat as a function of group and condition.

## DISCUSSION

In this inquiry we examined the thesis that the play of video games may result in some of the same effects as the practice of meditation due to the impact both practices have on attention. Meditation can be characterized as an attention training activity (Lutz et al., 2008), and it has become clear that VGP also trains attention in ways that generalize beyond the game play (Boot et al., 2008). A waking and a dreaming inquiry into any differences between these two activities were undertaken. The waking inquiry measured attention skills and beliefs, while the dreaming inquiry examined types of dreams thought to be associated with both practices due to their emphasis on attention. Three groups of participants were examined: those who meditated, or engaged in a meditative type of prayer, but did not play video games (M/P); those who played video games, but did not meditate or pray (VGP) and a control group who neither meditated/prayed nor played video games (CON).

### Waking Attention

Attentional skills were assessed with a change blindness task. Although there were no group differences in identifying where in the scene the change took place, the speed of recognition was statistically significantly faster for the VGP group than for the M/P and CON groups. This is consistent with the evidence supporting the theory that playing action video games benefits gamer's visual attention (Boot et al., 2008; Feng, Spence, & Pratt, 2007; Green & Bavalier, 2003; Green, Li, & Bavalier, 2009). Since video-game intervention has been known to enhance attention and perception, it is reasonable to assume that it can also improve resistance to change blindness (CB). CB describes the

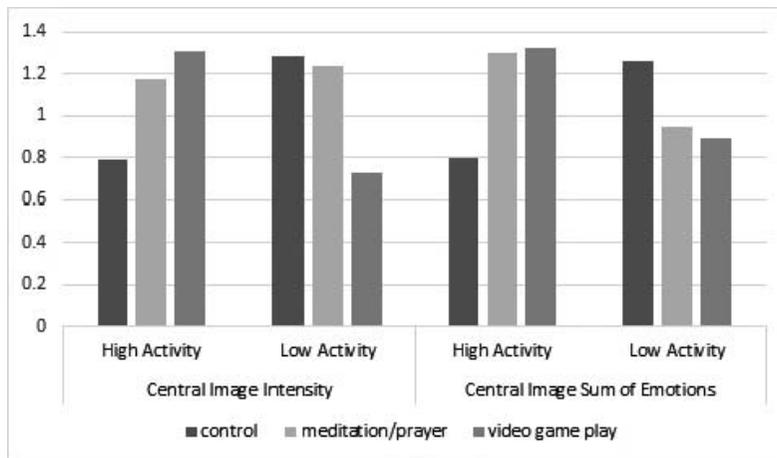


Figure 8. Central imagery judges' coding on intensity and total number of emotions coded for group by condition with covariates of words per dream, sex of subject and media use day before dream.

phenomenon in which humans are poor at detecting changes in a visual scene when distracters are competing for attention in the scene (Rensink, O'Regan & Clark, 1997). In their 2009 study, Durlach, Kring, and Bowens made an attempt to identify this connection but ultimately failed to do so. They were, however, able to replicate Green and Bavalier's (2003) results on some attention tests but were unable to replicate the evidence that VGPs were superior to non-players in the area of CB. It is worth noting that their players' mean reaction time overall was better than non-players', which is consistent with this inquiry. In a more recent inquiry on a related phenomenon, inattention blindness, Vallett, Lamb, and Annetta (2013) conclude,

Results of this study strongly indicate that there was a significant difference between those that played action video games and those that did not in their ability to detect new objects in the visual field. This suggests that those that spend time playing action games are less likely to succumb to the phenomena known as inattention blindness, and thus have a greater rate of attention capture with regards to visual stimuli. (p. 2185)

It is also somewhat surprising that the VGP group outperformed the other two groups when Hodgins and Adair (2010) found that meditators, when compared to non-meditators, were superior in change blindness. Two reasons for these conflicting findings may be considered. First, our meditation group was a mix of prayer and meditation practitioners. Second, Hodgins and Adair's (2010) non-meditators may or may not have played video games.

Another type of attentional measure administered in this study was Reavley and Pallant's (2009) "Effects of Meditation Scale." Their scale was adapted for use by the VGP and CON groups by including video game play (VGP group) or self-chosen absorbing activity (CON group) as the target practice. Unlike with the performance measure, on this self-report measure the M/P group scored

higher than the other two groups on nearly all of the effects' subscales. Several explanations might account for this difference. The first and most obvious explanation is that while the wording was changed to accommodate the other two groups absorbing activities, the items were conceptualized for meditation effects and thus may have seemed odd or inappropriate to a gamer or to someone who does not game or pray or meditate (e.g., CON group). An alternate explanation is that while gamers do appear to have superior attentional skills, they may not believe in the positive effects of gaming, given the widespread negative attitude about gaming. Although these negative attitudes are changing, they were still prevalent when this study was run in 2011. Finally, the third and simplest explanation is that the practice of meditation, or meditation-like prayer, does in fact result in various positive effects to a greater degree than the other two absorbing activities (i.e., control group activities were collapsed into one measure).

### **Dream Reports**

Following the laboratory session, research subjects were instructed to report two dreams, one after a day of high levels of participation in their absorbing activity and one after a day of low levels of participation. The rationale for this differentiation was that the level of participation in the absorbing activity would impact the subsequent night's dreams. Although the activities were self-defined and varied considerably in actual length, there was a significant difference in time spent participating across all groups, thus verifying the manipulation. Additionally, to control for any effects of media use the day prior to the reported dream, which varied across groups and conditions, this information was entered into all subsequent dream analyses as covariates. The VGP group was most affected by this condition. Two more covariates were also entered: self-reported dream recall ability and sex of subject. Sex of subject was used as a covariate because of the small cell sizes of some of the group by condition cells. We then examined self-reports of dream types and emotions and judges' rating of specific dream types. Needless to say self-evaluations do not necessarily line up with others' evaluations in human behaviors, including in the dream reporting literature (Mathes, Schredl, & Goritz, 2014), thus the importance of considering dream impact from both perspectives.

Before we discuss the dream types associated with each activity, it is important to consider if the activity specialization of each group showed incorporation into the dream as would be hypothesized by the continuity theory of dream content (Schredl, 2003). The simple answer is yes; we found evidence of incorporation of the activities. Gamers were more likely to rate their dreams as game like, and the coding by judges supported this with more gaming symbolism found in the dreams of gamers than the other two types of activities. This observation was also true with the M/P group. Using the definitions of prayer used to delineate the groups, the M/P group was judged to have more prayer or meditation after a high activity day than a low activity day.

Finally, the absorbing activity for the control group was individually defined. Five groups of dream activities were identified: school, physical activity, music, media use and social relationships. There were no group effects for either music or media use, although they were in part controlled for with the media use covariate. There were, however, group based differences in the prevalence of school activities in the dreams of the meditation and control groups and least in the gamers. The physical activity group main affect may seem confusing. That is, the VGP group was coded as having the highest levels of physical activity with the other two groups not differing. This affect is a consequence of high levels of perceived physical activity when playing a video game. Although the participants themselves are not physically running, the avatar they are controlling in the game is, and thus the continuity with the night's dreams. The continuity, in this case, is thus not with the actual physical events of the day before, but with the perception of physical events. This supports the importance of considering virtual worlds when exploring dreams. The final CON group activity coded by judges was social relationships. In contrast to the high physical activities of the gamers, there was minimal relationship activity in gamers' dreams on high activity days relative to low activity days. The opposite was true for the other two groups. Further, the M/P group showed the most stability in relationship issues across activity days. We can conclude that with some interesting exceptions, the continuity hypothesis is supported.

The central question in this inquiry, however, is the effect of these attentional practices on three dream indices: lucidity/control, bizarreness, and nightmares/bad dreams. Each of these has been identified in both the meditation and gaming literatures as affected by the practice of meditation and gaming, respectively, in apparently the same way. That is, more lucidity and control, more bizarreness and less nightmares/bad dreams (Gackenbach & Hunt, 2014). In this study we were uniquely able to directly compare the effects of meditation to the effects of gaming.

A useful conceptual model to examine the lucidity/control findings is Gackenbach's (1988) argument that lucidity emerges in one of three ways: due to bizarre content, frightening content and "just knew." It can be argued that the emergence of bizarre and frightening content is more intentional while the "just knew" type are more spontaneous. The difference between judges' and dreamers' ratings of the relative lucidity/control differed in this study and might be explained as examples of intentional versus spontaneous lucidity/control. In terms of self-reports of lucidity type dreams, the M/P group reported more across conditions. Consistent with this, the judges found that more prayer type dream imagery was noted in the M/P group's dreams after high activity days, while there was no difference between the VGP and CON groups as a function of their levels of activity. Finally, the MACE self-reports, in terms of details of the cognition in the dreams, found in the high activity days that the M/P group reported less internal dialogue in their dreams. This finding is consistent with decreased internal chatter, which is one aim of meditation.

The practice that gaming offers in virtual worlds may be argued to lead to more intentional types of lucidity/control in dreams. Accordingly, it was found that the judges coded the dreams of gamers as more lucid after high activity days relative to low activity days, with no difference in the CON group. The opposite was true in the M/P group. Although the subjects themselves may not have seen their dreams as lucid, the judges did. This was confirmed by the judges' coding of gamer dreams as more like the dream ego is in a dreamt game while in the dream. This interpretation is further supported by two findings. The first is the gamers' self-reports of more internal dialogue, which is associated with less thwarted intentions and fewer emotions than in the low absorbing activity days. The second is the self-reports of the VGP group of more control dreams. An argument against this intentional lucid dream interpretation, however, is the lack of group differences in the levels of self-reported dream bizarreness, subjects' perceptions of dreaming normality and mythic type of dreams. These sorts of dream oddities are often triggers for lucidity and have been found in gamers' dreams in the past (Gackenbach & Dopko, 2012).

The third dream type explored was nightmares and bad dreams. Past research has shown that nightmares/bad dreams occur less often or involve less threatening content among gamers (Gackenbach et al., 2011) and are conceptually less problematic among meditators (Hunt, 1989). In this inquiry nightmares were examined in terms of self-report dream types, negative emotions associated with the dream, and by the judges' evaluations of threat and central imagery in the dream. While there was no group difference in self-reported nightmares, bad dreams resulted in a group by condition interaction. This observation was due to the control a group's bad dream being the opposite of the VGP and M/P groups. The control group reported more bad dreams after a low activity day, while the opposite was true for the VGP and M/P groups. This result is puzzling and contrary to the study's predictions. The dream literature differentiates bad dreams from nightmares in a number of ways. Bad dreams are less upsetting as nightmares, do not wake up the dreamer (Zadra et al., 2006) and tend to be concerned with social tensions. Conversely, nightmares wake up the dreamer and most often involve chase scenes. Although gaming may not prepare respondents for dealing with social tensions in their bad dreams, meditation may have a different effect. Since most of the M/P group were in point of fact praying, it may be that their high activity days were at times of perceived difficulty and as such they were praying for guidance and thus the evidence in the dream.

The judges' coding of threatening dream content resulted in the VGP group's dreams having more threat on the high activity days. This finding is unsurprising given the violent content of most action games. The gamers also had higher levels of participation in their threatening dreams on high activity days, implying that they fought back as has been found previously (Boyes & Gackenbach, 2014). Relatedly, this interpretation is supported with the MACE finding of lower levels of thwarted intention for the VGP group on high activity days compared to low activity days. The opposite was true for the M/P and CON groups. Surprisingly, there were no group effects for emotions

experienced in the dream with regards to the types of emotions experienced in the dream reported in the checklist following the dream report. There was a group by condition interaction, however, for intensity of emotions using the MACE. Participants were less intense during dreams after high activity days. We are left with a picture of gamers thinking about what is happening in a bad dream and not being swept up with the emotions while also doing what was needed to feel better in the dream, as their intentions were not thwarted. This is an empowering picture in response to a bad dream. In contrast, although the meditators had less internal commentary, their dream actions were thwarted.

Finally, the central imagery analysis by judges resulted in two interesting group by condition interactions. First, the gamers had stronger central images after high activity then low activity days while the CON group experienced the opposite. The M/P group, conversely, evidenced no difference in the intensity of their central images as a function of activity level. The emotion ratings of these central images were the same for the VGP and CON group but not for the M/P group. Although no difference in the intensity of the central image was found, a difference in the sum of the emotions coded for the M/P was recorded. More emotions were coded as associated with the central image for the high activity day than for the low for the M/P group paralleling the finding for the gamers and opposite for the CON group.

#### LIMITATIONS AND CONCLUSIONS

There are two major limitations to this study: distribution of sex across groups and meditation/prayer group activity content. With regards to sex, there were too few males in the M/P group and too few females in the VGP group to use sex as an independent variable. Accordingly, sex was entered as a covariate. While not an ideal solution, work with gaming in the past has repeatedly found certain cells hard to fill. To check the accuracy of these results all analysis were rerun with sex not included as a covariate but the covariates of number of words per dream and the three media types continued to be used. There were no differences with and without sex, except minor differences on occasion of the p-value; i.e., self-reports of dream being lucid with sex as a covariate the  $p=.061$  and without sex as a covariate  $p=.057$ .

The second limitation is the use of meditative type prayer to primarily define the M/P group, which is not as strong as having individuals who are committed to practicing meditation. This limitation was a consequence of availability so future work should try to pair meditation practice with gaming practice as both can reach total hours that define expertise. In this inquiry the VGP group was most likely to have more time in their practice than the M/P group would have, over a lifetime.

A third, but less significant limitation, is the nature of the condition independent variable as self-defined as high or low activity days. While there is support for these self-definitions, ideally these would be more closely controlled in future studies. Only one performance measure was used to assess waking attention

while a multitude of measures is preferable. So too in the dream collection, ideally a two-week series of dreams should be collected from each individual instead of the two dreams collected herein.

In conclusion, Gackenbach (2008) hypothesized that VGP may offer some of the same effects on consciousness as the practice of meditation. This action was based on various attention findings with both practices and was tested in the current inquiry. That is, VGP and M/P were examined through the context of dream reports, change blindness tasks and subjective reports of the effects of each practice in waking life. Performance on the waking attention task was superior for gamers while self-reports of activity effects were highest for the M/P group. The results of the dream content evaluations were mixed. Heavy gamers reported experiencing higher levels of dream control in comparison to M/P practitioners. There was also a marginal difference found in dream lucidity favoring the M/P group and with gamers reporting more lucidity than the CON group. These findings imply that the absorbing qualities of VGP and M/P may share a similar role in their effects on consciousness but also have unique differences.

## NOTES

<sup>1</sup> They were also instructed to look at the timer the instant they noticed the change to minimize recording delays. Real Player was the media device used, and participants used the timer on this program to record their time.

<sup>2</sup> Each change blindness task sheet has a quadrant table with a number in each quadrant. The participants wrote down the number of the quadrant in which the change occurred, or if the change occurred in more than one quadrant then they wrote down the numbers of more than one quadrant.

<sup>3</sup> Few students at the study's university engaged in any type of meditation. Thus, the group was a combination of meditation and meditative type prayer practiced often. A t-test for the pre-screened sample compared frequency of meditation to frequency of prayer and was statistically significant ( $t(1351)=18.6, p<.0001$ ) with average meditation frequency being rarely or never and prayer frequency being several times per year.

<sup>4</sup> It should be noted that from the online survey where dreams were reported, 92 various absorbing activities were categorized into five main groups: school/reading (48), music (6), physical activity (8), relationships (12), watching media (9). The school/reading group was made up of studying (28), homework (8), and general reading (12). Music was mostly in regards to listening (4), but also playing instruments (2). The physical activity category included working out (3), dancing (1) running (1) and yoga (3). Relationships pertained to any significant relationship to the dreamer, which included friendship (6), family (4) and dating (2). The watching media group was consistent with watching television (8) and browsing the Internet (1). The remaining miscellaneous activities included driving, shopping, drawing and work.

<sup>5</sup> Words per dream is a rough estimate of dream recall.

<sup>6</sup> Another ANCOVA was computed for the self-regulation subscale but was not significant. Also the Cronbach's alpha for the three thinking items that constituted reflective awareness was only .16.

<sup>7</sup> While developing the codebook, it was initially intended that rather than coding for the presence or absence of certain themes or elements in a dream, each theme would be scored on a 5-point Likert scale. However this type of assessment was too refined to attain an acceptable inter-rater

agreement. Another method that was being considered was to individually count each instance of each a dream theme or element and tally them together in each subscale of every category. For example, let's say a participant reported a stoic dream of being in school with four friends and they decided to study, eat lunch in the cafeteria and work out in the gym in one dream. The coding method that would have been used would score 2 instances of school setting, 3 instances of school activities, 5 incidences of school related characters (the dream self and the other 4 characters) and 0 instances emotion related to school.

The problem that arose from this was there was a large amount of overlapping in the presence of themes between the subscale categories. This would end up making the dream look like it would have more thematic content than it actually did. For example, the dreamer and his/her friends working out in the gym at school would also fit in the physical activity category and the scoring would yield 1 instance of setting, 5 characters and 1 activity each under two completely different categories, namely physical activity and school. However, in both cases the same thing was being counted twice, which could lead to misinterpretation. Many dreams tended to have many overlapping themes in this way. Therefore, it was determined that it would be simpler to report either the presence or absence of these elements rather than keeping a count of each instance per theme. Thus the participant's dream of being in school would be coded as such: school settings are present, school activities are present, school characters are present and school-related emotions are absent.

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# ENERGY AND AWAKENING: A PSYCHO-SEXUAL INTERPRETATION OF KUNDALINI AWAKENING

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*ABSTRACT:* In the Hindu Yoga and Tantric traditions, Kundalini is seen as a “coiled energy” at the base of the spine. Its release (which can be sudden or gradual) results in sudden spiritual awakening, sometimes with disruptive psychological and physical effects. In this article, cases of “kundalini-like” experiences from my research are discussed, highlighting ways in which they seem to differ from kundalini as normally conceived. Here the experiences are interpreted in terms of an “energetic” theory of spiritual awakening. It is suggested that kundalini-like experiences are related to a sudden release of energy normally expressed as sexual energy, or libido. In other cases, spiritual awakening may be related to a dissolution of the normal self-system, or ego. The concept of kundalini arousal may have been developed as a way of describing the transformational experience of a sudden release of concentrated sexual energy.

*KEYWORDS:* Kundalini, spiritual awakening, ego-dissolution, awakening experiences, sexual energy.

In the chakra system of the Yoga and Tantra traditions, kundalini—derived from the Sanskrit word *kunda*, meaning to coil or spiral—lies dormant in the first and lowest of the seven chakras, the *muladhara*. According to these traditions, once kundalini is aroused, it travels up through the *sushumna* energy-channel, located roughly in parallel with the spine (hence the slightly inaccurate but common belief that kundalini travels “up the spine” itself). It travels all the way up to the seventh chakra, the *sahasrara*, in the crown of the head. Here it manifests itself as spiritual awakening. If the energy can be permanently settled or established at the seventh chakra, the individual will be in a permanent state of *nirvikalpa samadhi*, in union with Brahman, becoming a *Brahma-vidya*, with knowledge of Creator Brahman.

Many traditional sources describe the awakening and liberating effects of kundalini. The *Hatha Yoga Pradipaka*—one of the classic texts on hatha yoga, written during the 13th century CE—describes how, when kundalini rises through the *sushumna* towards the *sahasrara*, “all the lotuses and all the knots [that is, all of the chakras and all of the ‘energy-knots’ in the nadis] are pierced through.” At this point, “the mind then becomes free from all connections (with its objects of enjoyments) and death is then evaded” (*Hatha Yoga Pradipika*, 2015).

The *Yoga Kundalini Upanishad* describes how, with the rising of kundalini, the yogi “attains peace and becomes devoted to atma” (Aiyar, 2015/1914, p. 265). In the Tantric text, the *Paratrisika Vivarana*, the state is described in terms of

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“the universal emission—vibrating within the heart of the sushumna in the great bliss of union” (cited in Silburn, 1988, p.10).

Such sources also discuss processes by which kundalini can be “raised,” including *asanas*, *mudras* (gestures), breath (*prana*) control and forms of meditation. The *Yoga Kundalini Upanishad* (Aiyar, 2015/1914) states that two things are necessary to raise kundalini: the restraint of *prana* and the technique of *saraswati-chalana* (which involves sitting in the *padmasana* posture, manipulating the breath and holding the ribs, so that the *saraswati nadi* can be opened and kundalini can flow through). The *Khecarīvidyā*, a hatha yoga text, states that kundalini can be raised by the *kechhari mudra* (where the tongue is placed above the soft palate towards the nasal cavity) (Mallinson, 2007). Another hatha yoga text, the *Goraksasataka*, recommends hatha yoga postures such as the *mula bandha*, the *jalandhara bandha* and *kumbhaka* (Mallinson, 2011).

The practice of *brahmacarya* (usually translated as chastity or celibacy) is also seen as a process by which kundalini may be raised. In kundalini yoga, *brahmacarya* is characterised as *erotic celibacy* and also as an *inner marriage* (Sovatsky, 2014). In other words, it is not a technique of suppression of sexuality, based on a world-denying attitude of duality between the *body* and *spirit* (as tends to be the case with celibacy in Christian traditions); *brahmacarya* is an expressive and dynamic process of transformation, which can be compared to alchemy. This is clearly seen in the practice of *urdhva-retas*, the grand maturational process of all yoga (Sovatsky, 2014), by which the instinctive energies associated with the lower chakras move upwards and are transformed into the “higher” spiritual energy of *ojas*. Using an alchemical metaphor, Sovatsky (2014) refers to *urdhva-retas* in an experiential sense as “the distillation of the secretion-radiance of *ojas*...into ever more unconditional love” (p. 154).

Traditional Yogic and Tantric texts do not address the potential difficulties of kundalini in great detail, presumably because the phenomenon occurred in the context of spiritual or monastic traditions, under the close supervision of gurus. As a result, such difficulties may have been less likely to occur (Greyson, 1993). Nevertheless, traditional texts do hint at the potential volatility of kundalini. For example, in Jnaneshvari’s commentary on the *Bhagavad-Gita*, written in the 14th century CE, its volatility is described in terms of being akin to “a ring of lightning, folds of flaming fire” (Jnaneshvari, 1986. p.130). The Tantric Buddhist text the *Tantrasadbhava* describes how “dazzling sparks” appear as kundalini rises. It describes how the “fiery energy” of kundalini pierces each of the lower chakras, so that it is able to rise to the highest (cited in Silburn, 1988, p.42).

The *Vijnanabhairavatantra*—a key text of Kashmiri Shaivism—also speaks of *pisacavesa*, “demonic penetration,” which can occur when the energy moves back down through the chakras, resulting in depression and fatigue (in Silburn, 1988, p.69). The *Vijnanabhairavatantra* describes another problem that occurs if the yogin has not wholly transcended his sense of identification with the

body. In this case, the arousal of kundalini causes powerful, uncontrollable trembling. If this trembling intensifies, the sense of identification with the body becomes stronger. (According to Sovatsky [2014], this trembling occurs when the dorsal paths within the spinal and cranial nerves are activated, and related phenomena occur across cultures—for example, *qawaali* in Islam, *nigun* in Judaism, the Christian traditions of glossolalia and the “wailing” of shamanic traditions.)

