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

Adam J. Rock, Ph.D.
Kylie P. Harris, Ph.D. Candidate
Armidale, New South Wales, Australia

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.
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)

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,2 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

---

*Factor Structure of Spiritual Emergency*
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 purposed 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

*Factor Structure of Spiritual Emergency* 247
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). 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-Myer-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>
<thead>
<tr>
<th>Item</th>
<th>Factor 1</th>
<th>Factor 2</th>
<th>Factor 3</th>
<th>Factor 4</th>
</tr>
</thead>
<tbody>
<tr>
<td>... experienced a greater awareness of the interconnectedness of all things? (Psychic Opening)</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... spontaneously gained a greater understanding of the cosmos? (Psychic Opening)</td>
<td>0.71</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced the sense of becoming one with humanity, nature, the creative energy of the universe and/or God? (Peak Experience)</td>
<td>0.63</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... spontaneously attained profound insights into the nature or reality? (Shamanic Crisis)</td>
<td>0.62</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... felt a sense of overcoming the usual divisions of the body and mind and reaching a state of complete inner unity and wholeness?</td>
<td>0.57</td>
<td>0.31</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced an increased connection with animals and plants and the elemental forces of nature? (Shamanic)</td>
<td>0.52</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... spontaneously attained profound insights into the nature of reality? (Peak Experience)</td>
<td>0.49</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced the destruction of an old sense of identity followed by rebirth and a renewed purpose for living? (Central Archetype)</td>
<td>0.44</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced going beyond your normal understanding of time and space and entered a timeless realm where these categories no longer apply?</td>
<td>0.46</td>
<td>0.36</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... 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)</td>
<td>0.90</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced living what seemed to be another life, in another time and place, in great detail? (Past Life)</td>
<td>0.79</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced a visionary state taking you back through your own history and that of mankind to creation? (Central Archetype)</td>
<td>0.78</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced insights and/or visions, in which you received secret or sacred teachings and healing powers to take back to the &quot;ordinary&quot; world? (Shamanic Crisis)</td>
<td>0.72</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... undertaken a powerful inner experience that involved a journey into another world? (Shamanic Crisis)</td>
<td>0.54</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>... been aware of the presence of spiritual entities? (Psychic Opening)</td>
<td></td>
<td>0.78</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... had the need to fight off or try to control the actions of a negative being or entity? (Possession State)</td>
<td></td>
<td>0.66</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... had an experience of dealing with something that has a divine nature and is radically different from your ordinary perception of the everyday world?</td>
<td>0.34</td>
<td>0.53</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... spontaneously received accurate information about things in the past, present or future, by extra-sensory means?</td>
<td>0.35</td>
<td>0.45</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... been overwhelmed by powerful emotions and physical sensations concerning yourself and others in various circumstances and historical settings? (Past Life)</td>
<td></td>
<td>0.38</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... been able to see auras around people, animals, plants or other living things? (Psychic Opening)</td>
<td></td>
<td>0.32</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... spontaneously lost your sense of identity? (Psychic Opening)</td>
<td></td>
<td>0.65</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... lost your sense of reference as your outer and inner worlds dissolved? (Dark Night of the Soul)</td>
<td></td>
<td>0.63</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... developed a deep change in consciousness during which you lost contact with everyday reality? (Shamanic Crisis)</td>
<td></td>
<td>0.57</td>
<td></td>
<td></td>
</tr>
<tr>
<td>... experienced the spontaneous production of complex visual geometrical images or chants inside your head? (Kundalini)</td>
<td></td>
<td>0.52</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
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 ($b$), 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 1 (continued).**

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

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.

**TABLE 2**

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

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.
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

<table>
<thead>
<tr>
<th>Variable</th>
<th>BT</th>
<th>EGO</th>
<th>SELF-T</th>
<th>SELF-P</th>
<th>SES</th>
<th>( \beta )</th>
<th>( r^2 )</th>
</tr>
</thead>
<tbody>
<tr>
<td>BT</td>
<td>.01</td>
<td>.22*</td>
<td>.09</td>
<td>.40**</td>
<td>.31**</td>
<td>.09</td>
<td></td>
</tr>
<tr>
<td>EGO</td>
<td>.18*</td>
<td>.18*</td>
<td>-.18*</td>
<td>-.03</td>
<td>.04</td>
<td>.00</td>
<td></td>
</tr>
<tr>
<td>SELF-T</td>
<td>.34</td>
<td>.46**</td>
<td>.40**</td>
<td>.13</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SELF-P</td>
<td>.17*</td>
<td>.02</td>
<td>.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

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. \( R^2 = .31. ** p < .01; * p < .05. \)

### Table 3: Summary of Standard Multiple Regression Analysis for SE and Personality Traits
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 Identity/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

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

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

REFERENCES


Factor Structure of Spiritual Emergency 261

The Authors

*Emma J. Cooper,* M. Clin. Psy., is a registered psychologist and clinical psychology registrar. She completed a Masters in Clinical Psychology at the University of New England, NSW, Australia, supervised by Dr Adam Rock. She is a member of the Australian Psychological Society (MAPS) and the APS Transpersonal Psychology interest group. Ms Cooper has been involved in numerous projects in the area of spiritual emergency, and recently presented at the International Transpersonal Conference in Brazil.

*Adam J. Rock,* Ph.D., is a Senior Lecturer in Psychology at the University of New England, NSW, Australia. He is a Founding International Board Member of the International Transpersonal Association, President of the Australian Institute of Parapsychological Research, Research Editor of the *International Journal of Transpersonal Studies* and an Associate Editor of *Anthropology of Consciousness.*

*Kylie P. Harris,* Ph.D. Candidate, is an independent researcher and casual academic at the University of New England, NSW, Australia. Her PhD research is in the area of spiritual emergency, supervised by Dr Adam Rock and Dr Gavin Clark. She has worked on a number of projects involving spiritual emergency, shamanism, mediumship and holotropic breathwork. Publications include peer reviewed journal articles and book chapters, as well as numerous conference presentations.

*Gavin I. Clark,* D. Clin. Psy., is a lecturer in Clinical Psychology at the University of New England, Armidale, NSW, Australia. He has extensive experience regarding the treatment of psychological disorders and has published research concerning training in psychological therapy and the effectiveness of psychological treatments.

Correspondence concerning this article should be addressed to: Adam Rock, School of Behavioural, Cognitive, and Social Sciences, University of New England, Armidale, NSW, 2350 AUSTRALIA, E-mail: arock@une.edu.au