Kundalini awakening has been a popular subject of investigation by transpersonal psychologists—e.g., Greyson (1993, 2000), Grof (2000), Sovatsky (1998, 2004, 2009, 2014), and Thalbourne and Fox (1999). In particular, the potentially negative or disruptive effects of the phenomenon have been studied in great detail. As Greyson (1993) noted these difficulties are much more likely to occur outside the original traditions, where there is a lack of proper guidance, and when the energy is awakened too suddenly and dramatically, without the individual being prepared. Some of these negative effects include disruptions to psychological functioning, resembling psychiatric disorders, and often resulting in misdiagnosis of mental illness (Greyson, 1993). Greenwell (1995) noted that unprepared kundalini awakening can cause physical collapse and psychological disturbance. She noted seven key factors of kundalini awakening, including pranic movements (e.g., involuntary jerking movements, such as spasms and vibrations), yogic phenomena (such as spontaneously performing yoga asanas or mudras), unusual physiological patterns (e.g., burning sensations, hypersensitivity, hyperactivity or lethargy), psychological and emotional upheaval, extrasensory experiences (e.g., hearing voices, visions of lights or symbols), psychic phenomena, and mystical states of consciousness (e.g., a sense of unity and deep serenity).

The nine point kundalini scale developed by Ring and Rosing (1990) – in order to investigate a possible link between kundalini and near-death experiences—concentrates mainly on the physical effects of the phenomenon, including feelings of energy in the hands, deep ecstatic sensations, awareness of energy discharges or currents flowing through the body, and sensations of tickling, itching or tingling on or underneath the skin. Greyson (1993) developed a more rigorous scale, consisting of 19 items, divided into four categories of symptoms: motor, somatosensory, audio-visual and mental. The audio-visual phenomena include internal noises, voices and lights, while the mental phenomena include “Observing oneself, including one’s thoughts, as if one were a bystander,” “Thoughts spontaneously speeding up, slowing down, or stopping altogether,” “Experiencing oneself as larger than the body” and spiritual aspects such as “Sudden, intense ecstasy, bliss, peace, love, devotion, joy, or cosmic unity” (1993, p.49).

#### KUNDALINI AS A FORM OF SPIRITUAL AWAKENING

How common are kundalini experiences? Can *all* cases of spiritual awakening be interpreted in terms of kundalini in some sense, or is the phenomenon simply one form of spiritual awakening amongst other types?

In my PhD thesis (Taylor, 2013), purposive sampling was used to find a group of individuals who reported having undergone permanent spiritual awakening. Following initial contact (which eliminated a number of potential participants who were deemed unsuitable) 25 participants were interviewed, in a phenomenological investigation into the causes and characteristics of reported cases of spiritual awakening.

Analysis of the sample found that five participants reported experiences with strong similarities to kundalini awakening. These five experiences all featured descriptions of a sudden upsurge of energy convulsing or exploding through them, together with many of the physiological, audiovisual and mental phenomena highlighted by Green (1995), Greyson (1993), Ring and Rosing (1990) and Thalbourne and Fox (1999). However, only one person specifically located the source of this energy at or close to the bottom of the spine, and rising through it. In the other four cases, the source and trajectory of the energy was non-specific, or general. For example, one person spoke of “a feeling of an energy rushing through my body,” (Taylor, 2013, p. 262) while another described “a tremendous amount of energy coursing through my body” (p. 282). A little more specifically, perhaps, another participant described how “the energy meridians in my body were energised” (p. 312). It is perhaps possible that these were “classic” kundalini experiences, but that the participants were simply unable to identify the specific source and trajectory of the energy. Alternatively, this may suggest that the upsurge or rush of energy associated with kundalini can arise from other sources rather than solely the muladhara chakra, as in the classic kundalini experience.

There were two other participants who had some signs of a kundalini-like experience, but not particularly strong or clear ones. One of these participants reported spiritual awakening at the time of her father’s death. At the very moment of his passing, she experienced a “huge golden bright light, circular” rising from her solar plexus: “It seemed to be suddenly there and it was spinning round and round. And that developed and grew brighter, and moved through my body and filled my body. There was a flood of joy right through me” (p. 221). This description has some similarities with the arousal of kundalini. However, the participant specifically referred to light, rather than energy and did not report disruptive after-effects normally associated with kundalini.

The second person described a sensation of “little sparklers going off inside my body and mind,” (p. 321) but again there was no specific description of energy and no reported negative or disruptive effects.

Of the other varieties of spiritual awakening reported by the participants in the study (Taylor, 2013), by far the most frequent was intense psychological turmoil pre-figuring a collapse of the self-system, enabling a new sense of identity to emerge. (A number of participants also reported a very gradual awakening, through many years of spiritual practice and life experience.)

Here I will briefly describe the five experiences reported in Taylor (2013) with strong similarities to kundalini awakening:

## Case 1

This experience occurred during a very stressful period of the participant's life, when he was forced to do a job which he disliked, and when his wife was undergoing tests for cancer. He "literally did not sleep at all for a week due to worry and stress" (p. 302). He described the transformational experience that ensued as follows:

Out of nowhere at 5 a.m. one morning I had what I now realise was a sudden uncontrolled Kundalini awakening... All through the initial experience I was sure I was having some sort of intense spiritual awakening experience but knew nothing about anything like that at the time and had no-one to ask. I initially thought that I was Jesus Christ and that everyone else was as well. At least some sort of Christ consciousness within every one. As I lay on a bare mattress in a locked room on a high security psychiatric ward, my spine and upper body convulsed as I experienced going back into previous lives to work out issues. This went on for about two days but there was no-one to tell about it as the doctors and nurses just look at you every five minutes to make sure you are not doing anything daft. I never spoke to anyone about this at the time, least of all the doctors, because I knew it just meant they would detain me longer in hospital. I had the experience that I could feel my spine from within my body. (p. 302)

Over the following year, the participant spent periods in a psychiatric hospital, on anti-psychotic drugs. He was told that "I had experienced a psychotic episode after first discussing possible schizophrenia" (p. 302).

He described the changes the experience had brought to him as follows:

I found I wasn't able to work full time anymore. I had to work part-time. I was a service manager at BMW car dealers and I just couldn't do it anymore, physically and mentally. I had a different perspective, a different outlook on life. I guess I was seeking, searching for answers...

Some people get this after a bereavement—you suddenly realize what's important in life and what's not—big cars and lots of money and all the material trappings isn't what life is all about. Now I have lost all material desires. I used to think my life would only be complete if I had a newer faster motorbike and drove my wife mad for years with impulsive purchases of dozens of different bikes. At the time of my original breakdown I was consumed with having the latest biggest car and gadgets. This has all dissolved into thin air. I am not at the stage of treating a pebble and a gold nugget the same, but I have no desires now...

I lost all interest in my hobbies and my charity work. I continued my stress free two days a week job as it fits my life very well.

Even my love of football has waned. It was a massive part of my life, but that desire to belong has pretty much gone. Everyone seems to need to belong to a particular group, but I don't need that anymore. (p. 305)

It took several years for the participant to feel that he had understood and integrated this shift—in fact, it was only in the last year that he had begun to feel fully stabilized, and to experience a degree of real contentment and fulfillment.

It took me a very long time, but I now look forward to nothing better than sitting and meditating in thoughtless awareness. It must seem very strange to an Ego oriented person, the idea of doing nothing. Some people cannot sit still and get bored very easily. I don't get bored anymore. I only work two days per week and all I do otherwise is read books go for walks and meditate.

In the past, I couldn't sit still for five minutes. I had to be doing something or going somewhere. The transition from that to being able to sit and do nothing is massive. (p. 305)

## Case 2

This transformational experience also occurred following a long period of stress (and depression, in this case) and a short period of sleeplessness (four days). The participant was in poor physical health, and after her husband expressed his concern for her well-being, they had a major argument, which ended with her husband exploding with rage and wrecking the house. And as she described it:

His explosion, and the release of his anger, freed something tremendous in me. It was at that moment that I had an experience of enlightenment.

This experience came with feelings of such perfect joy and peace. I remember thinking afterward “so that's what I'm supposed to feel like!” This experience was multidimensional. It was physical. I felt a tremendous amount of energy coursing through my body and with the energy came healing. My sinuses cleared instantly, and my lungs cleared out and started working perfectly again. I watched this instant healing with amazement. It was intellectual. The final puzzle piece dropped into place...

Spiritual knowledge was revealed to me, I “knew” it in an instant, and am still to this day learning in a linear conscious fashion what was revealed to me in that instant. I also felt like a ton of stuff went blowing by me and I didn't pick up on most of it - though I have spent 17 years actively studying and seeking to put this information together into a state that can be perceived with the human mind and heart.

This was the beginning of a remarkable time when a spiritual guide started to have conversations with me. I learned first hand that one has to go through hell before you get to heaven. I also understood about why mystics have talked about: “for all eternity.” In a mystical consciousness, within that one instant, you sense forever and ever, and are forever changed. I guess that was also what was meant by being born-again, to see with the eyes of a child.

I was in an altered state of consciousness, though I was still very much in control in normal consciousness. It was living a life of duality where I could see from either perspective at will, spiritual, or physical. It was an incredible time that I will never forget, and can still access. I felt like I had broken through a barrier, and I was talking back to people left on the other side, and I so wanted to grab them and pull them through with me! (p. 283)

There was an initial difficult phase, during which she found difficulty relating to other people, especially the people closest to her, and found it difficult to understand and integrate her new identity:

I was really blown apart and needed to do a lot of work and seeking to integrate and figure out how to live with this new person I was. I was very confused and often too honest...I find I don't compromise, so prefer fewer more authentic and congruent relationships. I think I simply needed to learn better social skills. It's up and down. I find I threaten some people, but relate better to others. Still a challenge. (p. 285)

### Case 3

This participant described many symptoms of kundalini awakening very graphically, including audiovisual phenomena, very rapid thought processes, perceptual distortions, psychic phenomena, an awareness of angelic presences, and finally, during the period following the experience, confusion and depression. Although she does not specifically refer to an upsurge of energy during the initial experience (she refers to "a lot of heat around my body and a very bright light"), it was followed by a frequent feeling of "energy rushing through my body with a loud screeching sound" (p. 262).

Her transformational experience appears to have been triggered by the death of her mother. As she describes it:

I was grieving. My mother had died. I was lying in bed in the morning; I smelt her perfume and started to get upset. Then I felt her presence and my body went into a type of paralysis or cramp where I couldn't move. There was a lot of heat around my body and a very bright light, but my eyes were closed. I couldn't open my eyes. I was feeling frightened but all the while I could feel a reassuring presence. I remember being very indignant about the whole thing. It felt like I was being reassured but I wasn't having any of it...

Then every time I napped or slept I had a similar experience. My night time experiences were filled with a feeling of an energy rushing through my body with a loud screeching sound, seeing things visions and faces, colours and maps of the solar system, scientific symbols, things I remember from maths at school, formulae. It was just random information at a very very high speed, like a slideshow, showing frames throughout human history. That was when I closed my eyes. In my waking hours I was seeing colours around people, feeling their feelings, reading their thoughts. The next day there would be a new enhanced

sense or ability. I would look in the mirror and my face would change, I would look at others and their faces would change. I would know who was about to call me or who was about to turn up at my doorstep. I started having physical empathy. I had a nap and found myself in a hospital where people were speaking a foreign language, and I was losing a lot of blood. I had very specific details about where I was. Then I found that my best friend had had a suspected miscarriage in a hospital in Paris. Occasionally there were more pleasant things like angelic presences, an energy form which brought my mother's presence to me and then took her back to wherever she was. (pp. 262–263)

As with the two previous participants, without a background in spirituality, she struggled to make sense of her experience. As she described it, “I was very sceptical of my own experiences. I held on to that inner observer at the same time as feeling a lot of fear” (p. 263). For several weeks following this initial experience, she was unable to work, or to function in everyday life. She was diagnosed with depression, and then with fibromyalgia, or somatisation of the central nervous system as a result of trauma. She describes the physical symptoms she experienced as follows:

My body was in pain. I was fatigued but couldn't sleep. I didn't sleep properly for about 8 months. I had memory problems, and problems with concentration and confusion, particularly in the early stages. I was on a short term memory cycle of about 30 seconds and everything was just sort of slipping through my mind. That occasionally happens now; it depends on how busy or over-stimulated I am. (p. 263)

Disenchanted with conventional medicine, she turned to alternative therapies, which she felt helped to integrate her new state of being. Overall it “took two to three years to feel stable and finally understand what was happening” (p. 263). Now that this integration had taken place, she described her normal state as featuring a constant psychic and spiritual awareness:

Once it stabilised, I realised I was left with abilities that could help other people. I started to get a sense of what the purpose of it was and what good it could do for others. With enhanced sensory awareness I can read what's going on with people at the unconscious level, and help make those things conscious and help transform them. There's an awareness of energy or vibration or consciousness, an ability to read that fundamental level of reality, what's going on beneath the surface...

There's also a more expanded awareness and a realisation of our context in the universe, an expanded understanding of the journey of the soul and the continuity of consciousness, an understanding that physical life is just one dimension of reality.

I walk between two worlds a lot of the time. I'm learning to enjoy physical reality and family life, and just the simple things in life. That's become heightened - an appreciation of everyday life. I always had a sense of beauty, but it's become more heightened now. There's certainly a connection with

nature and because of the openings and awareness of energy and vibration and I can certainly delight in nature and feel its forces and its cycles. When that first happened, I thought I was losing the plot, when I thought I could almost feel a tree speaking to me, but now I realise I was just picking up on the energy...

What was interesting was that I moved back down to Devon (my home town) and was fully expecting to walk into the room and for family and friends not to recognise me. I felt so different, like a completely different person to be honest. All my internal frames of reference have changed. I no longer experience life as a random sequence of disconnected, separate events of which I am merely a passenger or victim. I experience life as an interconnected co-creative partnership with some kind of intelligent force or ever-present sentience. I live as a timeless soul enjoying my physical experience. That is my daily reality. (p. 267)

#### **Case 4**

This participant's transformational experience began after he had travelled to India to learn Ashtanga Yoga. He had suffered from psychiatric problems for a period earlier in his life, and shortly after his return from India, he experienced his "first manic episode for 10 years" (p. 311). He had "several experiences where my consciousness seemed to rise suddenly, the energy meridians in my body were energised, and my mind became sharper and clearer" (p. 312). Although he was sure he was having some form of spiritual experience, he was admitted to a psychiatric ward, where the staff were sceptical and hostile. However, he "persuaded them to discharge me while I was still unwell" (p. 312).

On the same day that he was discharged, he felt he experienced a "breakthrough":

I felt a shift in my consciousness, something I hadn't felt before. My mind was becoming quieter, and at the same time the world was becoming sharper, more real, and the experience was lasting. I went for a swim while my friend taught a class at the gym, and for the first time in my life I experienced myself as consciousness.

I went home that night still feeling very clear, and my mind was still quiet.... (p. 312)

This was followed a few weeks later by a second shift, which occurred during a camping trip with his brother, while having a shower:

I was in that vibrant dimension of clarity, laughing my head off, absolutely elated. I realised a profound truth, what it meant just to be alive and to be able to have a shower, and have a bed to sleep in, and food to eat. I met my brother in Edinburgh that night and I was amazed at the quality of the

colour of the sky, it had never looked like that before, and the warmth on my skin, it was like the world had been made anew...

After the episode of illness, I felt like a new person. The things that used to bother me didn't any more. I threw out every possession I had that reminded me of the past. I fictionalised my experience to explain it to myself and others, and believed that on that day when I had the peak experience in the shower I'd actually died, my life energy had left my body and taken all my old issues and neuroses with it, and had new energy had entered my body. I'd re-incarnated in the same body in the same lifetime, changed.

I doubt if that's the truth, I just couldn't rationally explain why I emerged from a manic episode with better mental health than I've ever had before. I spend a lot of time in the present now, more than I ever did, and I can quiet my mind easily when I want to. My family have often remarked on my positive changes, and my psychiatrist told me recently that I'm one of the most psychologically healthy people she's ever met. I've not been able to tell her that when I recovered from the last episode of mania most of my fears and anxiety were gone...

Life is simple. And life is precious. All forms of life are sacred. Life is a miracle, and it is to be enjoyed. Every moment is different; every moment is alive with possibilities. If I was to lose everything tomorrow, I'd be okay. The greatest way I can use my life is to contribute toward the well-being of all forms of life... I'm fine the way I am. I spend most of my time in the moment, and in many ways encourage others to do the same. There's nothing lacking from my present situation. I don't feel uneasy when I'm lacking direction or stuck. All of the difficult things in my life happened to get me to where I am today – and I'm very happy with who I am and where I am – so I no longer label experiences as good or bad. (pp. 314-315)

## Case 5

This transformational experience is less overtly kundalini-like than the previous four, in that the participant does not specifically refer to a feeling of rising energy. However, she does describe experiencing a sudden “rush of love, like I was burning up. My whole body was being flooded with light” (p. 241). I felt that this could refer to a kundalini awakening, especially since many of the other characteristics of the experience were similar to the phenomenon:

I'd been depressed for quite a few years before then, although it was nothing definite. There was just a lot of stress leading up to it. I'd been in a very close relationship with a friend, and it had got to the point where it was suffocating and breaking down. I was also drinking quite a lot and taking drugs, living in quite a self-destructive way.

It happened very suddenly, one night. I'd taken ecstasy but only a small amount. I ended up having a proper conversation with my friend. She was

great – it was a very deep honest conversation. Suddenly I felt a rush of love, like I was burning up. My whole body was being flooded with light. It was a realising that everything in my life had led up to this point. It got scary when I went to bed. I closed my eyes and I was going to down a portal. I could see blue electricity around me. I felt like I was dying.

After that my whole senses opened up, and I found everything overwhelming. I was completely blown open too fast. I had no filter. I was so open and so delicate. Whenever I went out it was very chaotic. I was having psychic episodes but I didn't understand them. I could sense other people's thoughts.

I thought I was going bonkers [insane], but I was aware that I was going bonkers, and I had a sense that I needed to work through it, that it would play itself out. It lasted for about two years, before it started to stabilise. I was working in a bookshop at the time but had to stop because I was ill. I was diagnosed with ME. I was too ill to go out.

The past seven years has been about integrating the old and the new. Over the last three or four years I've reached a more stable state. I've worked through the chaos and I don't feel vulnerable anymore. I feel a lot more peaceful and stable now.

I feel a completely different person. I used to be very cynical and intolerant and judgmental. I was also anxious and neurotic and insecure. I'm a lot more intuitive and in touch with myself, a lot more aware of my own energies. People are so surprised at how sorted I seem. People who knew me in the past can't believe that I'm the same person, they're amazed at how calm and centred I am. Now I'm really happy being me. I used to feel a general anxiety all the time.

I still have psychic experiences sometimes, like pre-cognitive dreams. Sometimes I just know things without knowing why I know them. And sometimes synchronistic things happen. (pp. 241–242)

#### SUMMARY OF CASE STUDIES

In relation to kundalini experiences, then, Taylor (2013) elicited the following findings:

- Five participants had kundalini-like experiences, with many of the classic characteristics of the phenomenon; although in four cases they did not specifically locate the “rush of energy” they experienced near the base of the spine, or describe it rising up through the spinal area. This observation suggests either that these four participants were simply unaware of the exact source or trajectory of the energy (perhaps it *was* the bottom of the spine), or that the upsurge of energy associated with kundalini may sometimes occur in a different form, from a source other than the *muladhara-chakra*, or through the channel of *sushumna*.

- Kundalini-like experiences were more likely to occur in people who were not engaged in spiritual practice, and did not have a prior interest in spirituality.
- The kundalini-like experiences confirm the resemblance between kundalini-like experiences and psychiatric problems. Four of the five participants were diagnosed (mis-diagnosed?) with and treated for psychiatric problems, although they were all convinced that they were undergoing some form of spiritual experience.
- The participants found that the state stabilized after a period. The disruptive elements they experienced - including the psychological disturbances and physical difficulties - eventually became less intense, or faded away altogether. This process, however, was very gradual, extending over several years. This process of integration and stabilisation was no doubt partly due to increased understanding of their experience, creating a conceptual framework within which they could make sense of it. But it also seems to suggest that kundalini arousal has a natural dynamic of de-intensifying and settling over time.
- Other modes of spiritual awakening were experienced besides kundalini-like experiences. The most common type of transformation described by the participants was a sudden awakening following a long period of psychological turmoil, apparently caused by a dissolution of their normal self-system. Although these experiences occasionally have an energetic dimension to them, they usually do not feature the same overt sense of explosive, flowing or flooding energy as kundalini-like experiences. Most of these participants also experienced some negative or disruptive effects, although these tended not to be as intense as kundalini-like experiences. Those who did not experience problems, undergoing a fairly smooth integration into their new state of being, were in almost all cases those with a previous interest in spirituality, who were engaged in spiritual practice at the time of their transformation. A smaller number of participants in Taylor (2013) experienced a very gradual awakening, with no disruptive effects, following long periods of spiritual practice and personal development.

#### INTERPRETING KUNDALINI EXPERIENCES

In previous papers (Taylor 2005, 2009, 2012b), I have attempted to explain some temporary awakening experiences - or higher states of consciousness - in terms of energy. I have suggested that there are two basic types of awakening experiences. These roughly correspond to the distinction made by Fischer (1971) between *ergotropic* higher states of consciousness - that is, “high arousal,” active or ecstatic experiences - and *trophotropic* higher states - that is, “low arousal,” more serene experiences.

First, there are temporary awakening experiences caused by *homeostasis-disruption* – that is, when our physiology and brain chemistry is powerfully disrupted by external influences e.g., fasting, sleep deprivation, self-inflicted pain, hyperventilation, psychedelic drugs, etc. Awakening experiences do not

always result from these states, of course - usually homeostasis-disruption has to occur in a religious or spiritual context, and with conscious intent (Taylor, 2005, 2010, 2012b). In Fischer's distinction, these experiences are more likely to be ergotropic or high arousal higher states.

Second, there are temporary awakening experiences of an energetic nature. These are often related to what has been termed a state of *intensified and stilled life-energy* (ISLE state) (Taylor, 2010, 2012b). These usually occur in the context of peaceful, relaxing activities such as meditation, contact with nature, yoga, running or swimming, listening to or playing music. These activities and environments may have the effect of reducing the mental or psychic energy the individual expends through mental functions such as concentration, cognition or perception. Mental energy which was previously monopolised by these functions is retained. At the same time, psychic or mental energy often becomes stilled, in the sense that there are fewer thoughts, perceptions and items of information passing through consciousness. This process may result in an awakening experience of a trophotropic low arousal type. In a study of 161 awakening experiences (Taylor, 2012b), awakening experiences related to ISLE states were found to be significantly more common than those related to HD states. Around 80% were related to ISLE states, with 10% related to HD (homeostasis-disruption) states, while the others had no clear origin.

The existence of "life-energy" is, of course, controversial. Materialistic science clearly does not accept the concept of a non-physical energy within the human organism. This is not the place for an extended discussion of this concept, or an attempt to justify it (see Taylor, 2010, 2012b for this). It is important to note, however, that this concept has been central to many cultures throughout history - in fact, the modern paradigm of materialistic science is possibly the first belief system in history to question its existence. As well as being central to traditional Hinduism, the concept was a central part of Chinese Daoist philosophy. Belief in a life-force was also common to the ancient Egyptians (*ka*), the ancient Greeks (*pneuma*), and to indigenous tribal peoples all over the world. To take a few examples, the Maoris of New Zealand used the term *tapu*, the Algonquian Indians called it *orenda*, while the Ainu of Japan called it *ramat* (which also refers to an all-pervading universal spirit-force) (Levy-Bruhl, 1965; Monro, 1962).

Early psychologists such as William James (1917), Freud (1923/1962) and Jung (1988) assumed the existence of a non-material psychic energy, and even an avowedly materialist contemporary psychologist such as Csikszentmihalyi (1992) speaks of *psychic energy* and *attentional energy*, tacitly assuming the existence of a non-material energy. In the transpersonal field, Michael Washburn (1998) suggests that the essence of our being is a life-energy which expresses itself in three different ways: as psychic energy, as libido (or sexual energy), and as spiritual power. He notes that psychic energy is used continually, fueling our ongoing conscious experience, while libido and spiritual power are both potential energies, which are usually latent but become activated by certain stimuli.

In a sense, the phenomenon of kundalini awakening can be seen as evidence for the existence of life-energy too, and is certainly only explicable in terms of the concept. Kundalini awakening is a high arousal energetic awakening experience. It can be seen as an especially extreme example of the connection between life-energy and awakening experiences.

In Taylor (2010, 2012b) it is suggested that there is a correlation between the intensity of ISLE states, and the intensity of awakening experiences: the greater the intensification of energy, the more intense the awakening experience, and this principle applies to kundalini arousal too. Since it releases a great of energy very suddenly, the awakening experiences it generates are usually of a high intensity. In fact, whereas ISLE states are normally associated with temporary awakening experiences, because of its intensity, and its dramatic disruptive effects, kundalini arousal generally brings a *permanent* shift in identity and consciousness.

The explosive high arousal nature of kundalini awakening suggests a similarity with awakening experiences related to homeostasis disruption. However, it is important to note that, with HD states, awakening experiences are *caused by* powerful physiological changes, while in kundalini awakening, physiological disruption is an *effect* of the explosion of energy.

#### KUNDALINI AND SEXUAL AWAKENING EXPERIENCES

Sexual awakening experiences can also be of a high-arousal explosive nature. In fact, there are significant similarities between kundalini experiences and sexual awakening experiences, which are important to consider in relation to the question of what kundalini energy actually *is*, and where it originates.

These similarities were highlighted by a kundalini experience which was reported to the researcher as a part of a different study (Taylor, 2010), when the aim was to collect examples of awakening experiences to study their different causes or triggers. This experience occurred after a long period of meditation. During one meditation session, the participant felt what she describes as a “forceful, pushing sensation near the base of my spine.” And as she continued breathing:

This sensation continued to rise in my spine, getting and higher with each in-breath. It was a magnificent but intensely intimate and sexual experience. It was at that point where the sensation was arriving at my neck that I panicked. I knew that if I did not resume control, this force would pass through my head and out through the crown and as a result I would scream and be forced to run around the room like some crazy person...[For weeks afterwards] my face shone with a new happiness and many people commented on the “new image” – lively, awake and laughing. I had boundless energy and required little or no sleep. I was surrounded by people wanting to talk to me. (Taylor, 2010, pp. 145–146)

Some sexual awakening experiences are sedate and serene experiences, due to a quietening and stilling of energy. The sheer pleasure of sex creates a state of intense absorption. Attention is taken away from associational mental chatter, which quickly begins to subside. Sexual pleasure may overwhelm the individual to such an extent that their attention is effectively closed to everything beyond the desire and pleasure they feel. In this sense, sex can have a meditative effect. Here is an example of this type of sexual awakening experience which was given to me, in which a woman describes how she typically feels after having orgasms:

I feel as if I haven't got any weight. There's a warm feeling running all through my body...Nothing else seems to matter, problems cease to exist, as if the feeling takes you over so much that there's no room for anything else. I feel capable of doing anything...

I also look at things more clearly, look beyond what I usually look at. The colours seem more distinct; if you look at, say, a tree, you see it for what it really is, not just as a tree. You see it as nature, not just as an object. (Taylor, 2010, p.142)

However, some sexual awakening experiences can be more explosive high arousal experiences, more similar to kundalini experiences, in that they seem to involve the sudden release of previously dormant energies. Wade collected many examples of altered and higher states of consciousness occurring during sex, finding that "sex can take people to the same realms as trance, meditation, drugs" (Wade, 2000, p.120). Many of the experiences she collected had similarities to kundalini experiences. As Wade described it, "Some people report strange energies coursing through the body. Sometimes it starts with a sense that the sexual charge normally rooted in the genitals is spreading throughout the entire body, lighting it up with crackling power and fireworks" (Wade, 2004, p. 27). One person described it as "electric, really light-oriented, very much upwardly oriented" (p. 29); another spoke of "energy, patterns, and electric colors...burning energy" (p. 30), while another person described an "electrical feeling that moves up my body and just goes out my eyes. When it's intense, it's almost blinding" (p. 29).

Here is a similar (previously unpublished) sexual awakening experience (sent to me after I published a blog article on transcendent sexual experiences [Taylor, 2012c), which also has similarities to kundalini arousal:

I was making love and suddenly the pleasure was all throughout my body, then I was nothing but the pleasure. I was no longer in my body in a physical sense, I was energy. My partner's energy and mine merged together, and I saw that energy while simultaneously being that energy. Then I began seeing a pattern, maybe an energy pattern, maybe a light pattern, but nonetheless it was something I had never seen or heard of before in reality so I have nothing to compare it to. Then, I passed through "something," into another universe, dimension, realm or whatever, and became the pattern that I was seeing. I was no longer in the room, I wasn't

anywhere; I was in an all-encompassing void, only existing as the energy or light pattern. Instinctively I knew, not believed, that this was where I was before my first memories and first became conscious in human form.

Greenwell (1995) also comments on the strong connection between kundalini and sex, noting that kundalini awakening can be triggered by a powerful sexual encounter and also that, in the aftermath of kundalini awakening, the individual may experience spontaneous orgasm, and veer from extremely heightened to unusually quiescent sexual desire.

These transcendent sexual experiences—and more generally, the Tantric view of sexuality as a sacred spiritual aspect of human life with great transformational potential—correspond to Foucault’s concept of *ars erotica* (literally, erotic arts). Foucault suggested that *ars erotica* is a typically Eastern (or ancient) attitude, treating sex as a source of profound pleasure and utilising erotic techniques to access and heighten these pleasures. He distinguished *ars erotica* from the more common physical and emotionally motivated sexuality (Foucault, 1990).

#### BRAHMACARYA

The connection between kundalini and sex—and in a more general way, between sexual energy and spiritual awakening or development—is also evidenced less directly by the Indian Yogic practice of *brahmacharya*. This can be conceived as a lifestyle of *inner marriage*, even whilst the adept is conventionally married or single (Sovatsky, 2014). It can also be seen as an example of Foucault’s *ars erotica*.

For many spiritual traditions—particularly monastic orders—celibacy has been an essential practice, a prerequisite of spiritual development. This tradition of celibacy may initially appear puzzling in terms of a connection between sexuality and spirituality. If sexual energy is spiritual in nature, then why has sexual energy been *denied* expression?

In dualistic anti-physicalist traditions—such as monastic Christianity—celibacy can be seen as a heavy-handed attempt to suppress sexual energy, the result of seeing the “flesh” as being opposed to the “spirit.” Sexuality is part of the “lower” animalistic nature, which it is necessary for us to overcome. However, in Yogic and Tantric traditions, *brahmacharya* or celibacy does not involve a suppression of sexual energy, but a *transmutation* (or perhaps also a *maturation*, in Sovtatsky’s [2014] terminology). In Foucault’s (1990) terms, *Brahmacharya* is a lifestyle of *ars erotica*. There is a recognition of the *potentially* spiritual nature of sexual energy, and an aim of controlling, re-directing and transforming it. As Swami Prabhavananda and Isherwood put it, “Sexual activity, and the thoughts and fantasies of sex, use up a great portion of our vital force. When that force is conserved through abstinence, it becomes sublimated as spiritual energy” (1969, p. 72). In the words of the early English scholar of yoga Ernest Wood, celibacy “leads to a sublimation of the bodily energy,

which would otherwise have been expended wastefully, into the functions and powers of the higher mind” (1959, p.41). Or as Patanjali (in Prabhavananda & Isherwood, 1969) states in *the Yoga Sutras*, the yogin who practices *brahmacarya* gains *virya* (or vigor). As described earlier, the practice of *urdhva-retas* specifically aims to raise the energies associated with the lower chakras, transforming them into more subtle spiritual energy. There is a very similar idea in Daoism, where spiritual development (or *cultivation*, as it is more usually referred to) is also seen as an inner alchemy. In Daoism, the essential energy of our being is called *jing*, and associated with sexual energy, or libido. The aim of Daoist cultivation practices is to transmute *jing* into *qi* (usually translated as life-energy) and then from *qi* into *shen* (usually translated as spirit). So, just as in the Yogic model, instinctive energy is transmuted into a higher, more subtle and spiritual form.

*Brahmacarya* is one aspect of the broader tradition of *tapas* (literally “heat,” often translated as asceticism), the general purpose of which is to conserve and transmute energy. Frustrating the body’s desires and instincts fills us with spiritual radiance and vitality, and generates the numinous energy of *ojas* which pervades the whole of the body and mind (Feuerstein, 1990). *Tapas* is mentioned in the *Rig-Veda*, which describes how the practice generates “an inner heat” that leads to states of ecstasy, visions of gods and psychic powers. In his eight-limbed path, Patanjali included *tapas* as an essential observance and recommended such practices as prolonged standing, fasting, bearing cold and heat, and prolonged silence (in Prabhavananda & Isherwood, 1969). The inner heat may also be spontaneously generated during puberty, pregnancy and menopause (Sovatsky, 2014).

It is interesting that, in the influx of Indian spiritual ideas into the West in recent decades, *brahmacarya* has been largely ignored – including as a method of raising kundalini, or a lifestyle of *ars erotica*—presumably because it fits less well with permissive and hedonistic Western cultural tendencies.

### KUNDALINI AND SEXUAL ENERGY

The connection between kundalini awakening and sexual awakening experiences may provide a basis for understanding the origins of the energy associated with the phenomenon.

In order to understand this matter fully, it is necessary to briefly consider how the life-energy of human beings is affected by our psycho-physical development, from childhood to adulthood. Young children possess an abundance of free-flowing energy. (In Yogic terminology, this can be described as *pranotthana*, a state of uplifted or intensified life-energy [Sovatsky, 2014]). Washburn describes this very vividly, writing that children are “bathed in the water of life. Ripples and waves of delicious energy move through the infant’s body, filling it with delight. When its needs are satisfied and it is otherwise content, [it] experiences a sea of dynamic plenitude, blissful fullness” (Washburn, 1980/1995, p.82).

It is because of this abundance of rich energy flowing through their being that, as was argued in Taylor (2009), young children naturally experience certain perceptual and affective features normally associated with awakening experiences, or an ongoing “wakeful” state. These include a more intense perception of the phenomenal world, a sense of the aliveness of phenomena which normally appear inanimate, a sense of meaning or of an atmosphere of harmony, and a sense of inner well-being, bliss or joy. (In Tantra, the powerful fertility of the puberty phase is seen as a *siddhi* - the power to create life - leading to *grihasta* [the stage of life devoted to marriage and family], which can serve as a path to enlightenment through devotion, compassion and familial love [Sovatsky, 2014]). This is not to suggest that children are “enlightened” or “awakened” in the same sense that spiritually developed adults may be. There are aspects of adult “wakefulness” which children do not appear to have access to, such as an all-embracing sense of love and compassion and the capacity for introvertive withdrawal from the external world into a state of pure consciousness (Taylor, 2009).

Here it is important to note the three ways in which, according to Washburn (1998), our life-energy expresses itself: psychic energy, as libido (or sexual energy), and as spiritual power. Young children have such powerful free-flowing energy—or in Washburn’s terminology, such intense spiritual power—because little of their energy is expressed through the psyche, or through the libido. Energy is not concentrated into these areas, and so, in Washburn’s terms, they possess a large degree of “spiritual power.” (There is a clear parallel here with the Daoist concepts of *jing*, *qi* and *shen*.)

The adult ego confers massive benefits—abstract and logical thought, conceptual knowledge, self-reflection, impulse control, exercise of the will, the ability to organise, to make decisions, to plan, to manipulate our surroundings, etc. (Jung, 1928/1988; Loewinger, 1976; Washburn, 1980/1995; Wilber, 1996). At the same as being a giant “leap,” however, the development of the ego entails a “fall,” mainly because of the massive amount of life-energy (as psychic energy) that the ego requires for its functioning, and to maintain its structure. In particular, the cognitive activity of the ego—both conscious rational or logical cognitive activity and involuntary thought-chatter—consumes a great deal of energy. As a result, less energy is available for direct, immediate perception, which entails a loss of the intense perceptual awareness of childhood. In Deikman’s (1963) phrase, perception becomes *automatized*. According to him, mystical experience involves a *de-automatization of perception*, which can be cultivated through meditation.

A similar process occurs with sexual energy. As we enter adolescence and sexual impulses and desires (and the *siddhi* of fertility, potentially leading to parenthood) begin to develop—at roughly the same time as the self-system becomes strongly developed—life-energy becomes concentrated and expressed as sexual energy (libido). Thus, life-energy is diverted to two new sources (the ego and sexuality), both of which reduce the amount of energy available to be expressed through direct perception.

It was mentioned earlier that temporary awakening experiences of an energetic nature can occur when energy normally monopolised by the ego is conserved or released. This is the origin of ISLE (intensified and stilled life-energy) states, induced by—for example—meditation, contact with nature, relaxation, listening to music and so forth. However, the explosive sexual awakening experiences examined earlier suggest that temporary awakening experiences can arise from a different energy source too: when the life-energy normally monopolised by sexual impulses and desires is released. These experiences tend to be explosive simply because that is the *nature* of sexual or libidinal energy. As Washburn (2003) notes, whereas psychic energy is used continually, sexual energy is often dormant or potential, awaiting a stimulus to be aroused. It is very powerful and concentrated, which is why—as Freud (e.g., 1991) pointed out—its repression can have such harmful consequences.

I suggest that the phenomenon of kundalini awakening also involves a sudden, dramatic release of this libidinal energy. The energy does not express itself directly as libido (or *jing*, in the Daoist sense), but flows through—or explodes through—our whole being. However, the energy does not necessarily become completely free of its sexual association. As the experience reported to me above shows, there may still be a sexual aspect to kundalini, or at least it may feel reminiscent of sexual arousal. While, as noted above, intense sexual experiences may also enable the release of this energy.

It may be that, while sexual desire or activity usually arouses this libidinal energy to some degree, it is only rare that the energy is aroused in its most concentrated and intense form. This process occurs in kundalini awakening, and occasionally in sexual encounters—when the experience no longer becomes specifically sexual, but more generally spiritual or mystical (Wade, 2000, 2004).

The sudden release of sexual energy may therefore be the basis of kundalini-like awakening experiences. It may be that the concept of kundalini arousal, as developed by ancient Yogic and Tantric teachers and philosophers, was developed as a way of describing and explaining this phenomenon. Perhaps this suggestion is substantiated by the fact that some of the participants in Taylor (2013) described energy flowing through them, but did not specifically locate it as arising from the bottom of the spine or flowing up through it.

## TWO MAJOR MODES OF SPIRITUAL AWAKENING

It is not coincidental that the two major modes of sudden spiritual awakening described by the participants in Taylor (2013) are related—in psychodynamic terms—to the ego and the libido. They both involve the two centres of concentrated life-energy formed in psycho-physical development, during later childhood and adolescence. In Taylor (2013), ego-related transformational experiences were more common: a sudden dismantling of the self-system in response to intense psychological pressure or turmoil. This turmoil took various forms, including bereavement, illness and depression, leading to a sense of identity loss. (See Taylor, 2012a for a more detailed description of this

process.) Libido-related experiences—which may be interpreted as experiences of kundalini arousal—are the second major mode. Interestingly, ego-related spiritual awakening appears to less likely to feature descriptions of rushing or flowing energy suddenly being released or exploding. The reasons for this observation are not clear, but perhaps it is related to how life-energy is used by these two different “centers” (that is, the ego and libido). In the case of the libido, the energy remains in a fluid, dynamic state, close to its original form, whereas in the case of the ego or self-system, the ego is used to maintain the structure of the ego, and to fuel its cognitive functioning, so that the energy becomes less dynamic and more “processed,” moving away from its original form.

### SPIRITUAL OPENING?

It is because concentrated libidinal energy arises so suddenly and powerfully that it has such disruptive effects. Sudden awakening related to ego-dissolution can also be disruptive, but usually not to the same extent. (For example, it is less likely to feature physical problems, and its psychological disturbances tend to be less intense.) In fact, kundalini-like experiences are a useful corrective to the naive view that spiritual awakening is a wholly *positive* phenomenon. Spiritual awakening—or the state of being “enlightened”—is often conceived as a state of blissful serenity in which all problems disappear, and in which the awakened person always behaves with ethical perfection. The “enlightened” person is free from all anxiety and is incapable of behaving improperly (e.g., Cohen, 2011; Tolle, 1999).

As Forman has suggested (2011), however, this view may well be a romanticisation, since a person who undergoes the transformational experience of spiritual awakening does not automatically become free of previous psychological issues, or negative behavioural traits and tendencies. The concepts of “spiritual emergency” (Grof, 2000) and “spiritual crisis” (Clarke, 2010) also clearly express the inherent difficulties of sudden spiritual transformation. Sovatsky (2004) uses the term *spiritual surpassing* to refer to the potential problems which arise with the attainment of an enlightened state. In Taylor (2013), transformation was reported as a primarily positive problem-free process *only* when it occurred gradually, as a result of long term spiritual practice, or when participants had previous knowledge of spirituality (e.g., a background in spiritual traditions) or were engaged in spiritual practice at the time of the shift. The other participants experienced significant difficulties.

Terms such as *awakening* and *enlightenment*—with their positive overtones—may not be so appropriate to describe this process. The term *spiritual opening* (as originally employed by Grof [e.g., 2000]) has more descriptive accuracy, referring to a psychological shift which brings a more intense and expanded awareness, but which can be a difficult process, especially if it occurs suddenly, and without a conceptual framework to help make sense of it. Previously stable psychological structures are broken down, creating disturbance and instability, causing physical problems and disrupting psychological functions such as

concentration and logical or abstract thinking. The opening of previously stable self-boundaries may also lead to a sense of being overloaded with perceptual information, and a sense that life has become overly complicated.

However, as was the case with the participants of Taylor (2013), after a certain amount of time, and especially once the individual has established a conceptual framework to make sense of their experience, these difficulties and disturbances may gradually fade away. With kundalini experiences, the initially volatile energy seems to have a natural tendency to settle and stabilise, even though this may take up to several years.

At this point, when the shift has been fully integrated, the individual has, in a sense, returned to the free-flowing energetic richness and openness of childhood—only with the intellectual and cognitive benefits of adult development retained.

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# THE FACTOR ANALYTIC STRUCTURE AND PERSONALITY CORRELATES OF ‘SPIRITUAL EMERGENCY’

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**ABSTRACT:** A reliable and valid assessment instrument would aid clinicians in their diagnosis of spiritual crisis, or emergency. The current study investigated the structural validity and personality correlates of the 30-item Spiritual Emergency Scale (SES) (Goretzki, Thalbourne, & Storm, 2013). Participants ( $N = 162$ ) were recruited via email and social media and completed an anonymous online questionnaire. Exploratory principal axis factor analysis revealed a four-factor solution. Mysticism was correlated with SES scores, supporting convergent validity. However, the SES appears to neglect the crisis aspect of SE. As expected, results found that self-concept expanding beyond the here-and-now and mental boundaries predicted SES scores. In contrast, ego-grasping style did not predict SES scores. In conclusion, although in need of revision, the 30-item SES may be regarded as a promising measure of spiritual *emergence* but perhaps not *emergency*.

**KEYWORDS:** spiritual emergence, spiritual emergency, mystical experiences, psychopathology, transpersonal self-concept, mental boundaries, ego-grasping orientation

The *Diagnostic and Statistical Manual of Mental Disorders 5th Edition (DSM-5)* contains a diagnostic category “Religious or Spiritual Problem” (Code V62.89) under Other Conditions That May Be a Focus of Clinical Attention that are not mental disorders (American Psychiatric Association, 2013). The impetus for the inclusion of spiritual problems in the *DSM* some 20 years ago stemmed from transpersonal clinicians who were concerned about the mental health system’s tendency to pathologise states of spiritual crisis (Lukoff, Lu, & Turner, 1998) and the prevalence of religious and spiritual problems in clinical practice (Allman, De La Rocha, Elkins, & Weathers, 1992; Shafranske, & Maloney, 1990). The aim was to increase cultural sensitivity in the *DSM* (Lukoff, Lu, & Turner, 1992; Turner, Lukoff, Barnhouse, & Lu, 1995).

The “V Code” allows religious and spiritual issues to be recognised as non-pathological problems, similar to bereavement (Lukoff, 2005), providing a legitimate option for clinicians to diagnose these problems, as distinguished from a mental disorder (Johnson & Friedman, 2008). The inclusion of this category marked “an important shift” (Lukoff et al., 1998, p. 28) in the mental health profession’s acknowledgement of religious and spiritual problems, which was previously ignored (Shafranske & Gorsuch, 1984). However, after two decades, there is still a paucity of empirical research on spiritual problems

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and currently only one known measure of spiritual crisis (Goretzki, Thalbourne, & Storm, 2009, 2013) under investigation.

### SPIRITUAL EMERGENCY

An experience that may warrant the V Code is spiritual crisis, or *spiritual emergency* (SE) (Lukoff et al., 1998). Grof and Grof (1989, 1991) coined the term *SE* to describe intense spiritual experiences that may lead to a state of crisis or distress. A gradual and subtle unfolding of spirituality that leads to a profound shift in values and/or a more fulfilling way of life may be referred to as *spiritual emergence* (Grof & Grof, 1991). However, if spiritual experiences are dramatic or sudden, they may lead to a state of psychological crisis (Bragdon, 2006; Grof & Grof, 1989, 1991; Lucas, 2011). Thus, the term *SE* is a “play on words,” alluding to both spiritual emergence and spiritual emergency (SE), a sudden crisis representing a precarious position of danger or opportunity. Grof and Grof (1989, 1991) described at least 10 varieties of SE based on extensive research and personal experience. For example, the awakening of a form of energy yogis call Kundalini can give rise to sensations of vibrant currents of energy and heat streaming up the spine, accompanied by intense emotions such as anxiety, anger, sadness or joy, and an overwhelming fear of impending insanity or death. Based on their research and experience, Grof and Grof (1991) defined SE as

... critical and experientially difficult stages of profound psychological transformation that involves one’s entire being. Spiritual emergencies can take the form of non-ordinary states of consciousness and involve intense emotions, visions, and other sensory changes, and unusual thoughts, as well as physical manifestations. (p. 31)<sup>1</sup>

Goretzki, Thalbourne, and Storm (2009) developed a questionnaire that ostensibly quantifies SE, with the aim of assisting clinicians’ diagnoses. The *Spiritual Emergency Subscales* are based upon 10 formulated categories of SE, with a particular focus on the types of SE experiences outlined by Grof and Grof (1985, 1989, 1991). The SE categories are Dark Night of the Soul, Kundalini Awakening, Shamanic Crisis,<sup>2</sup> Peak Experience, Psychic Opening, Past Life Experience, Near Death Experience, Possession States, Activation of the Central Archetype, and UFO Experience (for a full description of each of these categories see Grof & Grof, 1989, 1991). Goretzki et al. reported acceptable internal reliability for the subscales (.53 to .84) and test-retest reliability over a four-month period (.67 to .88). Harris, Rock, and Clark (2015) also reported acceptable internal reliability for the subscales (.55 to .79) and excellent reliability for the 84-item scale (.95).

Goretzki, Thalbourne, and Storm (2013) refined their 84-item questionnaire into a shorter 30-item version, the *Spiritual Emergency Scale* (SES). This process was achieved by correlating each item on the full length 84-item SES with an obtained factor score, thus allowing the identification of the 30 items that correlated the highest with that factor score. Goretzki et al. reported

excellent internal reliability (.94) for the 30-item SES, as did Harris et al. (2015).

Bronn and McIlwain (2014) utilised the 30-item SES in a recent study. The authors conducted a pilot study on a spiritual sample ( $N = 30$ ) and obtained adequate reliability (.71). Based upon feedback from this sample, the authors adapted the scoring response for the SES to a Likert scale response format. Their main study consisted of two samples – a student and spiritual sample (total  $N = 212$ ), for which they obtained excellent internal reliability for the SES (.95) and good test-retest reliability (.84).

Bronn and McIlwain (2014) conducted a confirmatory factor analysis (CFA) on the SES, arguing that CFA is commonly used in scale development to assess construct validity. They used item parcelling to ensure the stability of CFA parameter estimates, explaining, “before parcels can be entered into confirmatory analyses, they must satisfy a minimum standard of internal consistency (e.g.,  $>.60$ ) and demonstrate unidimensionality” (Kishton & Widaman, 1994, p. 9). The authors further explained that unidimensionality refers to items that are intercorrelated and purportedly tapping into the same construct (Little, Cunningham, Shahar, & Widaman, 2002). Bronn and McIlwain reported, “Item parcels were created by randomly allocating the items of the SES into 6 parcels, with 5 items in each parcel. Internal consistencies for the item parcels ranged between .732 and .824 for the student sample and between .698 and .831 for the spiritual sample” (p.13). The authors also reported that the goodness-of-fit statistics for each parcel indicated an excellent fit for both samples (i.e., student and spiritual), confirming unidimensionality of the SES.

However, we argue that Bronn and McIlwain (2014) acted under the erroneous assumption that Goretzki et al. (2013) conducted an *exploratory* factor analysis (EFA) on the 30-item SES, replicating their single factor solution for the 84-item version of the scale (Goretzki et al., 2009). For example, Bronn and McIlwain state:

Goretzki et al. (2009) published the first self-report scale purporting to measure the 10 subtypes of SE... Principal components analysis of the 10 subscales revealed a single underlying factor, labelled “spiritual emergency.” The Spiritual Emergency Scale (SES) was created by combining the 30 items that correlated most highly with this underlying factor. *Principal components analysis of the SES revealed a single underlying dimension* [emphasis added]. (2014, p. 5)

However, this is not the case. Goretzki et al. (2013) describe how the 30-item SES was constructed following EFA on the 84-item SES, for which the authors did, in fact, obtain a single factor solution, identified as “spiritual emergency” (Goretzki et al., 2009). Subsequently, the authors correlated each item on the scale with an obtained factor score and selected the 30 items that correlated most highly with this factor score. These items constitute the 30-item SES. Importantly, however, Goretzki et al. have not reported findings based upon factor analysis of the 30-item SES.

Goretzki et al. (2013) reported inter-item correlations for the 30-item SES, ranging from .47 to .72. However, while it may be reasonably *purported* that the 30 items of the SES are tapping into an underlying construct, this assumption deemed necessary for CFA (Kishton & Widaman, 1994) has not been statistically demonstrated (i.e., via EFA). Thus, we argue that Bronn and McIlwain's (2014) justification for conducting a CFA on the 30-item SES is based upon an unsubstantiated assumption, and, therefore, the current study's EFA of the 30-item SES is justified and necessary.

Additionally, there is some discrepancy regarding the type of analysis that was conducted on the SES by Goretzki et al. (2013). For example, Goretzki (2007) stated that a principal components analysis (PCA) was performed, whereas Goretzki et al. (2009, 2013) stated that principal axis factor analysis (PAF) was conducted on the 84-item subscales. Bronn and McIlwain (2014) asserted that Goretzki et al. (2009) conducted a PCA on the SES (p. 5). In any event, Bronn and McIlwain's primary focus was Goretzki et al.'s (2013) study, which discusses the development and validation of the 30-item SES. Curiously, however, Bronn and McIlwain (2014) did not cite Goretzki et al. (2013).

Costello and Osborne (2005) recommend PAF rather than PAC when conducting EFA, arguing that the latter is a data reduction method, which is computed without regard for any underlying structure caused by latent variables. Given that the aim of this study was to examine the underlying structure of the SES, to investigate unidimensionality and construct validity (Williams, Onsman, & Brown, 2010), PAF was conducted.

It is noteworthy that Harris et al. (2015) recently conducted an EFA on the 84-item SES and failed to replicate Goretzki et al.'s (2009) single factor solution. The authors argued that it was not appropriate to conduct EFA on the ten subscale scores of the 84-item SES (as conducted by Goretzki et al.) because the subscales are not unidimensional. Importantly, Harris et al.'s EFA on the total 84 items of the SES yielded a four-factor solution. Thus, it seems reasonable to consider that a similar multidimensional solution may be obtained for the 30-item SES.

## SPIRITUAL EMERGENCY AND MYSTICAL EXPERIENCES

Another way of assessing construct validity of a scale is to explore convergent validity (Messick, 1993). At present, there are no other psychometric instruments measuring SE, which renders the assessment of convergent validity rather difficult. However, SE has been described as closely related to mystical experience (Grof & Grof, 1989, 1991; Lukoff, 1985). A *mystical experience* is a "transient, extraordinary psychological event marked by feelings of being in unity and harmonious relationship to the divine and everything in existence" (Allman et al., 1992, p. 565). It may include "changed perceptions of time and surrounding and a feeling of "knowing," coupled with reordering of life's priorities" (Thomas & Cooper, 1981, p. 79). Lukoff (1985) described SE as a mystical experience with psychotic features. Bronn and McIlwain (2014)

found that mysticism was positively associated with SES scores, providing preliminary support for the convergent validity of the 30-item SES. The present study hypothesised a moderate to high correlation between SES scores and reported mystical experience on Hood's (1975) *Mystical Experiences Scale* (M-Scale). However, we note that while SE appears related to mysticism, it involves an element of crisis that is not necessarily evident in a mystical experience (Bragdon, 2006; Grof & Grof, 1989, 1990; Lukoff, 1985).

### SPIRITUAL EMERGENCY AND PERSONALITY

To date, a comprehensive psychological conceptualisation of the development and nature of SE and its clinical features has not been established. Consequently, there are a number of challenges regarding the recognition and differential diagnosis of this clinical presentation. Additionally, due to the relative lack of research an established evidence-based psychological approach to supporting people in SE does not exist. Therefore developing a deeper understanding of SE to aid clinical understanding and treatment is of significant importance. In some instances spiritual crisis could potentially be conceptualised as an opportunity for personal growth and transformation (Bragdon, 2006), whereas for other individuals such experiences may be associated with significant psychological distress and symptoms associated with psychosis, which may require support. Consequently, an understanding of personality characteristics that may predispose an individual to SE may aid clinicians to recognise a spiritual crisis.

#### Personal and Transpersonal Self-Concept

Johnson and Friedman (2008) suggested the use of the Self-Expansiveness Level Form (SELF) (Friedman, 1983) to make the distinction between spiritual experiences and underlying psychopathology. The construct of self-expansiveness goes beyond the classic distinction between *me* and *not-me* to incorporate a temporal and spatial dimension of the self (Pappas & Friedman, 2007). Friedman's (1983) model begins at a central point, the "here-and-now," or *personal present*. Subsequently, the model expands to consider a sense of the past and/or potential future of the self (temporal dimension), and a contracted and/or enlarged sense of self (spatial dimension). A contracted sense of self encompasses a biological perspective of the self, such as identifying with the atoms in the body, and an enlarged sense of self encapsulates social relationships and relationships with the non-human environment (Pappas & Friedman, 2007).

The SELF measures individual differences in self-concept on three levels. The Personal Scale (PS) refers to aspects of the self in the present, such as thoughts, feelings and behaviours. The Middle Scale (MS) refers to social relationships and identification with childhood experiences. The Transpersonal Scale (TS) refers to aspects of self-concept expanding into the transpersonal or spiritual level beyond the here-and-now (Friedman, 1983).

Friedman (1983) hypothesized that high identification with the transpersonal realm (i.e., high TS scores) coupled with grounding in the here-and-now (i.e., high PS scores) may promote SE, whereas high TP scores coupled with low PS scores may facilitate psychopathology. The current study is the first to empirically test part of Friedman's theory and hypothesizes that both PS and TS will predict SES scores such that SE will be associated with high scores on both.

### **Boundary Structure**

Another aspect of personality that may be related to SE is boundary structure. Hartmann (1989) first coined the term *boundaries in the mind* to refer to the degree of connectedness between various aspects of the mind and between self and the outside world. The Boundary Questionnaire (BQ) (Hartmann, 1991) measures the degree of boundary *thinness* and *thickness* along a continuum. At one end, a person with very *thick* boundaries is likely to clearly separate thoughts and feelings, clearly delineate between sleep and wake states, have a definite sense of time and space, and perceive the world in dichotomies such as black and white. In contrast, a person with very *thin* boundaries has a less clear sense of the distinction between, for example, thoughts and feelings and thinks in *shades of grey* (Hartmann, Harrison, & Zborowski, 2001).

The BQ has been used extensively in dream research where several studies found thin boundaries are associated with the emotional intensity and bizarreness of dreams (for a review see Hartmann & Kunzendorf, 2007) and a higher frequency of dream recall (Aumann, Lahl, & Pietrowsky, 2012). Boundary structure has also been studied in relation to the Big Five personality traits. For example, boundary thinness (BT) has been associated with openness to experience (McCrae, 1994). Furthermore, BT has been linked to unusual mystical experiences (Krippner, Wickramasekera, Wickramasekera, & Winstead, 1998). Thus, individuals with thinner boundaries may be more open to experiencing unusual mystical phenomena characteristic of SE.

### **Ego-grasping Orientation**

One aspect of SE is an increased awareness of the interconnectedness of all things and a sense of becoming one with humanity, nature and/or God (Goretzki et al., 2009). Eastern Taoist philosophy describes this interconnectedness and acceptance as "being with the Tao" (Knoblauch & Falconer, 1986). A personality trait referred to as Ego-Grasping Orientation (EGO) (Knoblauch & Falconer, 1986) measures the degree to which a person "fights against the Tao," or true self. Thus, ego grasping measures how much an individual is bound by the limits of rationality and caught up with the Western concept of control (Knoblauch, 1985).

Bragdon (2006) described three possible reactions people might have to spiritual experiences: (a) "gracefully integrate the experience into their lives," (b) "be overwhelmed for a period of time, experiencing SE but eventually

acknowledging and accepting the spiritual experience as part of their reality,” or (c) “fail to integrate the spiritual experience, and to deteriorate into a chronic state of fragmentation” (p. 78). Perhaps the difficulty associated with integrating a spiritual experience is related to EGO; that is, individuals may struggle to accept a profound spiritual experience as part of their reality due to their strong identification with rationality and control (i.e., high EGO). Thus, one would expect high EGO to be associated with SE.

## AIMS AND HYPOTHESES

The current study aimed to extend Goretzki et al.’s (2009, 2013) research in several ways. First, an EFA was conducted to explore the structural validity of the 30-item SES. Second, the convergent validity of the 30-item SES was assessed by investigating the relationship between SES scores and mystical experience. Finally, we investigated whether various personality traits predicted SES scores.

The following hypotheses were formulated:

H1: SES scores will be positively correlated with mystical experiences.

H2: Personal and transpersonal self-concept, BT, and EGO will predict SES scores.

## METHOD

### Participants

One hundred and sixty-two participants (71% female) completed the composite questionnaire. Participants reported their age in one of six categories (18–24, 25–34, 35–44, 45–54, 55–64, 65+), with a modal age of 35–44 years. Most participants (86.4%) achieved a level of education beyond high school. The majority of participants (74.70%) considered themselves to be spiritual. The sample consisted of 21 (13%) members of a yoga, meditation or spiritual group, 28 (17%) students, and members of the general population. They responded to email and social media requests for participation.

### Materials

Participants answered questions regarding general demographic information including age, gender, level of education, spiritual affiliation, and group membership. Subsequently, participants completed the series of questionnaires outlined below.

*Spiritual Emergency Scale (SES)*. Goretzki et al.’s (2013) SES consists of 30 yes-no items measuring the experience of SE. Following Goretzki et al.’s (2009) suggestion, the SES was modified to create a continuous variable by utilising a Likert scale ranging from 1 (definitely not) to 5 (definitely yes) with scores

summed to create a total SES score ranging from 30 to 150. The SES demonstrates excellent internal consistency and adequate test-retest reliability (Goretzki et al., 2009).

*Mystical Experiences Scale (M-Scale)*. The M-Scale (Hood, 1975) is a commonly used 32-item measure of mystical experiences across eight categories: Ego Quality, Unifying Quality, Inner Subjective Quality, Temporal/Spatial Quality, Noetic Quality, Ineffability, Positive Affect, and Religious Quality. Each category contains four items, two positively phrased items (for example, "I have experienced profound joy"), and two negatively phrased items (for example, "I have never had an experience in which I felt as if all things were alive"). Participants rate each item using a Likert scale ranging from -2 (definitely not true) to +2 (definitely true). Scores are added and converted to a positive score ranging from 30 (least mystical) to 160 (most mystical). The M-Scale demonstrates adequate reliability and moderate convergent and divergent validity (Block-Olexick, 1993).

*Self-Expansiveness Level Form (SELF)*. The SELF (Friedman, 1983) is an 18-item instrument measuring individual differences in self-concept based on the construct of self-expansiveness level. The Transpersonal Scale (TS; five items) and the Personal Scale (PS; five items) of the SELF were utilised in the present study. Participants rate items on a five-point Likert scale indicating their level of willingness to encompass items in their concept of "self," as opposed to "non-self." The scale ranges from A (very willing to use to describe my sense of self or identity) to E (very unwilling to use to describe my sense of self or identity). Items are scored A = 5 through to E = 1 and are summed for each subscale. The PS and TS demonstrate adequate test-retest reliability (.83 and .80 respectively) (Friedman, 1983), convergent and divergent construct validity, and criterion validity by discriminating between known transpersonal/spiritual groups and student groups (Pappas & Friedman, 2007).

*The Boundary Questionnaire Short Version (BQ-Sh)*. The BQ-Sh (Rawlings, 2002) contains 46 questions derived from Hartmann's (1989, 1991) BQ. Self-report items measure mental boundaries across six subscales: Unusual Experiences (12 items), Need for Order (12 items), Trust (six items), Perceived Competence (eight items), Childlikeness (five items), and Sensitivity (two items). Participants rate each item using a Likert scale ranging from 0 (not at all) to 4 (very much so). Items either indicate a *thick* boundary (for example, "I like stories with a definite beginning, middle, and end") or a *thin* boundary (for example, "Sometimes I don't know whether I am thinking or feeling"). *Thick* items are reversed, and all items (except six items on the Trust subscale) are summed, thus, creating an overall boundary score, or Sumbound, with high scores indicating BT. The BQ can distinguish between people with theoretically thin boundaries, such as nightmare sufferers and art students, and people with theoretically thick boundaries, such as Naval officers (Harrison, Hartmann, & Bevis, 2005), demonstrating construct validity. The BQ-Sh demonstrates good internal consistency ( $\alpha = .65$  to  $.80$ ) and correlates highly with the original BQ ( $r = .88$ ) (Rawlings, 2002).

*Ego-Grasping Orientation (EGO)*. The EGO (Knoblauch & Falconer, 1986) consists of 20 self-report items measuring a person's place on a continuum

from acceptance of one's true nature to ego grasping. Participants answer each item either true or false (T or F) to indicate their level of agreement with each statement. Each statement either reflects an ego-grasping orientation (for example "I really struggle against the ebb and flow of life") or a non-ego-grasping orientation (for example, "Understanding my personal problems comes easily if I do not fight it"). Agreement with ego-grasping items are scored and summed with disagreement with non-ego-grasping items to create an overall EGO score. Thus, a higher score indicates greater ego grasping. The EGO demonstrates good internal consistency ( $\alpha = .82$ ) and correlates positively with Western measures of psychopathology, such as anxiety and depression, demonstrating convergent validity (Knoblauch & Falconer, 1986).

*Lie Scale.* This 9-item scale (Eysenck & Eysenck, 1964) has well-established psychometric properties. Goretzki et al. (2009) used this scale as a measure of response bias. In the current study, the items were incorporated randomly into the EGO questionnaire, since both scales utilised a yes/no response style and the Lie Scale questions could be easily concealed.

## **Procedure**

Ethics approval was obtained from the University of New England Human Research Ethics Committee. An online survey was created using Qualtrics survey software ([www.qualtrics.com](http://www.qualtrics.com)). Participants responded to online recruitment advertisements sent via email to the general population and special interest groups (i.e., yoga groups and members of Spiritual Emergence Network, Australia), or posted on a social media website (i.e., Facebook) or an interactive student site (i.e., Moodle). A snowball sampling method was used whereby participants were asked to send the survey link to their contacts. Participants were provided with information about the study and gave their consent by continuing the survey. All responses were anonymous.

## **RESULTS**

### **Preliminary Analysis**

A Pearson's correlation revealed that the relationship between SES scores and the Lie Scale was not statistically significant,  $r(160) = .08, p = .30$  (two-tailed).

### **Exploratory Factor Analysis**

To investigate the factor structure of the 30-item SES we conducted an exploratory principal axis factor analysis (PAF). The Kaiser-Meyer-Olkin measure verified the sampling adequacy for the analysis ( $KMO = .94$ ). Bartlett's test of sphericity  $\chi^2(435) = 3494.30, p < .001$  indicated that correlations between items were sufficiently large for PAF. The sample size ( $N = 162$ ) exceeded the recommended 150 (Guadagnoli & Velicer, 1988) and was deemed adequate for factor analysis.

The analysis yielded four factors with an Eigenvalue exceeding 1 (Kaiser, 1960). The scree plot (Cattell, 1966) indicated a three-factor solution. Due to this discrepancy, a direct oblimin rotation was conducted on the three-factor and four-factor solutions and assessed for interpretability. The four-factor solution provided the simplest and most interpretable solution, with labels as follows: Interconnectedness/Spiritual Opening, Experience of Another Time/Place/World, Experiences of Spiritual Entities/Energies, and Loss of Identity/Reality and Altered States of Consciousness (ASCs). The four factors had Eigenvalues of 14.73, 1.97, 1.45, and 1.05 respectively and together accounted for 64% of variance. The correlations between the four retained factors were between  $r = .42$  and  $r = .60$ , indicating a moderate to strong relationship between factors. For parsimony, items with cross-loadings above .3 could be deleted from the scale, leaving 23 items with seven items on Factor 1, five items on Factor 2, four items on Factor 3, and seven items on Factor 4. Table 1 shows the factor loadings for the four factors after rotation, with cross-loadings of  $> .30$  suppressed for ease of interpretation. The items to be retained within each factor are bolded.

### **Reliability**

Cronbach's  $\alpha$  was very high for each factor (.92, .90, .78, and .88 respectively) indicating excellent internal consistency. The internal reliability coefficient for the total 30-item SES was also high ( $\alpha = .96$ ).

### **Descriptive Statistics**

Table 2 shows descriptive statistics for all variables used in the following analyses.

### **Validity**

The convergent validity of the 30-item SES was tested by correlating SES scores with M-Scale scores. The mean for the M-Scale was 110.96 ( $SD = 29.80$ ) and was 78.02 ( $SD = 30.91$ ) for the SES. A Pearson's correlation ( $N = 158$ ) was performed to test the hypothesis that SES scores would be positively associated with M-Scale scores. Results revealed a strong and statistically significant relationship between SES scores and M-Scale scores,  $r(158) = .84$ ,  $p < .001$  (one-tailed). Thus, H1 was supported.

### **Personality Traits**

*Multiple Regression.* Given that our four-factor structure had not yet been subjected to CFA, each participant was assigned a factor score for overall SES ( $M = 0.00$ ,  $SD = 30.68$ , minimum =  $-48.73$ , maximum =  $71.27$ ) to be used in the multiple regression analyses.

TABLE 1  
*Direct Oblimin ( $\Delta = 0$ ) Rotated Factor Structure of the 40-item SES*

Item	Factor 1	Factor 2	Factor 3	Factor 4
... experienced a greater awareness of the interconnectedness of all things? (Psychic Opening)	<b>0.72</b>			
... spontaneously gained a greater understanding of the cosmos? (Psychic Opening)	<b>0.71</b>			
... experienced the sense of becoming one with humanity, nature, the creative energy of the universe and/or God? (Peak Experience)	<b>0.63</b>			
... spontaneously attained profound insights into the nature or reality? (Shamanic Crisis)	<b>0.62</b>			
... felt a sense of overcoming the usual divisions of the body and mind and reaching a state of complete inner unity and wholeness?	0.57		0.31	
... experienced an increased connection with animals and plants and the elemental forces of nature? (Shamanic)	<b>0.52</b>			
... spontaneously attained profound insights into the nature of reality? (Peak Experience)	<b>0.49</b>			
... experienced the destruction of an old sense of identity followed by rebirth and a renewed purpose for living? (Central Archetype)	<b>0.44</b>			
... experienced going beyond your normal understanding of time and space and entered a timeless realm where these categories no longer apply?	0.46	0.36		
... felt like you have personally witnessed detailed sequences of events taking place in other historical periods and/or cultures that you have had no previous exposure to? (Past Life)		<b>0.90</b>		
... experienced living what seemed to be another life, in another time and place, in great detail? (Past Life)		<b>0.79</b>		
... experienced a visionary state taking you back through your own history and that of mankind to creation? (Central Archetype)		<b>0.78</b>		
... experienced insights and/or visions, in which you received secret or sacred teachings and healing powers to take back to the "ordinary" world? (Shamanic Crisis)		<b>0.72</b>		
... undertaken a powerful inner experience that involved a journey into another world? (Shamanic Crisis)		<b>0.54</b>		
... been aware of the presence of spiritual entities? (Psychic Opening)			<b>0.78</b>	
... had the need to fight off or try to control the actions of a negative being or entity? (Possession State)			<b>0.66</b>	
... had an experience of dealing with something that has a divine nature and is radically different from your ordinary perception of the everyday world?	0.34		0.53	
... spontaneously received accurate information about things in the past, present or future, by extra-sensory means?		0.35	0.45	
... been overwhelmed by powerful emotions and physical sensations concerning yourself and others in various circumstances and historical settings? (Past Life)			<b>0.38</b>	
... been able to see auras around people, animals, plants or other living things? (Psychic Opening)			<b>0.32</b>	
... spontaneously lost your sense of identity? (Psychic Opening)				<b>0.65</b>
... lost your sense of reference as your outer and inner worlds dissolved? (Dark Night of the Soul)				<b>0.63</b>
... developed a deep change in consciousness during which you lost contact with everyday reality? (Shamanic Crisis)				<b>0.57</b>
... experienced the spontaneous production of complex visual geometrical images or chants inside your head? (Kundalini)				<b>0.52</b>

TABLE 1 (continued).

Item	Factor 1	Factor 2	Factor 3	Factor 4
... had the ability to move into and out of non-ordinary states of consciousness at will? (Shamanic Crisis)			0.30	<b>0.42</b>
... heard voices, music or the repetition of mantras, without knowing where they're coming from?		0.38		0.42
... experienced the spontaneous desire to create rituals? (Shamanic Crisis)				<b>0.41</b>
... experienced intense sensations of energy and/or heat streaming along your spine? (Kundalini)			0.30	<b>0.39</b>
... been aware of a cosmic battle being played out between the forces of good and evil or light and darkness?				
... experienced rich connections with mythological symbols from ancient history?				

Note. Each item is preceded with "Have you ever..." Items without cross-loadings are bolded, and the corresponding subtype of SE is in parentheses. Factor 1 = Interconnectedness/Spiritual Opening; Factor 2 = Experiences of Another Time/Place/World; Factor 3 = Experiences of Spiritual Entities/Energies; Factor 4 = Loss of Identity/Reality and ASCs.

A standard multiple regression was performed to investigate personality traits associated with SES scores, with SES as the dependent variable (DV) and BT, TS, PS, and EGO as the independent variables (IVs). Table 3 displays the zero-order correlations between the variables ( $r$ ), the intercept, the standardised regression coefficients ( $\beta$ ), the semi-partial correlations ( $sr^2$ ), and  $R^2$ .

$R$  for regression was statistically significantly different from zero,  $F(4, 157) = 17.59, p < .001$ . The adjusted  $R^2$  value of .30 indicates that BT, transpersonal self-concept, personal self-concept and ego-grasping orientation, account for almost a third of the variability in SES scores. As hypothesised, BT and transpersonal self-concept were statistically significant predictors of SES scores. In contrast, EGO and personal self-concept were not statistically significant predictors of SES scores. Thus, H2 was partially supported.

## DISCUSSION

The current study aimed to extend Goretzki et al.'s (2009, 2013) studies in several ways. The first aim was to explore the factor structure of the recently developed 30-item SES (Goretzki et al., 2013). A second aim was to assess the convergent validity of the new scale. A third aim was to investigate whether

TABLE 2  
Descriptive Statistics for Variables used in the Study

Variable	$N$	Min	Max	Mean	$SD$
SES	162	5	150	78.02	30.91
M-Scale	158	30	160	110.96	29.80
BT	162	0	160	92.42	16.33
EGO	162	0	20	5.77	3.55
SELF-T	162	5	25	17.41	4.26
SELF-P	162	5	25	20.83	2.71

Note.  $N = 162$ . SES = Spiritual Emergency; M-Scale = Mystical Experiences; BT = Boundary Thinness; EGO = Ego-Grasping Orientation; SELF-T = Transpersonal Self-Concept; SELF-P = Personal Self-Concept.

TABLE 3  
*Summary of Standard Multiple Regression Analysis for SE and Personality Traits*

Variable	BT	EGO	SELF-T	SELF-P	SES	$\beta$	$sr^2$
BT		.01	.22*	.09	.40**	.31**	.09
EGO			-.18*	-.18*	-.03	.04	.00
SELF-T				.34	.46**	.40**	.13
SELF-P					.17*	.02	.00

*Note.*  $N = 162$ . BT = boundary thinness; EGO = ego-grasping orientation; SELF-T = transpersonal self-concept; SELF-P = personal self-concept; SES = Spiritual Emergency. Intercept = -30.28.  $R^2 = .31$ . \*\* $p < .01$ ; \* $p < .05$ .

personal and transpersonal self-concept, BT and EGO predicted scores on the SES.

### Factor Structure

The current study conducted an EFA on the 30-item SES. The analysis revealed that the most interpretable outcome was a four-factor solution. This finding differs from Goretzki et al.'s (2009) one-factor solution. As previously mentioned, Harris et al. (2015) raised the issue that it was not possible to conduct EFA on the 84-item SES in the manner undertaken by Goretzki et al. (2009) due to the multidimensionality of the subscales, which Goretzki et al. used as variables in their analysis. Consequently, Harris et al. conducted EFA on the total 84 items of the SES and obtained a four-factor solution. The results of the present study are consistent with Harris et al.'s findings. Additionally, Harris et al.'s study used a larger sample size relative to Goretzki et al., as this was also cited as a possible limitation of Goretzki et al.'s results.

The four factors in our solution were labelled: Interconnectedness/Spiritual Opening, Experience of Another Time/Place/World, Experience of Spiritual Entities/Energies, and Loss of Identity/Reality and ASCs. These factors are thematically similar to the factors identified by Harris et al. (2015) (i.e., Insight and Interconnectedness, Experience of Other Life Forms and Worlds, Extrasensory Perception, and Physical and Verbal States).

These factors, or subscales, do not reflect the discrete subtypes of SE described in the literature (Grof & Grof, 1989, 1991). Rather, they appear to represent themes evident across several SEs. This appears to be consistent with literature suggesting there is substantial overlap across subtypes (Grof & Grof, 1989). For example, visionary states or powerful inner experiences involving other historical periods, one's own history, or another world, pertain to Past Life Experience, Psychological Renewal Through Return to the Centre (Activation of the Central Archetype; Goretzki et al., 2009), and Shamanic Crisis subtypes (Grof & Grof, 1989, 1991). The second factor, Experience of Another Time/Place/World, captures this theme spanning three subtypes of SE.

There are two limitations to a unidimensional SES scale without subscales (i.e., the 30-item SES) that could be overcome with our proposed four-factor

structure. First, Goretzki et al. (2013) stated that SES scores do not indicate the specific type of SE the individual has experienced, and further investigation of the items endorsed is required to ascertain the subtype. Goretzki et al. claimed that the 30-item SES “will significantly shorten procedures in the laboratory in cases where multiple instruments are to be administered” (p. 111). However, if item-by-item analysis is required to make sense of the individual’s experiences, this brings into question the practical utility of a unidimensional scale in research or clinical practice. Second, Goretzki et al. (2009) suggested a cut-off of 1.5 standard deviations above the mean “to indicate a *tentative* classification of a ‘relevant SE’” (p. 83). This arbitrary cut-off may only identify individuals who have experienced multiple SEs and scored highly on overall SES scores. Our four proposed subscales would enable clinicians to readily ascertain the themes underlying the individual’s experience, rather than relying on an indiscriminate cut-off for the overall SES score.

### **Validity**

The current study assessed the convergent validity of the SES by correlating the measure with reported mystical experience. As expected, results revealed a strong positive relationship between SES scores and mystical experience, as measured on the M-Scale (Hood, 1975). This is consistent with Bronn and McIlwain’s (2014) findings. In MacDonald’s (2000) factor analysis he found that the M-Scale loaded primarily onto a factor labelled *Experiential/Phenomenological Dimension*. Thus, it appears that the SES is tapping into phenomenology related to mystical experience. This finding offers preliminary support for the convergent validity of the 30-item SES; however, it must be interpreted with caution since mystical experiences are not synonymous with SE. Specifically, they do not address the *crisis* aspect that is inherent to SE (Grof & Grof, 1989, 1991; Kane, 2005; Lucas, 2011).

### **Personality**

The current study explored personality characteristics hypothesised to be associated with SE. It was hypothesised that TS, PS, BT scores, and EGO would predict SES scores. Results revealed that TS predicted SES scores, with higher SES scores associated with higher TS scores. This concurs with Johnson and Friedman’s (2008) reasoning that individuals who experience SE have a self-concept that expands beyond the boundaries of the self in the present moment and into a transpersonal, or spiritual, realm. In contrast, results revealed that PS did not predict SES scores. Perhaps a more prudent method for testing Friedman’s (1983) hypothesis would be comparing TS and PS scores for known groups of psychotic individuals and those who have undergone SE. Further research could pursue this line of inquiry.

Results revealed that BT was a statistically significant predictor of SES scores, with high SES scores associated with very thin boundaries. This finding suggests that individuals who are susceptible to SE may have difficulty

separating their sense of self from the environment around them or distinguishing dreaming from reality (Harrison & Singer, 2013). In addition, individuals with particularly thin boundaries may exhibit perceptual sensitivity (Thalbourne & Maltby, 2008), making them more prone to experiencing unusual mental phenomena characteristic of SE. Taken together, these findings suggest that people who experience SE have looser boundaries of both their sense of self in relation to time and space and structures in the mind.

Results revealed that EGO scores did not predict SES scores. This result was unexpected since the very definition of an SE encapsulates a state of wrestling with the integration of the experience into everyday life (Bragdon, 2006). This finding further suggests that perhaps the SES does not adequately capture the state of crisis associated with SE. Indeed, Harris et al. (2015) argued that the face validity of the SES is questionable, and that the SES is, in fact, quantifying spiritual *emergence* rather than SE because the scale is devoid of items that capture the *crisis* aspect of SE. Thus, the SES may have some significant limitations given it does not measure whether a particular experience is associated with personal crisis and psychological distress or is perceived as a positive occurrence contributing to self-worth or personal growth. Research and theory from cognitive behavioural psychology suggests that an individual's appraisal of cognitive, emotional and physiological experiences may play a significant role in determining psychological well-being, behaviour and emotion regulation associated with a given experience (Fulton, Marcus, & Merkey, 2011; Janeck, Calamari, Riemann, & Heffelfinger, 2003; Wells, 1995). Therefore, an evaluation of metacognition associated with SE (i.e., an individual's appraisal of the nature, perceived consequence or personal meaning associated with SE experiences) may have the potential to be greatly informative in terms of understanding an individual's relationship with SE experiences and associated psychological well-being.

Another consideration, which highlights a further limitation of the SES, is that EGO scores may be dependent upon past or present experience of SE, which the SES does not assess. That is, an individual in a *present* state of SE may exhibit high EGO (Bragdon, 2006), whereas an individual who has moved through the process and achieved the positive transformation and growth that is characteristic of SE (Grof & Grof, 1989, 1991; Jung, 1983; Laing, 1967; Perry, 1974, 1999), may exhibit lower levels of EGO. Thus, EGO may be worth investigating further in relation to a measurement instrument that is able to make such a distinction.

### **Limitations and Future Directions**

The main limitation of the current study was a gender-biased sample. Indeed, the snowball sampling method may have contributed to the gender bias of 71% female participants.

Several suggestions for future research are offered. First, although EFA was an appropriate method for examining the internal structure of the 30-item SES,

a CFA is warranted to conduct a more rigorous test of structural validity. For example, a CFA could be conducted comparing the model fit for Goretzki et al.'s (2013) single-factor 30-item SES, the 23-item four-factor version of the SES outlined in the present study, and the 40-item four-factor version of the SES outlined by Harris et al. (2015).

Second, the construct validity of our four proposed subscales needs to be addressed. The present study found several items with cross-loadings greater than .30 between factors. Further refinement of the scale could consider rewording some items to better capture the crisis aspect of SE in order to improve face validity and removing items with cross-loadings to ensure four distinct subscales. For example, one item that loaded onto the fourth factor (Loss of Identity/Reality and ASCs), "Have you ever experienced intense sensations of energy and/or heat streaming along your spine?" seems to be more consistent with the third factor (Experience of Spiritual Entities/Energies), with which it also loaded ( $< .30$ ). Rewording of this item may enable it to fit more appropriately with only one factor. Additionally, two items that loaded on the first factor are almost identical, differing only by one word, which appears to be a typographical error on the SES: "Have you ever spontaneously attained profound insights into the nature *or* reality?" is an item from the Shamanic Crisis subscale, while, "Have you ever spontaneously attained profound insights into the nature *of* reality" is an item from the Peak Experience subscale. Interestingly, the item with the apparent typographical error (from the Shamanic Crisis subscale) loaded more highly onto Factor 1. Deletion of one of these items is warranted to avoid repetition. On this point, it is noted that Goretzki, Thalbourne, and Storm (2014) have provided an update on the 30-item SES, in which they replaced the first of the abovementioned replicated items with an item from the Central Archetype subscale from the original 84-item scale. The authors stated that this replacement item was the next highest factor-scoring item. They reported psychometric properties very similar to those reported in Goretzki et al. (2013). However, a CFA should also be performed on this revised version of the 30-item SES to assess validity.

Third, research has indicated that SE can include psychotic-like symptoms (Lukoff, 1985, 2005). The current study's subscale Loss of Identity/Reality and ASCs may be closely linked to positive symptoms of psychosis such as delusions and hallucinations. Positive and negative metacognitive beliefs in psychosis (e.g., regarding delusions or hallucinations) have been implicated in the increased likelihood of developing and experiencing psychotic symptoms as well as the distress associated with such symptoms (Morrison, French, & Wells, 2007). Thus, it would be pertinent to determine whether such beliefs (e.g., positive beliefs about hallucinations) are associated with increased likelihood of SE. Further research might investigate the relationship between the Loss of Identify/Reality subscale and measures of psychosis, specifically those instruments designed to measure metacognitive beliefs, thereby assessing the construct validity of the SES.

Finally, as described above, the nature of an individual's appraisal of the experiences assessed by the SES may have significant implications for the

individual's psychological well-being and the trajectory/resolution of their SE. An area for future research may be to modify the SES or develop a measure that adequately assesses individual appraisal of SE experiences. Developing such a measure may contribute to our understanding of how those experiences assessed by the SES relate to a positive *spiritual emergence* versus an individual crisis, which may warrant the need for psychological support.

## CONCLUSION

In summary, the current study offers three main findings. First, the proposed four-factor structure differs from the assertion made by Goretzki et al. (2013) that the 30-item SES is a unidimensional scale. However, it is consistent with Harris et al.'s (2015) four-factor solution for the 84-item SES. Our four-factor structure offers greater ease of interpretation for clinical practice. However, further investigation of the psychometric properties of the scale needs to be undertaken to establish its value as a reliable and valid measure of SE. Second, results revealed that SES scores are closely related to mystical experiences, supporting convergent validity. However, this finding does not address the crisis aspect of SE. Third, personality traits such as expanded transpersonal self-concept and thin mental boundaries may predispose individuals to spiritual opening or emergence, which we argue is captured by the SES. In conclusion, while in need of revision and further validation, the 30-item SES is a promising measure of experiences that would otherwise be labelled as 'pathological' or 'psychotic,' but at this stage may be best regarded as a reliable measure of spiritual *emergence* rather than *emergency*.

## NOTES

<sup>1</sup> Rock and Krippner (2007, 2011a, 2012) argued that states of consciousness are more appropriately referred to as states of phenomenology.

<sup>2</sup> On the link between shamanism and psi phenomena see Storm and Rock (2009a, 2009b) and Rock and Krippner (2011b).

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# SPIRITUAL EMERGENCY, PSYCHOSIS AND PERSONALITY: A QUANTITATIVE INVESTIGATION

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**ABSTRACT:** Spiritual emergency (SE) is a process of spiritual emergence that becomes a psychological crisis and may appear identical to clinical psychosis. This study attempted to validate Goretzki, Thalbourne and Storm's (2009) Spiritual Emergency Subscales (SES), and Experiences of Psychotic Symptoms Scale (EPSS) as measures of SE and psychosis, respectively. The study also investigated whether personality traits (i.e., transliminality, dissociation, sensitivity, openness to change, tension and abstractedness) predicted SES and EPSS scores. Two hundred and twenty-four participants completed an anonymous online questionnaire. Factor analysis revealed that the SES is a multidimensional scale. Results showed preliminary support for the reliability of both scales and the validity of the EPSS. However, the SES may not be sufficiently capturing the crisis aspect of SE. Transliminality predicted scores on both scales, while dissociation and emotional stability predicted EPSS scores. In conclusion, results indicate that the SES requires modification if it is to be a valid measure of SE.

**KEYWORDS:** spiritual emergency, crisis, psychosis, transliminality, dissociation, personality

The term *spiritual emergency* (SE) may be defined as a process of spiritual emergence or awakening that sends an individual into a state of psychological crisis (Grof & Grof, 1989, 1991) and represents a 'play on words' in relation to spiritual *emergence*. SE may be conceptualised as a non-ordinary state of consciousness<sup>1</sup>, which may include extrasensory perceptions, disorganised behaviour, physical manifestations (e.g., spasms and jerking, feelings of vibration, digestive problems, burning and heat sensations, crawling sensations on the skin, roaring sounds in the head), and unusual or illogical thoughts and beliefs with strong spiritual content (Grof & Grof, 1989, 1991; Lucas, 2011). Lucas (2011) has described SE as a spiritual awakening that has speeded up to a state that is so intense that the individual is sent into a state of psychological crisis. Findings by Kane (2005) have confirmed that the speed of onset of a process of spiritual emergence is connected to the likelihood that it will become an SE, and the only universally differentiating factor is that SE involves psychological crisis.

## SPIRITUAL EMERGENCY AND PSYCHOSIS

Various transpersonal researchers have emphasised that SE experiences hold the potential for positive transformation and growth (e.g., Grof & Grof, 1989,

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1991; Jung, 1983; Laing, 1967; Perry, 1974, 1999). However, the expression of SE may *appear* identical to clinical psychosis, which has led numerous researchers to suggest that many cases of psychosis may, in fact, be SE and be best treated using a transpersonal approach rather than the standard Western medical approach (Bragdon, 2006; Grof & Grof, 1989, 1991; Lukoff, 1985; Perry, 1974). A transpersonal approach involves allowing individuals to experience the symptoms of psychosis, while helping them find meaning in the content of their experiences. For example, Perry (1974) presented reports of patients experiencing psychotic episodes who were treated without medication and whose psychoses were supported and allowed to run a 'natural course.' He reported that patients treated in this way displayed lower rates of relapse and higher levels of emotional development.

Concern over a perceived lack of understanding of spiritual problems by mainstream mental health professionals has prompted numerous transpersonal researchers to attempt to differentiate SE from psychosis (Bragdon, 2013; Grof & Grof, 1989, 1991; Lukoff, 1985; Perry, 1974, 1999). It has been suggested that the importance of differential diagnosis lies in the resulting treatment (Bragdon, 2013). That is, if SE is diagnosed as psychosis and treated in the conventional way (i.e., anti-psychotic medication and/or hospitalisation), treatment generally undermines the natural developmental process, and the individual fails to integrate the spiritual aspects of the experience. To date there has been little research carried out which would suggest if and how SE experiences may be differentiated from the experience of psychosis. However, it has been suggested that a psychotic-like experience may in fact be SE if the individual had good pre-episodic functioning without a long history of psychopathology, experiences acute onset of symptoms precipitated by a stressful event and displays a positive exploratory attitude towards the experience (Grof & Grof, 1989; Lukoff, 1985).

#### A SPIRITUAL EMERGENCY QUESTIONNAIRE

Goretzki, Thalbourne, and Storm (2009) developed a questionnaire that ostensibly quantifies SE, with the aim of assisting clinicians' diagnoses. The *Spiritual Emergency Subscales* (SES) are based upon ten formulated categories of SE. The SES is an 84-item questionnaire consisting of ten subscales representing ten identified categories of SE. The SES subscales are Dark Night of the Soul (seven items), Kundalini Awakening (11 items), Shamanic Crisis<sup>2</sup> (10 items), Peak Experience (seven items), Psychic Opening (13 items), Past Life Experience (five items), Near Death Experience (eight items), Possession States (eight items), Activation of the Central Archetype (nine items), and UFO Experience (six items). For a full description of each of these categories see Grof and Grof (1985, 1989, 1991).

Descriptive statistics for the SES showed that while some subscales approximated a normal distribution, there was significant skewness and/or kurtosis present for a number of subscales. Most subscales showed acceptable reliability, with alpha coefficients ranging from .53 to .84. Test-retest reliability ranged from .67 to .88. Significant positive correlations were found amongst the subscales, indicating substantial overlap of the features of the ten categories

of SE. Factor analysis revealed a single factor, identified as 'Spiritual Emergency' (Goretzki et al., 2009).

Goretzki et al. (2009) also developed the *Experience of Psychotic Symptoms Scale* (EPSS) as a 15-item measure of clinical psychosis, based upon the DSM-IV-TR (American Psychiatric Association, 2000) criteria. The justification for development of the EPSS was a perceived lack of available measures of psychosis, with the exception of Eysenck and Eysenck's (1991) Psychoticism (P) scale, which the authors described as a measure of unconventionality rather than clinical psychosis. The EPSS scores were found to be relatively normally distributed, with an alpha coefficient of .82 and test-retest reliability of .84. The authors attempted to provide criterion validity for the scale by examining it in relation to three measured variables: the experience of a psychotic episode, and the prescription and consumption of medication. They reported preliminary criterion validity for the scale based upon higher EPSS scores for those reporting affirmative answers to these questions.

Goretzki et al. (2009) found significant positive correlations between scores on the EPSS and SES subscales and significant differences in EPSS scores for those scoring above and below arbitrary cut-off points on the SES. Additionally, there was a significant positive correlation between factor scores pertaining to the SES and scores on the EPSS. Subsequently, Goretzki, Thalbourne, and Storm (2013) developed a shorter 30-item version of the SES. This was achieved by correlating each item on the full 84-item SES with an obtained factor score, thus allowing the identification of the 30 items that correlated the highest with the factor score.

Some preliminary findings using the full-length and short version of the SES suggest that it is related to both psychotic and spiritual phenomena. Bronn and McIlwain (2014) reported a significant positive correlation between the 84-item SES and the positive symptoms of psychosis (i.e., hallucinations and delusions; for a discussion of the positive/negative symptoms dichotomy see Andreasen, 1985), spiritual identity, mysticism and religious interpretation. Additionally, they found a divergent relationship between SE and alogia (i.e., a negative symptom of psychosis characterised by a lack of speech). Rooijakkers (2013) administered the 30-item SES and found that scores predicted psychosis. Scores on the SES were also significantly positively correlated with ego resilience and 'positive potential' (i.e., positive results following mental illness episodes).

Irrespective of the aforementioned findings (e.g., Bronn & McIlwain, 2014; Rooijakkers, 2013), the results of the factor analysis by Goretzki et al. (2009) are questionable due to their small sample size ( $N = 109$ ). For example, Hutcheson and Sofroniou (1999) stated that the minimum sample size when performing factor analysis is 150 cases, whereas Guilford (1954) stipulated that  $N$  should be at least 200 cases. Thus, one might argue that Goretzki et al.'s  $N$  is too small to "obtain factor solutions that are adequately stable and that correspond closely to population factors" (MacCallum, Widaman, Zhang, &

Hong, 1999, p. 84). A major aim of the present study was, therefore, to attempt to replicate Goretzki et al.'s factor solution with a larger sample.

It also seems prudent to identify *trait*-like tendencies to experience SE and psychosis. Transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension are considered in the next section.

### SPIRITUAL EMERGENCY AND PERSONALITY

*Transliminality* may be defined as a “hypothesised tendency for psychological material to cross thresholds into or out of consciousness” (Thalbourne & Houran, 2000, p. 861). Interestingly, transliminality is considered a ‘central explanatory construct’ underlying both psychotic and spiritual states (Claridge, 2010; Clarke, 2010). Thalbourne (1998) and Thalbourne and Delin (1994) identified transliminality as a factor underlying paranormal belief, mystical experience, creative personality, manic experience, magical ideation, absorption (i.e., a tendency to become deeply engaged in mental imagery; Tellegen & Atkinson, 1974), fantasy proneness (Myers, 1983), hyperaesthesia (i.e., hypersensitivity to sensory stimulation), and positive attitude towards dream interpretation. Thalbourne and Delin (1994) also found that high transliminals are more likely to report psychotic phenomena and bipolar and schizophrenic disorder. Thus, transliminality might be a trait-like tendency to experience both SE and psychosis.

Another variable of interest is *dissociation*, defined as the temporary alteration or separation of mental processes (e.g., thoughts and emotions) that would normally be integrated (Butler, 2004; Spiegel & Cardeña, 1991). The contemporary view is that dissociation exists on a continuum (Van der Hart & Dorahy, 2009). Thus, it is argued that there is individual variability in the expression of dissociation (see Braun, 1988; Cardeña, 1994), ranging from non-pathological (e.g., daydreaming, meditation) to pathological (e.g., multiple personality disorder) phenomena (Van der Hart & Dorahy, 2009). Research has linked dissociation to schizophrenia (see Schafer, Aderhold, Freyberger, & Spizer, 2008), psychotic disorders (Ross et al., 1990; Steinberg, Cicchetti, Buchanan, Rakefeldt, & Rounsaville, 1994), and psychotic-like symptoms (Allen, Coyne, & Concole, 1997; Pope & Kwapil, 2000). Research has also linked dissociation to spiritual and transpersonal phenomena (Edge, 2004; Peres, Moreira-Almeida, Caixeta, Leao, & Newberg, 2012) and paranormal and mystical belief and experience (Gow, Hutchinson, & Chant, 2009; Zingrone & Alvarado, 2009). Thus, dissociation might be a trait-like tendency to experience both SE and psychosis.

The current study also investigated a number of variables measured by the *Sixteen Personality Factor Questionnaire* (16PF) (Cattell, 1946), including *emotional stability, sensitivity, openness to change, abstractedness* and *tension*. Researchers have collectively stressed the opportunity for positive transformation that accompanies the successful integration of SE (e.g., Grof & Grof, 1989, 1991; Jung, 1983; Laing, 1967; Perry, 1974, 1999), and Mezirow

(1997) has suggested that openness to change is necessary to integrate transformative experiences. Thus, openness to change might be a trait-like tendency to experience SE.

Spiritual emergency has been described as involving a ‘roller-coaster’ of intense emotions, whereby the individual may experience extreme sensitivity to the suffering of others and the world (Lucas, 2011). Thought processes are often marked by symbolism and mythological themes (Lukoff & Everest, 1985), and the individual is often thrown into a state of overwhelming psychological crisis and panic (Perry, 1974). Thus, sensitivity, abstractedness and tension might be trait-like tendencies to experience SE, whereas, emotional stability may be expected to correlate negatively with SE.

The experience of psychosis is also considered to be a challenging or traumatic life event, marked by emotional dysfunction (Birchwood, 2003; Livingstone, Harper, & Gillanders, 2009; Morrison, Frame, & Larkin, 2003) and reactivity (Myin-Germeys & van Os, 2007), interpersonal hypersensitivity (Masillo et al., 2012) and stress-sensitivity (Myin-Germeys & van Os, 2007). Thus, sensitivity and tension might be trait-like tendencies to experience psychosis, whereas emotional stability may be expected to correlate negatively with psychosis.

Psychosis has been related to difficulties in abstract thinking, although this generally pertains to those with poor premorbid functioning (Carpenter & Chapman, 1982; Herron, 1962; Johnson, 1966; Watson, 1973, 1976). However, abstract thinking is purported to facilitate increased creativity (Fink, 1995; Forster, Friedman, & Liberman, 2004; Jia, Hirt & Karpen, 2009; Ward, 1995), which in turn has been linked to both schizophrenic and bipolar affective forms of psychosis (see Claridge & Blakely, 2009). In particular, creativity may be associated with the positive symptoms of psychosis (Schuldberg, 2001; Schuldberg, French, Stone, & Heberle, 1988). For example, Nettle (2006) found that creative individuals were as high as schizophrenic patients on the positive symptoms of schizotypy (i.e., unusual ideas and experiences), but were distinguished by the absence of negative symptoms (i.e., anhedonia and avolition). Additionally, Strong et al. (2007) investigated the affective symptoms of psychosis (i.e., cyclothymia/dysthymia) in relation to creativity and found a positive relationship. It has also been suggested that creativity and psychosis may have an inverted U-shaped relationship, first increasing and then decreasing as psychopathology worsens (Akiskal & Akiskal, 1988). Thus, abstractedness might be a trait-like tendency to experience psychosis.

Psychosis commonly involves a purported lack of insight into one’s illness (Amador & David, 1998), which contributes to lower levels of compliance and willingness to accept intervention (Kampman & Lehtinen, 1999). In contrast, SE has been associated with insight into one’s experience, a positive exploratory attitude, and willingness to accept help (Grof & Grof, 1989, 1991). Thus, openness to change may be expected to correlate negatively with psychosis and may provide a way of differentiating between SE and clinical psychosis.

## AIMS AND HYPOTHESES

The current study aimed to attempt to replicate Goretzki et al.'s (2009) factor solution for the SES with a larger sample. In addition, the criterion validity of the SES and EPSS was assessed. The study also investigated whether various personality traits predicted SES and EPSS scores. Regarding trait-like tendencies to experience SE and psychosis, the following hypotheses were formulated:

**H1:** Transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension will predict SES scores.

**H2:** Transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension will predict EPSS scores.

## METHOD

### Participants

A total of 224 participants (49 males and 171 females) completed the questionnaire. Four participants did not report their gender. They ranged in age from 16 to 69 years; mean age = 40 years ( $SD = 12.05$  years). Participants were students at the Phoenix Institute of Australia and members of the general population who responded to advertisements and recruitment emails.

### Materials

The study used a composite questionnaire comprising a number of scales (described below), as well as questions pertaining to demographic and mental health information.

*The Spiritual Emergency Subscales (SES).* The SES was developed by Goretzki et al. (2009) and consists of 5–13 yes/no self-report items across 10 subscales, with a total of 84 items. Each subscale represents a category of SE: Dark Night of the Soul (seven items), Kundalini Awakening (11 items), Shamanic Crisis (10 items), Peak Experience (seven items), Psychic Opening (13 items), Past Life Experience (five items), Near Death Experience (eight items), Possession States (eight items), Activation of the Central Archetype (nine items) and UFO Experience (six items).

*The Experience of Psychotic Symptoms Scale (EPSS).* The Experience of Psychotic Symptoms Scale (EPSS) was also developed by Goretzki et al. (2009) and consists of 15 yes/no self-report items based upon the DSM-IV criteria for psychosis. It includes such items as, “Have you ever found that the familiar boundaries between people, events, time and space were blurred or not as accessible as they once were?”

*Lie Scale.* Eysenck and Eysenck's (1964) nine-item Lie Scale was used by Goretzki et al. (2009) as a measure of response bias. The scale has well-established psychometric properties and was also included in the current study. The SES, EPSS and Lie Scale form a total of 108 randomly positioned items that were presented in the same order as that of Goretzki et al.

*Transliminality Scale Revised (TS-R).* The TS-R is a Rasch (1980) scaled version of Thalbourne's (1998) original Transliminality Scale (Houran, Thalbourne, & Lange, 2003; Lange, Thalbourne, Houran, & Storm, 2000). It consists of 29 true/false self-report items designed to measure transliminality. It includes items relating to experiences such as dreams, reactions to music, various feelings, and belief in psychic ability. The scale displays high internal reliability (.85), test-retest reliability (.82) (Houran et al., 2003), and established construct validity (Thalbourne, 2000).

*The Dissociative Experiences Scale (DES-II).* The DES (Bernstein & Putnam, 1986) is a 28-item self-report scale that measures the frequency of dissociative experiences. Items relate to amnesia, depersonalization, derealisation, absorption, and imaginative involvement. The DES has displayed internal reliability ( $r = .83$  to  $.93$ ,  $\alpha = .95$ ), and test-retest reliability (.79 to .84) (Bernstein & Putnam, 1986; Frischholz et al., 1990; Pitblado & Sanders, 1991). Construct and criterion validity have also been established in both normal and clinical samples (see Carlson & Putnam, 1993). The DES-II contains the same questions as the DES but uses a different response scale. Scores produced by this version are not significantly different to the original (Bernstein & Putnam, 1993). For each item, participants are required to select the percentage of time (0-100%) a given experience happens to them.

*The Sixteen Personality Factor Inventory (16PF).* The 16PF was developed by Cattell (1946) as a measure of personality. The complete version is a 185-item instrument that measures 16 primary personality factors and 5 global factors using a multiple-choice self-report format (see Cattell & Mead, 2008; Russell & Karol, 2002). The current study used a short version (56 items) comprising five subscales: Sensitivity (low scores = utilitarian, objective, unsentimental; high scores = sensitive, aesthetic, sentimental); Emotional Stability (low scores = reactive emotionally, affected by feelings; high scores = emotionally stable, adaptive); Openness to Change (low scores = traditional, conservative; high scores = open to change, flexible); Tension (low scores = relaxed, placid; high scores = tense, high energy) and Abstractedness (low scores = grounded, practical; high scores = abstract, imaginative) (Conn & Rieke, 1994). The psychometric properties of this scale are well established (Cattell & Krug, 1986; Conn & Rieke, 1994; Hofer & Eber, 2002).

## **Procedure**

Recruitment advertisements were placed upon special interest websites (i.e., mental health and spiritual interests) a social media website (i.e., Facebook),

TABLE 1  
*Descriptive Statistics for the EPSS, SES Subscales and 84-item SES (N = 224)*

Subscale	# of items	<i>M</i>	<i>SD</i>	Skewness	Kurtosis
EPSS	15	7.69	3.60	.06	-.81
Kundalini	11	4.73	2.80	.17	-.99
Peak Experience	7	5.15	1.94	-1.06	.32
Dark Night	7	4.30	1.74	-.42	-.52
Psychic Opening	13	8.28	3.24	-.61	-.43
Possession	8	2.12	2.13	.96	.21
UFO	6	0.79	1.19	2.14	5.76
Central Archetype	9	3.58	2.32	.45	-.47
Shamanic Crisis	10	4.98	2.56	.09	-.94
Past Life	5	2.58	1.65	-.07	-1.16
Near Death	8	4.10	2.02	-.07	-.46
SES (total)	84	40.62	16.77	-.14	-.40

and a local classifieds website (i.e., Gumtree). Participants were provided with a brief description of the research including a description of SE and its relationship to psychosis. They were informed that they were not required to have experienced either an SE or psychosis. Participants were guided to an online questionnaire, through which responses were submitted. All responses were anonymous.

## RESULTS

### Preliminary Analyses

Descriptive statistics for the EPSS and the 10 Spiritual Emergency Subscales are shown in Table 1.

Tests of normality showed that none of the subscales demonstrated a normal distribution, and a number of subscales displayed significant skewness and/or kurtosis. However, visual inspection of histograms showed that the EPSS, Kundalini, Dark Night, Central Archetype, Shamanic Crisis, Past Life and Near Death subscales approached a normal distribution. The total 84-item SES was normally distributed.

As can be seen in Table 2, there is a moderate to high degree of positive and significant interrelatedness amongst the ten SES subscales (with the exception of the UFO and Dark Night subscales).

### Planned Analyses

*Exploratory factor analysis.* Given that an aim of this study was to attempt to replicate Goretzki et al.'s (2009) results, it was deemed appropriate to remain consistent with their analyses, so that any differences in results would be due to the larger and different sample and not due to a different analysis. Goretzki et al. (2009) performed principal axis factor analysis (PAF) on SES subscale scores, citing a high degree of interrelatedness amongst the subscales. The

TABLE 2  
*Inter-correlations Among the 10 SES Subscales*

Subscale	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.
1. Kundalini	–	.49*	.57*	.64*	.61*	.40*	.56*	.67*	.56*	.50*
2. Peak Experience		–	.57*	.71*	.48*	.37*	.61*	.73*	.45*	.67*
3. Dark Night			–	.59*	.47*	.24	.52*	.60*	.40*	.43*
4. Psychic Opening				–	.50*	.44*	.64*	.73*	.55*	.64*
5. Possession					–	.31*	.54*	.53*	.41*	.40*
6. UFO						–	.41*	.47*	.40*	.41*
7. Central Archetype							–	.70*	.49*	.57*
8. Shamanic Crisis								–	.53*	.68*
9. Past Life									–	.49*
10. Near Death										–

Note: \* Correlation is significant at  $p < .001$  (two-tailed).

authors did not specify why they performed PAF on the ten subscale scores and not on the total 84 items. Using the ten subscale scores is based upon the assumption that the subscales are each unidimensional. To test this assumption, PAF with Oblimin rotation was performed for each of the ten subscales. Only the Peak Experience subscale returned a single factor solution, indicating that the subscales are not unidimensional. Thus, it was not deemed suitable to perform PAF on the SES using the subscale scores as variables.

Given that the data were not amenable to the same analysis performed by Goretzki et al. (2009), the decision was made to perform a PAF with Oblimin rotation on the 84 items of the SES. The Kaiser-Myer-Olkin measure verified the sampling adequacy for the analysis ( $KMO = .85$ ). Bartlett's test of sphericity  $\chi^2(3486) = 8578.22, p < .001$ , indicated that correlations between items were sufficiently large for PAF. The sample size ( $N = 224$ ) exceeded 200 (Guilford, 1954), although Hair et al. (1995) recommend a subject to item ratio of 20:1. However, Costello and Osborne (2005) state that there are no strict rules regarding sample size in FA, and small samples can be adequate if the data are strong enough.

The analysis yielded 24 factors with Eigenvalues  $>1$  (Kaiser, 1960). However, there is broad consensus in the literature that the Kaiser method of factor extraction is among the least accurate methods for factor retention, often resulting in the retention of too many factors (Costello & Osborne, 2005; Velicer & Jackson, 1990). Costello and Osborne state that the Scree test (Cattell, 1966) is the best option, which indicated that four factors should be retained. Further analyses were run selecting the retention of three, four and five factors, respectively.

The four-factor solution provided the most simple and interpretable solution, with labels as follows: Physical and Verbal Experiences, Insight and Inter-connectedness, Experience of Other Life Forms and Worlds, and Extrasensory Perception. The four factors had Eigenvalues of 18.22, 3.75, 3.23, and 2.63 respectively, and together accounted for approximately 30% of variance. The correlations between the four factors were between  $r = .26$  and  $r = .46$ , indicating a moderate relationship between factors. Items with cross-loadings above .3 were

deleted (see Costello & Osborne, 2005). Additional items were removed so that each factor (i.e., subscale) was unidimensional (Insight and Interconnectedness; Extrasensory Perception) or displayed two distinct dimensions (Physical and Verbal States distinguishes between ‘physical’ and ‘verbal’ states; Experience of Other Life Forms and Worlds distinguishes between ‘other life forms’ and ‘other worlds’). A total of 40 items were retained, presented in Table 3 (please note that each item is preceded with “Have you ever...”).

*Reliability.* Cronbach’s alpha for the 84-item SES (.95) and Goretzki et al.’s (2013) 30-item SES (.92) and the EPSS (.80) was very high. Internal reliability was calculated for the 40-item SES (.91) and each of the subscales identified in the previous section: Physical and Verbal States (.83), Insight and Interconnectedness (.89), Experience of Other Life Forms and Worlds (.69), and Extrasensory Perception (.73).

*Validity.* The criterion validity of the EPSS was examined by comparing scores with the reported experience of clinically diagnosed psychosis (i.e., psychotic episode, schizophrenia or bipolar disorder) and the prescription and/or consumption of medication. An independent samples *t*-test was used to compare the average EPSS score obtained for those reporting psychosis ( $N = 24$ ) compared to those reporting no psychosis ( $N = 200$ ). The test was statistically significant, with those reporting psychosis ( $M = 10.25$ ,  $SD = 3.69$ ) obtaining higher scores on the EPSS than those reporting no psychosis ( $M = 7.38$ ,  $SD = 3.47$ ),  $t(222) = -3.93$ ,  $p < .001$  (two-tailed),  $d = .82$ . An independent samples *t*-test was also used to compare the average EPSS score for those reporting the prescription and/or consumption of medication ( $N = 78$ ) compared to those reporting no medication ( $N = 146$ ). The test was statistically significant, with those reporting the prescription and/or consumption of medication ( $M = 8.76$ ,  $SD = 3.49$ ) obtaining higher scores on the EPSS than those reporting no medication ( $M = 7.11$ ,  $SD = 3.54$ ),  $t(222) = -3.34$ ,  $p < .001$  (two-tailed),  $d = .47$ .

Subsequently, the criterion validity of the 84-item SES was examined by assessing its relationship with the EPSS. The correlation was positive and moderate to large,  $r(222) = .62$ ,  $p < .0001$  (two-tailed). In addition, we note that the relationship between the SES and the Lie scale was not significant,  $r(222) = .01$ ,  $p = .920$  (two-tailed). In contrast, the relationship between the EPSS and the Lie Scale was weak but significant,  $r(222) = .18$ ,  $p = .01$  (two-tailed).

In accordance with Goretzki et al. (2013), we assessed the relationship between the 30-item SES and the EPSS. The relationship was positive and moderate to large,  $r(222) = .54$ ,  $p < .0001$  (two-tailed). In addition, we note that the relationship between the 30-item SES and the Lie scale was not significant,  $r(222) = -.03$ ,  $p = .705$ . The relationship between the 40-item SES and the EPSS was also assessed,  $r(222) = .56$ ,  $p < .0001$  (two-tailed). The relationship between the 40-item SES and the Lie Scale was not significant,  $r(222) = .01$ ,  $p = .08$ , (two-tailed).

TABLE 3  
*Direct Oblimin ( $\Delta = 0$ ) Rotated Factor Structure of the 40-item SES*

Item	Factor 1	Factor 2	Factor 3	Factor 4
... experienced yourself performing involuntary, previously unknown, yogic postures or hand positions (mudras)? (Kundalini)	.65			
... experienced your hands or body taking on strange contortions or making involuntary movements? (Possession)	.62			
... experienced intense involuntary body movements such as shaking, vibrations or jerking for no apparent reason? (Kundalini)?	.58			
... experienced your eyes and face spontaneously taking on wild and/or terrifying expressions? (Possession)	.56			
... experienced dramatic episodes of choking, projectile vomiting and/or frantic physical activity? (Possession)	.51			
... experienced marked differences in your breathing pattern for no apparent reason? (Kundalini)	.49			
... heard voices, music or the repetition of mantras, without knowing where they're coming from? (Kundalini)	.48			
... experienced your voice spontaneously taking on a deep and otherworldly quality? (Possession)	.47			
... experienced the spontaneous production of complex visual geometrical images or chants inside your head? (Kundalini)	.47			
... spontaneously burst into sacred songs and dances? (Shamanic)	.43			
... ever found yourself spontaneously producing previously unknown words or sounds? (Kundalini)	.41			
... experienced intense sensations of energy and/or heat streaming along your spine? (Kundalini)	.33			
... experienced a greater awareness of the interconnectedness of all things? (Psychic Opening)		-.73		
... experienced a state of profound peace and beauty? (Peak Experience)		-.70		
... had an extraordinary experience that has prompted you to change the way you live in a more positive and loving way? (Near Death)		-.66		
... experienced the sense of becoming one with humanity, nature, the creative energy of the universe and/or God? (Peak Experience)		-.64		
... spontaneously attained profound insights into the nature of reality? (Peak Experience)		-.63		
... experienced sensations of deep peace, tranquility, joy, and overwhelming waves of bliss? (Peak Experience)		-.62		
... spontaneously gained a greater understanding of the cosmos? (Psychic Opening)		-.60		
... felt a sense of overcoming the usual divisions of the body and mind and reaching a state of complete inner unity and wholeness? (Peak Experience)		-.55		
... experienced a greater awareness of your own potential? (Psychic Opening)		-.54		
... had an extraordinary experience that has fundamentally challenged your understanding of reality? (Near Death)		-.54		
... experienced the destruction of an old sense of identity followed by rebirth and a renewed purpose for living? (Central Archetype)		-.53		
... experienced a string of events that "seemed to be connected" at some deeper level? (Psychic Opening)		-.51		
... experienced an increased connection with animals and plants and the elemental forces of nature? (Shamanic)		-.43		
... been led or taken away by what you believed to be an extraterrestrial spacecraft? (UFO)			.57	

Item	Factor 1	Factor 2	Factor 3	Factor 4
... been led or taken away by someone who appeared to be an extraterrestrial being? (UFO)			.51	
... been taken to a distant land or an "otherworldly" landscape, unlike anything you have seen on earth? (UFO)			.49	
... made contact with someone whom you believed to be an extraterrestrial being? (UFO)			.42	
... found yourself out of your physical body, passing through some kind of dark tunnel? (Near Death)			.37	
... undergone a scientific or medical examination by someone who you believed to be an extraterrestrial being? (UFO)			.37	
... experienced insights and/or visions, in which you received secret or sacred teachings and healing powers to take back to the "ordinary" world? (Shamanic)			.35	
... found yourself outside of your physical body? (Near Death)			.33	
... been aware of the presence of spiritual entities? (Psychic Opening)				.52
... spontaneously received accurate information about things in the past, present or future, by extra-sensory means? (Psychic Opening)				.52
... experienced a connection with the afterlife or communication with your ancestors? (Central Archetype)				.46
... experienced precognition, knowing of an event before it actually occurred? (Psychic Opening)				.41
... been able to see auras around people, animals, plants or other living things?				.37
... experienced sensations such as smelling the scent of sandalwood, perfume or incense without knowing where it's coming from? (Kundalini)				.35
... experienced a precognitive dream providing you with formerly unknown information? (Psychic Opening)				.34

Note. Each item is preceded with "Have you ever..."

*Standard Multiple Regression.* A standard multiple regression was performed between SES (84-item) as the dependent variable (DV) and transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension as the independent variables (IVs). Table 4 displays the correlations between variables, the intercept, the standardized regression coefficients ( $\beta$ ), the semi-partial correlations ( $sr^2$ ), and  $R^2$ .  $R$  for regression was significantly different from zero,  $F(7, 210) = 47.48, p < .0001$ . The adjusted  $R^2$  value of .60 indicates that 60% of the variability in SES scores is predicted by transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension. Transliminality was a significant predictor of SES scores.

A standard multiple regression was performed between SES (40-item) as the dependent variable (DV) and transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension as the independent variables (IVs). See Table 5.  $R$  for regression was significantly different from zero,  $F(7, 210) = 40.57, p < .0001$ . The adjusted  $R^2$  value of .56 indicates that 56% of the variability in SES scores is predicted by transliminality,

TABLE 4  
*SES (84 items) Related to Personality Traits (N = 218)*

Variable	TENS	ABST	OPEN	SEN	EMOT	DES	TRANS	SES	$\beta$	$sr^2$
TRAN								.77*	.68*	.30
DES							.36*	.28*	.01	.00
EMOT						-.27*	-.18*	-.13	.00	.00
SEN					-.02	.03	.25*	.25*	.03	.00
OPEN				.21*	.06	.15*	.42*	.43*	.09	.00
ABST			.35*	.25*	-.45*	.27*	.46*	.43*	.09	.00
TENS		.14*	-.17*	-.06	-.37*	.16*	.00	-.07	-.07	.00
<i>M</i>	20.18	24.41	35.46	28.32	21.03	21.03	55.08	27.53		
<i>SD</i>	4.71	5.25	3.94	3.56	5.12	5.12	44.70	4.34		

Note. TENS = tension; ABST = abstractedness; OPEN = openness to change; SEN = sensitivity; EMOT = emotional stability; DES = dissociation; TRANS = transliminality; SES = SES scores (84 items). Intercept = -52.56.  $R^2 = .61$ . \* $p < .05$ .

dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension. Transliminality and openness to change were significant predictors of SES scores.

A standard multiple regression was performed between EPSS as the DV and transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension as the IVs. See Table 6. *R* for regression was significantly different from zero,  $F(7, 210) = 26.74$ ,  $p < .0001$ . The adjusted  $R^2$  value of .45 indicates that 45% of the variability in EPSS scores is predicted by transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension. Transliminality, dissociation and emotional stability were significant predictors of EPSS scores.

## DISCUSSION

The current study attempted to replicate Goretzki et al.'s (2009) factor solution for the SES with a larger sample. An additional aim was to assess whether transliminality, dissociation, emotional stability, sensitivity, openness to change, abstractedness and tension predicted scores on the SES and EPSS.

TABLE 5  
*SES (40 items) Related to Personality Traits (N = 218)*

Variable	TENS	ABST	OPEN	SEN	EMOT	DES	TRANS	SES	$\beta$	$sr^2$
TRAN								.74*	.65*	.27
DES							.36*	.26*	.02	.00
EMOT						-.27*	-.18*	-.08	.04	.00
SEN					-.02	.03	.25*	.20*	-.02	.00
OPEN				.21*	.06	.15*	.42*	.45*	.14*	.01
ABST			.35*	.25*	-.45*	.27*	.46*	.40*	.08	.00
TENS		.14*	-.17*	-.06	-.37*	.16*	.00	-.08	-.06	.00
<i>M</i>	20.18	24.41	35.46	28.32	21.03	21.03	55.08	27.53		
<i>SD</i>	4.71	5.25	3.94	3.56	5.12	5.12	44.70	4.34		

Note. TENS = tension; ABST = abstractedness; OPEN = openness to change; SEN = sensitivity; EMOT = emotional stability; DES = dissociation; TRANS = transliminality; SES = SES scores (40 items). Intercept = -26.16.  $R^2 = .58$ . \* $p < .05$ .

TABLE 6  
*EPSS Related to Personality Traits (N = 218)*

Variable	TENS	ABST	OPEN	SEN	EMOT	DES	TRANS	EPSS	$\beta$	$sr^2$
TRAN								.59*	.48*	.14
DES							.36*	.42*	.16*	.02
EMOT						-.27*	-.18*	-.41*	-.29*	.05
SEN					-.02	.03	.25*	.10	-.04	.00
OPEN				.21*	.06	.15*	.42*	.24*	.05	.00
ABST			.35*	.25*	-.45*	.27*	.46*	.39*	-.01	.00
TENS		.14*	-.17*	-.06	-.37*	.16*	.00	.13	-.00	.00
<i>M</i>	20.18	24.41	35.46	28.32	21.03	21.03	55.08	27.53		
<i>SD</i>	4.71	5.25	3.94	3.56	5.12	5.12	44.70	4.34		

Note. TENS = tension; ABST = abstractedness; OPEN = openness to change; SEN = sensitivity; EMOT = emotional stability; DES = dissociation; TRANS = transliminality; EPSS = EPSS scores. Intercept = .08.  $R^2 = .47^*$ .  $*p < .05$ .

The results showed that the 84-item SES was normally distributed. However, a number of the ten SES subscales did not approximate a normal distribution. In addition, there was a high level of interrelatedness between the ten SES subscales, indicating that there is substantial overlap between the various categories of SE.

It was not possible to replicate the factor analysis performed by Goretzki et al. (2009), due to the multidimensionality of the SES subscales, which the authors used as variables. As such, factor analysis was performed on the total 84 items of the SES, which returned four factors, labeled: Physical and Verbal Experiences (a 12-item multidimensional subscale, distinguishing between ‘physical’ and ‘verbal’ states); Insight and Interconnectedness (a 13-item unidimensional subscale); Experiences of Other Life Forms and Worlds (an eight-item multidimensional subscale, distinguishing between ‘other life forms’ and ‘other worlds’); and Extrasensory Perception (a seven-item unidimensional subscale).

The results of the present study indicate that the SES is not a unidimensional scale. This finding is inconsistent with the results of Goretzki et al. (2009) and Bronn and McIlwain (2014). The present study’s results are consistent with those by Cooper, Rock, Harris and Clark (2015), who conducted an exploratory factor analysis on Goretzki et al.’s (2013) 30-item SES. Cooper et al.’s analysis returned a 4-factor solution, with subscales (i.e., Loss of Identity/Reality; Interconnectedness/Spiritual Opening; Experiences of Another Time/Place/World; and Experiences of Spiritual Entities/Energies) that captured themes similar to those highlighted in the present study. However, the factors resulting from Cooper et al.’s analysis were not as ‘neat’ or ‘easily interpretable’ as those obtained in this study (see Costello & Osborne, 2005). This may be because Goretzki et al. (2013) created the 30-item SES by selecting those items that correlated highest with their single ‘spiritual emergency’ factor.

When we consider the combined results of the present study and Cooper et al. (2015), two main points emerge: (a) the SES is *not* a unidimensional scale, and (b) the 40-item SES outlined in this study displayed good internal reliability, and the ‘neat’ dimensionality of each subscale provides superior clinical utility

relative to Goretzki et al.'s (2013) 30-item SES. The wider implication of these results is that SE may not be a unidimensional construct.

The results of this study suggest that the EPSS is positively related to psychosis indicators (see also Goretzki et al., 2009). Mean scores for the 84-item SES, 30-item SES and 40-item SES correlated moderately to strongly with the EPSS. Given that it is widely acknowledged by transpersonal researchers that SE may appear identical to clinical psychosis (Bragdon, 2006; Grof & Grof, 1989, 1991; Lukoff, 1985; Perry, 1974; Thalbourne, 2003), these positive correlations between the SES and EPSS provide some degree of convergent validity. Nevertheless, we question the face validity of the SES as a measure of SE given that the vast majority of items do not appear to capture the *crisis* aspect of SE. As noted earlier, this crisis aspect is a key component of SE (Grof & Grof, 1989, 1991; Lucas, 2011) and, in fact, may be the only thing that differentiates it from spiritual *emergence* (Kane, 2005).

If the SES is, in fact, quantifying spiritual emergence rather than SE, then one needs to reconcile this lack of face validity with our previously reported finding that the SES is positively correlated with the EPSS. An inspection of its items reveals that the EPSS appears to be weighted towards the positive symptoms of psychosis (confirmed by Bronn & McIlwain, 2014), which have been largely associated with spiritual phenomena (e.g., Goulding, 2004, 2005; Jackson, 1997; Kelley, 2011) and are not always associated with pathology (Johns & van Os, 2001; Peters, 2001). Thus, if we consider that the SES is measuring *spiritual emergence* and that the EPSS is measuring the *positive symptoms* of psychosis, a positive relationship between the scales might be expected, and it does not necessarily follow that the SES is a valid measure of SE.

A number of personality variables hypothesised to predict SE and psychosis were examined. Transliminality statistically significantly predicted scores on the 84-item SES, the 40-item SES and EPSS, and these relationships were relatively strong. This observation supports the notion that transliminality underlies both spiritual and psychotic phenomena (Claridge, 2010; Clarke, 2010).

Dissociation was a statistically significant predictor of EPSS but not SES scores. This finding may be interpreted in light of the suggestion that the SES is measuring spiritual *emergence* and not SE. If this is the case, our results are consistent with the fact that two of the three subscales of the DES measure pathological forms of dissociation (i.e., depersonalisation/derealisation and amnesia), which would not be expected to relate to healthy spiritual emergence. Although dissociation was not a statistically significant predictor of SES scores, the two variables were positively correlated, possibly due to the third DES subscale (i.e., absorption). Future research into the relationships between these variables may include an investigation concerning the contribution of trauma as a possible mediating factor. For example, Moskowitz, Read, Farrelly, Rudegeair, and Williams (2009) suggested that dissociative processes mediate between early trauma and later psychotic symptoms. This point is supported by findings that dissociation mediates the relationship between

childhood traumas and hallucinations (Perona-Garcelan et al., 2012; Varese, Barkus, & Bentall, 2012).

Similarly, emotional stability was a statistically significant predictor of EPSS scores but not SES scores. However, emotional stability would not necessarily be expected to predict SES scores if the SES is, in fact, quantifying spiritual *emergence* rather than SE. It is only when the experience reaches a point of *crisis* (i.e., SE) that it may be expected to result in a significant degree of emotional instability (e.g., Lucas, 2011).

Although not statistically significant predictors, abstractedness, sensitivity and openness to change were positively correlated with 84-item SES scores. This finding supports the view that SE often involves thought processes marked by symbolism and mythological themes (Lukoff & Everest, 1985) and extreme sensitivity to the suffering of others and the world (Lucas, 2011). This observation also supports the contention that openness to change may be necessary to achieve the positive transformation which often accompanies the successful integration of spiritual experiences (e.g., Grof & Grof, 1989, 1991; Jung, 1983; Laing, 1967; Mezirow, 1997; Perry, 1974, 1999). Openness was a significant predictor of 40-item SES scores, further supporting the validity of the scale as a measure of spiritual emergence (see Mezirow, 1997).

Although not a statistically significant predictor, abstractedness was positively correlated with EPSS scores. This finding deviates from research linking psychosis to deficits in abstract thinking (Carpenter & Chapman, 1982; Herron, 1962; Johnson, 1966; Watson, 1973, 1976). However, such deficits have been found in relation to poor premorbid functioning, which the EPSS does not assess. The EPSS is also not able to assess severity of psychopathology, which may influence this variable (Akiskal & Akiskal, 1998). The findings support research that links creativity, which is facilitated by abstract thinking (Fink et al., 1995; Forster et al., 2004; Jia et al., 2009; Ward, 1995) to both schizophrenic and bipolar affective forms of psychosis (Claridge & Blakely, 2009), although the EPSS does not distinguish between schizotypal/affective symptoms. Additionally, given previous findings that the positive symptoms of psychosis are strongly related to creativity (Claridge & Blakely, 2009; Nettle, 2006; Schuldberg, 2001; Schuldberg et al., 1988) and the fact that the EPSS appears to focus more heavily on the positive symptoms (although it is unable to distinguish between positive/negative symptoms), this result is not surprising.

It was predicted that openness to change would correlate negatively with the EPSS and may provide a way of differentiating between SE and psychosis. Openness was not a statistically significant predictor of EPSS scores and displayed a positive, weak to moderate, correlation. This result might be expected if the EPSS is in fact measuring the *positive symptoms* of psychosis. For example, Ross, Lutz, and Bailley (2002) found that Openness to Experience, as measured by the NEO-PI-R (Costa & McCrae, 1992), significantly predicted negative psychotic symptoms in a negative direction, while also predicting positive psychotic symptoms in a positive direction.

It was predicted that sensitivity and tension would be positively correlated with EPSS scores, but neither variable showed statistically significant relationships with this scale. This result is not consistent with findings indicating that psychosis is marked by interpersonal hypersensitivity (Masillo et al., 2012) and stress-sensitivity (Myin-Germeys & van Os, 2007), although correlations were in a positive direction. Contrary to expectations, tension was not a statistically significant predictor of SES scores. Although the finding was non-significant, these variables displayed a negative correlation, further supporting the contention that this scale is not sufficiently capturing the crisis aspect of SE.

Future research might extend Bronn and McIlwain's (2014) findings, which suggest that SE may be more closely associated with the positive rather than the negative symptoms of psychosis. In order to identify possible differentiating factors, it is necessary to explore SE in relation to various aspects of psychosis. This may be achieved by investigating SE in relation to schizotypy, which addresses positive/negative symptomatology and *psychosis-proneness* in the general population; investigating schizophrenic and bipolar disorder groups, to distinguish between schizotypal and affective psychoses; and by the use of certain scales or clinician ratings to assess premorbid functioning and severity of psychopathology.

Furthermore, additional research into the contribution of personality towards the development and expression of SE and psychosis is recommended. Specifically, studies could further investigate the contribution of transliminality, dissociation, openness, abstractedness/creativity, emotional instability and schizotypy, along with possible mediating factors such as trauma. Such research could also follow-up Rooijakker's (2013) finding that SE may be related to ego resilience. Further exploration of a proposed spiritual-psychosis continuum (Clarke, 2010) also appears to be a prudent avenue for future research.

It is proposed that the SES requires modification if it is to be a valid measure of SE. One way in which the SES might be adapted in order to address the issue of spiritual emergency and the extent to which individuals experience crisis associated with such experience would be to incorporate the use of a Visual Analogue Scale (VAS) measuring subjective distress or crisis. VASs are utilised extensively within research, psychological assessment and psychological intervention to assess constructs such as psychological distress, mood, anxiety, pain and quality of life and are considered to have good reliability and validity in measuring such variables (e.g., de Boer et al., 2004; McCormack, de L Horne, and Sheather, 1988). Pairing a VAS that measures subjective distress or psychological crisis associated with each of the experiences described within the SES would allow for the assessment of the crisis aspect of SE, which is not sufficiently addressed in the current versions of the scale.

In conclusion, it appears that we are a step closer to having valid measures of SE and clinical psychosis and an understanding of a number of personality traits that may predispose individuals to these experiences. The validation of these instruments has far reaching implications, from clinical utility to

a broader body of research that may help shed further light on the persistent issue of the differentiation between SE and psychosis.

## NOTES

<sup>1</sup> Rock and Krippner (2007, 2011a, 2012) argued that states of consciousness are more appropriately referred to as states of phenomenology.

<sup>2</sup> On the link between shamanism and psi phenomena see Storm and Rock (2009a,b) and Rock and Krippner (2011b).

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## BOOK REVIEWS

DUFRECHOU, JAY (2015). *Moving Through Grief, Reconnecting with Nature*. London, UK: Muswell Hill Press. xiii + 348 pp. ISBN: 1908995106. Paperback, \$24.95. Reviewed by Dorit Netzer.

*Moving Through Grief, Reconnecting with Nature* is the fruit of the author's two decades inquiry into the spontaneous expression of grief when connecting with various aspects of the natural world. Dufrechou's reflective study illuminates how an unanticipated flood of emotions in response to nature, the experience of loss, when given the attention and space to be recognized and reflected upon, prompts a transformative shift, the significance of which is difficult to deny. He begins with a personal experience of being moved to tears when noticing the sound of rain falling on the roof during an early morning meditation at his former home in San Jose, CA—an experience that catalyzed moving with his wife and children away from that suburban neighborhood to Montana, where he had the opportunity to be closer to the land and its inhabitants.

Nature takes all sorts of forms in this book, filled in images of connecting with and feeling the separation from nature through a range of emotions, reflectively expressed, often poetically, at times through humorous anecdotes. From that sound of rain on the roof, to a hike in the woods, camping under the stars, encounters with wild animals, cultivating relationships with domestic animals, and the glimpses of nature in a big city—when noticed and recognized for their contribution to the otherwise human-centric environment. Nature is everywhere, and we are offered to consider how far have we removed ourselves from it, how do we position ourselves in this inherent relationship? Do we truly know nature, or do we merely know about it? Which is more real?

The author's personal experience was expanded over time through inquiry with research participants, who experienced similar transformational shifts in response to nature, and who provided written accounts, which constituted the data of his doctoral dissertation (Dufrechou, 2002), an intuitive inquiry (Anderson, 2004; 2011). Many of these reflective narratives and additional ones, which he gathered in the past decade, are included in this manuscript. Perhaps because the author continued fleshing the core of his original study for many years after its conclusion, adding new insights and incorporating subsequent experiences, this manuscript does not read as academic, and yet it balances critical analysis, which has likely stemmed from extensive literature review, with a conversational voice that addresses the reader directly and is captivating in its self-disclosure and authenticity of what he calls “the sacred within nature” (Dufrechou, 2015, p. 116).

*Moving Through Grief, Reconnecting with Nature* is a book about human relationships with nature and concern for the fate of the natural world. But Dufrechou is not an ecologist or an environmental activist. As a transpersonal researcher, he conceptualizes a particular socio-cultural and psychological understanding of an ecospiritual crisis—“our personal histories with parts of

nature are interwoven deeply within us, within our families, in our communities, in our heritage, and deeply inside various levels of the psyche” (2015, p. 134). His constructs, both intuitive and methodically laid out, spring from direct experiences, and anchored in paradigms such as conditioning, consensus reality, postmodernity, and monoculture. In so doing, Dufrechou illuminates a particular kind of inside-out/outside-in movement, alluded to by T. K. Whipple<sup>1</sup> when he wrote: “Our forefathers had civilization inside themselves, the wild outside. We live in the civilization they created, but within us the wilderness still lingers. What they dreamed, we live, and what they lived, we dream” (as quoted in Dufrechou, 2015, p. 299). Reading this book, it becomes clear that our current, shared state of being begs yet another turn, finding ways on personal, communal, and global levels to reconnect with lived-experiences that soften the dichotomy in Whipple’s image, and where dream and waking life are closer to one another. In that sense, healing through nature is made possible.

This notion is echoed in Dufrechou’s stated purpose for this book. His “desire to invite readers into ... a range of experiences [in response to nature], in many ways unique to each individual, but with a number of common threads .... My purpose is less to explain and more to consider where these experiences come from and where they lead” (2015, p. 9). His hope, too, is both stated as it is felt when reading his analysis of the socio-cultural and ecological predicaments as proposed by scientists, philosophers, and through the arts—images from literature, music, film and television, which amplify the author’s voice with the already familiar voices of iconic characters from Scott Fitzgerald’s *Great Gatsby*, to Francis Ford Coppola’s *Apocalypse Now*, to Elton John’s *Rocket Man*. Moreover, Dufrechou’s hope is deeply felt as a collective hope when reading the various narratives offered by the many contributors: “The grief experienced by me and others in response to nature is not separable from the awareness that our species has become a scourge on the planet ... Opening to ourselves as nature, finding the sacred in nature, just might lead to transformation that will make it difficult for us to objectify and kill each other. Life might become sacred, human and otherwise” (2015, p. 11).

Dufrechou guides the reader through the complexity of how nature and our relationship with it have been reshaped by humans over millennia, and how when reconnecting with nature we can recover nature’s innate shaping of us. Contemplation, meditation, embodied presence, and imagery-rich dreaming alert us that not all is well, and demand outward action to reclaim an interconnected sense of home. Actions such as shifting our attention and care toward nature, in turn, lead us back inside with compassion. We pause to wonder and relate to life and our mortality in a new way—a way that uniquely presents itself in moments of silence and deep listening. To Dufrechou it is a paradox: “awareness of suffering mixed with gratitude for the beauty of life... We come here to love and yet nothing is permanent. We can close off our hearts or we can open them, and then feel it all” (2015, p. 283).

This book unfolds thematically, eventually returning to the author’s root intuition, initially embodied and illuminated through years of attention to his

felt-senses and listening to others' accounts. I expect that many will resonate with the accounts of encounters with nature and the experiences of grief by individuals from all over the world. In reading this book, I had to take many breaks, feeling saturated by the stories of others, and needing to return to the silence of my own communion with nature, whether looking out the window, or stepping out into the engulfing landscapes that surrounded me at the time. This book is also most suitable as assigned reading for undergraduate and graduate students in the fields of transpersonal studies at large, and particularly in the context of ecopsychology and ecospirituality. My inkling is that those who are familiar with the foundational concepts Dufrechou presents throughout the book, such as states of consciousness, exceptional human experiences, mindfulness, phenomenology, embodiment, wholeness, symbolism, synchronicity, participatory spirituality, and Holotropic Breathwork, to name a few, would still appreciate how he weaves them together as theoretical scaffolding to an otherwise flowing account of a long journey that has come full circle.

#### NOTE

<sup>1</sup>In his final remarks, Dufrechou offers this old quote of Whipple, as found in Larry McMurtry's 1985 Pulitzer Prize-winning western novel *Lonesome Dove*, later turned into a film.

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#### The Author

Jay Dufrechou, J.D., Ph.D., worked for many years as an attorney before undertaking doctoral studies at the Institute of Transpersonal Psychology (ITP), now Sofia University, where he currently teaches transpersonal research ethics and dissertation research. Dividing his time between the mountains of Montana and New York City, Dufrechou works primarily as a mediator and consultant in conflict resolution. He is active in the international Holotropic Breathwork community emerging from the work of Stanislav and Christina Grof.

#### The Reviewer

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ALMENDRO, MANUEL. (2013). *Chaos, Psychology & Psychotherapy*. Houston, TX: Lantia Publishing. 390 pp. ISBN: 978-16-29341-72-9. Paperback, \$21.95. Reviewed by Terry Marks-Tarlow.

Each of us walks through life carrying unconscious assumptions about how everything fits together. We sport implicit understandings of how A relates to B plus how events in the present relate to events in the future. Sometimes these assumptions emerge from religious dictates, as in the belief that God creates and controls all aspects of life. Sometimes implicit assumptions emerge from emotional symptoms or psychopathology, as in the experience of being a victim whose fate is fatalistically determined by forces outside of one's control. In the current social climate, many if not most of us form pictures of universal workings based on our understanding of science. At the same time, readers of this journal who are particularly interested in transpersonal events may find themselves at the fringes of traditional science. For, even in the face of sound empirical studies, many hard core scientists remain staunch disbelievers of phenomena such as telepathy, telekinesis, precognition, and other non-ordinary occurrences.

The central theme of Manuel Almendro's recently translated book (from Spanish) is that the reductionist stance that underlies traditional Western science is the kiss of death for all human pursuits, especially for conscious experience, acts of self-determinism and true creativity in the face of life's apparent mysteries. In the first half of *Chaos, Psychology & Psychotherapy*, Almendro outlines the history of reductionism, which is the belief that all complex phenomena can be broken down and effectively analyzed according to simpler components. Reductionism goes hand-in-hand with strict determinism, which is the idea that if we know the starting position of each molecule in the universe plus all the laws that govern their interactions, we can predict where each and every molecule where go next, as far into the future as we care to venture.

In the history of Western science, when these ideas are applied to the pecking order of scientists, physics has been crowned "king" of the sciences, with psychology considered a mere "soft" if not "pseudo" science in need of reduction to biological and material substrates in the brains and bodies of people. Little room exists for a starring, much less causal role of conscious

awareness. Our internal experience is relegated instead to the supporting role of being an epiphenomenon, that is, a secondary effect or mere by-product of electrical and chemical events in the brain.

Most importantly, Almendro's agenda is to protest this stance of reductionism and strict determinism, which results in treating people and animals mechanically, as if robots devoid of inner promptings. Consider the movement of behaviorism, for example, so popular in the 1960s, which deemed all thoughts, emotions, and other mental events as irrelevant and then metaphorically shoved them into a "black box," which was never meant to be opened. This is where Almendro makes a poetic and passionate plea for a science to support interiority, consciousness, supra-rationality and all that is beyond complete understanding, prediction, or control.

Consider Almendro's story of visiting a house in the country where the owner had hundreds of sheep that "looked like stuffed and immutable dolls." When Almendro protested that the sheep were sick, the owner responded, "No way! They just got a visit from the vet" and were now filled with medication, antibiotics, and stimulant cocktails aimed to *prevent* them from getting sick and to increase their production. In Almendro's words:

It was here that I bore witness to a direct consequence of tactical determinism: the exploitation of the living being converted into a machine, undertaken in the interest of economic gain, and based on some initial medicine-like principles which make it impossible for the machine (i.e., the animals) to escape from the desired commercial trajectory. That is of course until the complexity and unpredictability of nature steps in and blows everything up, and those who seek to determine it—ourselves, today's experimenting techno-scientific human beings—ultimately end up being the victims of their own deception. Thus our efforts are rewarded with mad cows, dioxins, acid rain, global warming, viral mutations, and illnesses...  
(p. 100)

In the second half of the book, Almendro outlines a different kind of science that is kinder to living creatures, partly through being more holistic in focus. Chaos theory is introduced to turn all previous assumptions upside down. Rather than complex events *reduced* to simpler bases, complexity *emerges* instead, indivisibly and unpredictability from simple bases and a few rules of interaction. In nature, a little bit of chaos goes a long way to shake things up. What looks random on the surface can still have underlying order, yet even with a complete understanding of the patterns of every molecule in the present moment, chaos theory tells us it is impossible to predict future positions or patterns. Meanwhile, dissipative systems, as studied by Ilya Prigogine, appear to defy the entropic degradation of the universe specified by the second law of thermodynamics. Amid the slow heat death, localized pockets of increased complexity emerge due to the presence of open systems that exist in far from equilibrium conditions and maintain continual exchanges of matter, energy, and information with their environments.

Almendro celebrates and elevates these new ideas, rightly believing they represent a science of human beings where there lies a primary role for consciousness, including its non-ordinary states. In the final section of his book, Almendro attempts to apply these new concepts to psychotherapy. He identifies human moments of emergent crisis as states of chaos and resists categorizing the resulting symptoms as psychopathological states in need of elimination. Instead, these symptoms are viewed as necessary, non-ordinary states of consciousness signaling possibilities for positive change and healing. Finally, Almendro includes a couple of brief and complicated case histories to exemplify these ideas in action.

Dear reader, I confess that as a champion of nonlinear dynamics plus as a psychologist and author dedicated to applying contemporary science to psychotherapy, I was primed to love this book. Unfortunately, this was not my experience at all. Instead, I struggled mightily to read *Chaos, Psychology & Psychotherapy*. While the main theses are sound and Almendro's agenda to elevate contemporary science to the forefront is highly worthy, the scientific aspect of this book is weak. Almendro careens wildly between presenting ideas as scientific models and presenting ideas as vague metaphors, without identifying which he is doing when. Almendro's writing is often confusing, if not incorrect. Consider these assertions:

We understand that "attractor" and "fractals" have a point in common, since every attractor would correspond to the start of a fractal...In psychotherapy the symptom, within the "positivation of the pathological" could be the expression of an attractor that responds to the emergence of a sensitivity in the patient as a call for attention, so that the patient himself is guided towards a transformation of greater or lesser consequence, which will possibly begin with partial transformations that would constitute fractals of his psychic life...The attractor will therefore mark a point of instability towards which the system will direct itself." (p. 247)

Chaotic attractors don't correspond to the start of a fractal, because most chaotic attractors are characterized from the start by fractal structure. While some attractors are highly unstable, such as the chaotic or "strange" variety, others are highly stable, such as the point or cyclical variety. Regularity in structure doesn't lend itself readily to change. Meanwhile, even chaotic attractors indicating instability don't necessarily indicate the onset of change. Consider people who suffer from a diagnosis of Borderline Personality Disorder. Their lives are filled with chaotic transitions and instability, yet these continual crises don't necessarily indicate fundamental change. If change is to come, it will probably emerge relationally, from the influence of coupled dynamics within a healing dyadic process.

Almendro's book emerged from ideas dating back to the 1990s. As a result, the underlying science as well as its application to psychology are sorely outdated. Chaos theory has given way to complexity theory at the

center of application to human beings and the mind/body/brain plus self/other relationships. In my opinion, interpersonal neurobiology is at the forefront of how complexity theory applies to human beings. Whether in development or psychotherapy, interpersonal neurobiology is a 2-person perspective that views the relationship between people as primary for tuning minds, brains, and bodies of emergent, yet interdependent individuals. Unfortunately, Almendro's book lacks the developmental, evolutionary, as well as a fundamentally relational perspectives afforded by more contemporary work.

Meanwhile, the book is filled with typographical errors. The most distracting element is a host of copy-edited mistakes surrounding hyphenations at the end of lines. Here are two of countless examples, "underl-ying" and "occu-rred." It is unclear how much his opaque choice of words and phrases come from the author versus the translator, but Almendro appears to make up words and phrases, such as "positivation of the pathological." I found myself reading many sentences two or three times, but still remained unsure of the intended meaning. Finally, the absence of a subject index is glaring, rendering the job of reviewer particularly difficult.

But grumblings aside, a lot of scholarship did go into the making of this book, especially surrounding the history of determinism. Almendro tackled the highly ambitious aim of changing the whole paradigm of underlying assumptions within clinical psychology. Especially with respect to transpersonal phenomena, I believe he is on the right track. The notion of open boundaries between self, world, and other definitely helps to model fluid borders between mind and brain and between inner and outer events.

#### The Author

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#### The Reviewer

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exhibition of psychotherapist art entitled “Mirrors of the Mind: The Psychotherapist as Artist.”

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HANH, THICH N. (2015). *Silence: The power of quiet in a world full of noise*. New York, NY: HarperOne. 189 pp. ISBN: 9780062224699, Hardcover, \$24.99. Reviewed by Julie Gohman.

The Venerable Thich Nhat Hanh, referred to by many people in the Buddhist community as “Thầy,” is perhaps known best for his work as a peace activist and Buddhist monk. However, this Zen master is fast becoming one of the world’s most beloved authors about the art of mindfulness as well. Building on a number of prior publications, such as the classic *The Miracle of Mindfulness* (Beacon Press, 1975), and the more recent *Peace is Every Breath* (HarperOne, 2011), Thich Nhat Hanh explores in this new book how to find the silence within ourselves. As he writes, “To be alive and walk on the Earth is a miracle, and yet most of us are running as if there were some better place to get to” (Nhat Hanh, 2015, p. 3). Thich Nhat Hanh reminds us of the freedom and joy that is ours when we stop, breathe, and still our mind; when we stop all the noise and come home to the here and now.

#### **Four Kinds of Food**

Thich Nhat Hanh shares in the beginning that in Buddhism there are four kinds of food, the “Four Nutriments” (Nhat Hanh, 2015, p. 25). They are edible food, sense impressions, volition, and consciousness (both individual and collective). Edible food is fairly self-explanatory and easy to understand; it is the food we eat every day. The second food, sense impressions, is the sensory experiences we take in through our eyes, ears, nose, tongue, body, and mind. The third nutriment is volition. Volition means our will, desire and concern and affects our decisions and actions in life. The fourth food is our consciousness, meaning our individual consciousness, as well as the collective consciousness that exists all around us. It is through mindful awareness that we come to see how each of these four nutriments affects us deeply. With every bite we decide whether to put healthy food or junk food into our body. We make the choice to tune into media that is either wholesome or depleting. We have the power to use our time and energy purposefully or just drift along through life. We are the gardeners of our mind. Are we watering the “seed thoughts” that nourish our happiness, or poison our well-being? And we decide, unless circumstances are beyond our control, whether we will surround ourselves with friends, family, art, music, and places in this world that are loving, healing, and uplifting—or toxic, violent, and destructive. Thich Nhat Hanh continually emphasizes that when we have the space and quiet, the silence, to become mindful about making good choices, we discover a powerful source of joy in our lives.

## **The Internal Dialogue**

Thich Nhat Hanh describes the endless internal dialogue that plagues most of us as Radio NST (Non-Stop Thinking). He writes “Cows, goats, and buffalo chew their food, swallow it, then regurgitate and rechew it multiple times. We may not be cows or buffalo, but we ruminate just the same on our thoughts—unfortunately, primarily negative thoughts. We eat them, and then we bring them up to chew again and again, like a cow chewing its cud” (Nhat Hanh, 2015, p. 47). Our thinking goes around and around in circles and actually can do us harm. Just as a candle radiates light, our thoughts are no different, manifesting in our emotions, perceptions, speech, and actions. The answer, according to Thich Nhat Hanh, is not necessarily sitting still on a cushion; rather it comes with one simple in-breath taken in mindfulness. He reminds us that each of us has a choice. If we want to create more peace and less suffering, our first priority should be to find ways to reclaim the spacious silence within ourselves. To this end, Thich Nhat Hanh recommends walking as a wonderful way to clear the mind and stop the blaring noise from Radio NST. We don’t have to call it “walking meditation,” we can just walk slowly and with awareness. To transpersonal psychologists and others who are familiar with mindfulness practices, these suggestions may seem repetitive and simplistic, and yet the wise reader knows that is not the case. It can take a lifetime of practice to walk without letting our thoughts take us out of the present moment. Thich Nhat Hanh manages to breathe fresh air into these concepts by emphasizing the subtle gifts of mindfulness that are often overlooked. Awakening to beauty has the capacity to shift one’s whole perspective on life. Cultivating a calm mind brings a peaceful presence on an individual and communal level. Finding the silence within us makes space for true happiness. With a skillfulness that shows his deep understanding of human nature, Thich Nhat Hanh expands on these aspects of mindfulness in a way that is refreshing to the novice as well as the veteran practitioner.

## **The French Soldier**

In chapter five, Thich Nhat Hanh shares a story from 1947 when he was living as a student at the Buddhist Institute of Bao Quoc Temple. He writes, “At that time the French army occupied the whole region and had set up a military base in Hue. We often had gunfire around us between French and Vietnamese soldiers” (Nhat Hanh, 2015, p. 117). One morning Thich Nhat Hanh (2015) set out over the hills to visit his root temple and was suddenly approached by a young French soldier. “Where are you going?” (p. 119) the soldier asked him. When the young soldier learned that Thich Nhat Hanh could speak French, his face lit up, and he said he only wanted to ask the monk something. “I want to know which temple you’re from” (Nhat Hanh, 2015, p. 119). When Thich Nhat Hanh told him it was Bao Quoc Temple, the soldier pointed to his guard post on the side of the hill, and said, “If you’re not too busy, please come up there with me so we can talk for a little while” (Nhat Hanh, 2015, p. 119).

The French soldier then told Thich Nhat Hanh about a visit he and five other soldiers had made to Bao Quoc Temple ten days earlier in search of Vietminh, the Vietnamese resistors. They were intent on arresting and even killing them if necessary. But what happened when they entered the temple stunned them.

Normally when the soldiers did searches, people would run away in a panic, filled with fear about the terror that may follow. Not so in the Bao Quoc Temple. The oil lamps were turned low and it was incredibly quiet. The young soldier could not hear anyone even though he sensed many people were in the temple. He told Thich Nhat Hanh, “I turned on my flashlight and aimed it into the room we thought was empty—and I saw fifty or sixty monks sitting still and silent in meditation...It was as if we’d run into a strange and invisible force” (Nhat Hanh, 2015, p. 121). Taken aback, the soldiers went out to the courtyard, and waited until a series of bells sounded and normal activity returned to the temple. A monk came out and invited the soldiers inside, but they declined, and took their leave. The young French soldier then told Thich Nhat Hanh about how homesick he was, and about the fear and uncertainty that gripped his heart. He said, “The peaceful and serene life of those monks makes me think about the lives of all human beings on this Earth. And I wonder why we’ve come to this place. What is this hatred between the Vietminh and us that we have traveled all the way over here to fight them?” (Nhat Hanh, 2015, p. 122). Deeply moved, Thich Nhat Hanh shared a story of an old friend, a Vietnamese fighter, who had grappled with the same issues and had come to see the absurdity of the killing and the calamity of war.

After the sun had risen high into the sky, it was time for Thich Nhat Hanh to go. The young French soldier, named Daniel Marty, promised to visit Thich Nhat Hanh at the temple, and they parted with a feeling of understanding between them. In the months that followed, Daniel visited Thich Nhat Hanh at the temple many times, and their friendship became very deep. Daniel was given the name Luong by his new friend, which meant “pure and refreshing peaceful life” (Nhat Hanh, 2015, p. 123). The peace that began to fill his young friend, Daniel, began the night he first entered the temple as a soldier. Thich Nhat Hanh writes, “What made it all possible was that moment of complete and total *stopping* and opening to the powerful, healing, miraculous ocean called silence” (Nhat Hanh, 2015, p. 125).

Despite the fact that Thich Nhat Hanh has written extensively about mindfulness in the past, this new offering represents a beautifully written guidebook for anyone who is in search of finding more happiness, purpose, and peace. Thich Nhat Hanh eloquence and humility shine forth as he combines personal stories, simple techniques, and timeless wisdom with ease, making this book a joy to read for both longtime fans and newcomers alike. I know it is my new favorite!

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#### The Author

*Thich Nhat Hanh* is a Vietnamese monk, a renowned Zen master, a poet, and a peace activist. He was nominated for the Nobel Prize by Martin Luther King,

Jr., in 1967, and is the author of many books, including the best-selling *The Miracle of Mindfulness*.

#### The Reviewer

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KUSHNER, DALE M. (2013). *The Conditions of Love*. New York, NY: Grand Central Publishing. 371 pp. ISBN: 978-1-4555-1975-0. Paperback, \$15.00. Reviewed by *Ilene A Serlin*.

#### **The Journey of the Wild Child**

*The Conditions of Love*, a debut novel by the poet Dale Kushner, has been described as a young girl's awakening, through love, to womanhood.

While this is certainly a major theme, my own preference is to see it in the lineage of the archetype of the Wild Child. Like the characters in *Women Who Run with the Wolves* (Estes, 1992), the protagonist in this Thoreau-like novel reminds us of the Wild Child who lives in many women's psyches.

Eunice's journey to womanhood embraces several stages: Her upbringing by an unconventional mother; her choice of a new surrogate mother and life in the wild; her forced experience living in the "real world;" and her eventual integration, through love, into a world of her choosing.

Through lush poetic prose, various themes emerge in the novel:

*Identity*. The power of names and naming is described as Eunice discovers her power to create her world. Her father, a charming seducer, abandoned the family when she was young: "And that's when I stopped calling my father Frankie and started calling him Dupere" (p. 24). She revisioned the romance of her parents' relationship: "I saw my parents in a field, tipsy with love, dancing to bluesy horns. Through the haze, a Ferris wheel was spinning toward them" (p. 25-26).

Her father shows up in her dreams as the Demon Lover who forever affects her view of men: "He was my secret. He came in the middle of the night. No one else could see him" (p. 52).

She imagines him saying: “*They won’t believe you. They’re blind, Bunny, but you’re not blind... We’re not like them. We’re a couple of gypsies. No one cheers me up the way you do, Bunny*” (p. 52).

Her relationship with her mother was equally complex: a beautiful seductive woman who both nurtured and also abandoned her. This abandonment helped her separate and individuate as she created her own life: “What right did she have to decide my future? Why did her life have to be my life? I’m like her moon, I thought. I’ll always be in her orbit. I’ll never be able to escape and have a life of my own. My mother ruled my days and nights, but I couldn’t leave her, even though only a nitwit would stay” (p. 94).

Eunice coped with the difficulties of life with a single mother through use of the imagination: “I was modeling myself on Lauren Bacall in *Dark Passage*, practicing being the kind of woman a man could tell his secrets to without feeling betrayed” (p. 19). She used narrative to re-imagine her life and discover new possibilities (Serlin, 2007).

*Fate and Freedom.* The theme of fate and freedom runs through *The Conditions of Love* as characters both deal with their circumstance of birth and genetics, while discovering the freedom to create their own lives. Sam, her mother’s lover, tells her: “*There is no grand plan, sweetheart! There’s good luck and there’s bad luck—that’s it!*” (p. 96). Her mother’s version was: “The Man Upstairs plays with us, Eunice. Cat and mouse” (p. 121). When her mother abandons her to run off with a new lover, Eunice is consoled by Mr. Tabachnik: “Cisskele, from such terrible trials good comes” (p. 144).

*Emotions.* Kushner captures the complexity and ambivalence of a young girl’s feelings. When her first love, her pet turtle, dies she muses: “Mern cried when I told her, a fact that surprised me, but then sadness, I knew, was like any weather, coming and going at its own pleasing. I cried myself to sleep that night and then I stopped crying. I was finished crying, Eunice Turtle would not want me to mourn forever” (p. 119).

By introducing other colorful characters who mentored Eunice, Kushner also illustrates the young girl’s lessons on emotions. A neighbor, a Jewish delicatessen owner, helped Eunice cope with the loss of her mother’s lover Sam: “In war there are no winners,” Mr. Tabachnik sighed, “so, between men and women, why should it be different? Love and suffering are like this... Why should this be? Because a mischievous *pishadikeh* angel shoots an arrow, and the arrow doesn’t kill you, but oy, the pain! ...And that, my friend, is love!” (p. 110).

### **The World of Nature, Artist, and the Wild Child**

From an early age, Eunice knew that she was different. She could see the hidden world behind the visible, and also knew that this was the role of the artist. “I barely understood. I just knew I could see two worlds, the visible and the invisible, and how they were connected” (p. 123). “Question: how does an

artist capture invisible things? Like the wind moving through the fields?" (p. 301).

Her mother, an unusual woman herself, told her: "*Normal! Who wants to be normal, kiddo?*" (p. 183). Her adopted mother, Rose, warned her that normal people would try to co-opt them: "They're going to try to tame us or shoot us" (p. 193).

Eunice's role was to bridge worlds. Rose told her: "What I'm trying to say is that the bridge is an in-between place and that's where you are now. You're bound to cross over the bridge and move on because life is change" (p. 170).

As she was taken into the "normal" world, Eunice felt her dislocation: "It was as if I'd been wrenched from one life and redeposited into a former one..." (p. 179).

The world of nature, on the other hand, introduced her to magic: "A few golden leaves spun in the air, defying gravity... It's like magic here.' *Is magical,*' Rose said, closing her eyes." Rose also taught her about how to "see" the invisible world of magic. Eunice reflected: "My true education began with learning about silence and Rose called 'soft eyes.' According to Rose, if a person relaxed her eyes, she could see the world as it really was—not only trees and shoe and automobiles, but the spirit of these things (p. 146)." Rose was her spiritual mentor: "She wanted for me what she desired for herself: to live on the wing, to cross invisible meridians, to travel guided by the cold fire of stars" (p. 224).

## Love

One of the main themes in *The Conditions of Love* is the healing and redemptive power of love. Love transforms death: "In the dirt beneath us, maggots digested the ancient bones of elk. And all this violent seething, riotous simmering, this charging and recharging, this energy exchange, was love... Love was constantly working change with its terrible, precise force. Love leaped and roiled, rammed against itself, entered and exited, bloomed, died, and was reborn in things. In us!" (p. 176-177).

Rose taught Eunice: "Love is in no way orderly, even under the best circumstances" (p. 166). But it is love that brings us rebirth and eternity. Eunice understands herself as "...an artist who believes that love does not vanish across the border of death but is itself another word for eternity" (p. 367).

Finally, love echoes the reality that time is circular and death is not the end. After her lover, Fox, says to her: "*We can't know what we are creating, Sparrow, until long after we've created it*" (p. 356), Eunice reflects: "I think you may have been talking about reinvention and about hope. If I'm correct, months from now, your death will throw new marvels into high relief" (p. 356).

She understands that the surrender and commitment that love demands also gives: "If you believed I sacrificed myself for you, you must have also known I

depended on your love. I was fervently dependent, and I don't see how any love of worth can be otherwise. Dependence and independence rightly coexist! I come here and am *expanded* by your presence, not made less. What a relief to discover our habits of lifelong companionship can't be broken by death" (p. 356).

In conclusion, *The Conditions of Love* is the beautiful story of a young woman's awakening into womanhood through love. It describes her as a modern Wild Child who was raised by wise women, grew up in the forest, and learned to navigate between the worlds of nature and reality. For all of us women who are still in touch with our inner Wild Child, this book will resonate for months to come.

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## BOOKS OUR EDITORS ARE READING

Sabini, M. (2002). *The earth has soul: C. G. Jung on nature, technology, and modern life*. Berkeley, CA: North Atlantic Books.

Excerpts aggregated from Jung's published works on the subject of nature and collective unconscious.

...**Rosemarie Anderson**

Kraft, Doug (2015). *Kindness and wisdom practice: A quick guide to metta-panna meditation*. Nevada City, CA: Blue Dolphin Publishing.

From the author of *Buddha's Map* (2014), this short text summarizes "what the Buddha actually said" about the stages of his own meditation.

Ugolino (Brother) (W. Heywood, Trans.) (n.d.). *The little flowers of Saint Francis of Assisi*. Assisi, IT: Edizioni Porziuncula. (Original work published 1476)

I'm often drawn to the simplicity of this work. For example, Francis' Lady Poverty represents complete non-attachment and "dying" to one's self... as in "no self, no problem." Having no self frees one to love all beings unconditionally.

Zola, Emile (2013). *The complete works of Emile Zola*. New York, NY: Delphi Classics.

Zola was a widely known novelist at the turn of the last century who mingled precise descriptions of society with a deeply reflective, almost mystical, commentary on his times, as influenced by both Christianity and Buddhism.

...**Paul Clemens**

Pollan, Michael (2002). *The botany of desire: A plant's-eye view of the world*. New York, NY: Random House.

Pollan, Michael (2007). *The omnivore's dilemma*. New York, NY: Penguin.

Could be titled: One reason for America's decline: the degraded American diet.

Roth, Bernard (2015). *The achievement habit: Stop wishing and start doing and take command of your life*. New York, NY: HarperCollins.

By a professor of design engineering, a decidedly useful self-help book.

...**Jim Fadiman**

Jain, A. R. (2014). *Selling yoga: From counterculture to pop culture*. New York, NY: Oxford University Press.

Langlitz, N. (2013). *Neuro-psychedelia: The revival of hallucinogenic research in the decade of the brain*. Berkeley, CA: University of California Press.

Viveiros de Castro, E. (2014). *Cannibal metaphysics* (P. Skafish, Trans.). Minneapolis, MN: Univocal.

**...Jorge Ferrer**

May, Edwin C., & Marwaha, S. B. (Eds.). (2015). *Extrasensory perception: Support, skepticism, and science* (two volumes). Santa Barbara, CA: Praeger/ABC-CLIO.

Mijares, Sharon G. (Ed.). (2015). *Modern psychology and ancient wisdom*. New York, NY: Routledge.

Swigart, Rob. (2005). *Kibalba gate: A novel of the ancient Maya*. Walnut Creek, CA: AltaMira.

**...Stanley Krippner**

Bricklin, Jonathan (2015). *The illusion of will, self, and time: William James's reluctant guide to enlightenment*. Albany, NY: State University of New York Press.

Christie, Douglas E. (2013). *The blue sapphire of the mind: Notes for a contemplative ecology*. New York, NY: Oxford University Press.

Zolli, Andrew & Healy, Ann Marie (2012). *Resilience: Why things bounce back*. New York, NY: Simon and Schuster.

**...David Loy**

Singh, K. D. (2014). *The grace in aging: Awaken as you grow older*. Somerville, MA: Wisdom Publications.

Encouraging, inspiring, and practical, *The Grace in Aging* invites all those who have ever experienced spiritual longing to awaken in their twilight years. Since aging, in and of itself, does not lead to spiritual maturity, *The Grace in Aging* suggests and explores causes and conditions that we can create in our lives, just as we are living them, to allow awakening to unfold—transforming the predictable sufferings of aging into profound opportunities for growth in clarity, love, compassion, and peace.

Kathleen Dowling Singh streamlines vast and complex teachings into skillful means and wise views. Straightforward language and piercing questions bring Singh's teachings into the sharp focus of our own lives; the contemplative nature of each chapter allows for an uncommon depth of inquiry.

*The Grace in Aging* offers guidelines for older individuals of any wisdom tradition who wish to awaken before they die.

...**Frances Vaughan**

Dalton, J. (2011). *The taming of the demons: Violence and liberation in Tibetan Buddhism*. New Haven, CT: Yale University Press.

Farrer, D. S. (2009). *Shadows of the prophet: Martial arts and Sufi mysticism*. New York, NY: Springer.

Skallagrimsson, W. (2014). *Putting on the wolf skin: The berserker gang and other forms of somafera*. Charleston, SC: Author.

A first-person account of reliably reproducing the altered state of Odin's elite warrior-shamans, the shock troops known as berserks, which includes heightened strength, coordination, and swiftness, along with certain kinds of immunity magic.

...**Jenny Wade**