

Ego Development Stage Does Not Predict Persistent  
Non-Symbolic Experience

by

Jeffery A. Martin

A Dissertation Submitted to the Faculty of the California Institute of Integral  
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Allan L. Combs, Ph.D., Chair  
Professor, Transformative Studies

---

Ralph W. Hood, JR., Ph.D.  
Professor, University of Tennessee at Chattanooga

---

Bernard J. Baars, Ph.D.  
Senior Fellow, The Neurosciences Institute

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Jeffery A. Martin  
Allan L. Combs, Ph.D., Committee Chair  
California Institute of Integral Studies, 2010

## EGO DEVELOPMENT STAGE DOES NOT PREDICT PERSISTENT NON-SYMBOLIC EXPERIENCE

### **Abstract**

Non-symbolic experiences have been reported for millennia and generally attributed to spiritual and religious contexts, although atheists and agnostics also report them. Popular terms for them include: *nondual awareness, enlightenment, mystical experiences, peak experiences, transcendental experience, the peace that passeth understanding, unity consciousness, union with God*, and so forth. Most are temporary, but some individuals report a persistent form of them. Some scholars have argued that these experiences represent advanced stages of human development and placed them atop existing levels in various domains of developmental psychology such as cognitive or ego development. There is little evidence for this view. Moreover, several problems with it are pointed out in the present work.

The primary goal of this study is to test the above taxonomy by comparing ego development and Mysticism Scale measurements from a diverse population of individuals who report persistent non-symbolic experience. This investigation first hypothesized that individuals who report persistent non-symbolic experience would exhibit a range of psychological developmental levels, specifically tested here as a composite, ego development, using the Washington University Sentence

Completion Test (WUSCT). Second, it hypothesized that individuals who report persistent non-symbolic experience would score higher on Hood's Mysticism Scale than those who do not report such experiences. Third, it hypothesized the absence of a simple or linear relationship between scores on the WUSCT and Mysticism Scale for those who report non-symbolic experience.

These hypotheses were examined in 36 adults (F=9, M=27) reporting persistent non-symbolic experience. The first hypothesis was supported: ego development stages ranged from 5 (Loevinger and Cook-Greuter's "Self Aware" stage) to 10 (Cook-Greuter's "Unitive" stage). The second hypothesis was also supported: average and median Mysticism Scale scores notably exceeded those reported in studies of other populations. The third hypothesis could not be adequately tested because the Mysticism Scale score distribution was strongly skewed upwards, making most statistical comparisons unworkable. Overall, this study provides the first strong evidence that persistent non-symbolic experience does not represent higher levels of ego development.

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## Chapter 1

### Introduction to the Inquiry

#### Statement of the Problem

A category of human experience has been reported in the writings of philosophers and mystics since antiquity (Hanson, 1991; Stace, 1960a). It goes by many names, including: *nondual awareness, enlightenment, mystical experience, peak experience, transcendental experience, the peace that passeth understanding, unity consciousness, union with God*, and so forth (Levin & Steele, 2005; MacDonald, 2000; Thomas & Cooper, 1980). Such experiences are often reported in spiritual and religious contexts; however, atheists and agnostics report them as well (Newberg, d'Aquili, & Rause, 2001; Newberg & Waldman, 2006, 2009). These reports vary widely, and have led to considerable debate regarding whether or not they are related to a common family of experiences. *Common core* theorists argue that there are characteristics that are shared by the widely divergent descriptions of these experiences and that, despite cultural and other variations in the descriptions, there is an underlying core experience that the reports relate to (Hood, 1995, 2003; Stace, 1960a). The most widely used list of phenomenological characteristics is offered by Stace (1960a), and is applied to both temporary and persistent forms. It can be summarized as self-reports of: a unitive quality, a noetic quality, transcendence of space and time, a deeply felt positive mood, paradoxically, and ineffability. To avoid confusion among the many terms by which this common core experience has been identified the present inquiry simply refers to it as *non-symbolic experience* (Cook-Greuter,

2000). Most non-symbolic experiences are temporary, but some individuals report that they form an ongoing basis for how reality is experienced (Butlein, 2005; Levin & Steele, 2005; Maslow, 1970, 1973; Travis, Arenander, & Dubois, 2004). The latter type of non-symbolic experience will be referred to here as *persistent*. Virtually all of the information about these experiences comes from self-report data (McGinn, 1991; Stace, 1960a).

These experiences have often been regarded as advanced or higher levels of human development (Alexander & Langer, 1990; Combs, 2002; Cook-Greuter, 2000; Wilber, 2006). These purportedly higher levels are frequently represented as being above existing developmental domains, such as Piaget's stages of cognitive development, leading to developmental domains that are a mix of domains from traditional psychological research and higher level stages derived from religious or spiritual systems (Wilber, 2006). In theory, under this taxonomy individuals who report persistent non-symbolic experience should be at the highest developmental stage across the represented mixed domain or domains (Combs, 2002, 2009; Cook-Greuter, 2000; Wilber, 2000, 2006).

Some theorists, however, have pointed out potential problems with such mixed developmental schemas (Combs, 2002, 2009; Cook-Greuter, 2000; Wilber, 2000, 2006). Principle among these is the fact that many well-known individuals who have reported persistent non-symbolic experience appear to have exhibited a variety of levels across various psychological development domains, rather than clearly demonstrating that they would be rated at or above the highest levels (Butlein, 2005; Combs, 2002; Falk, 2009). For example, researchers have



documented what appears to be highly questionable moral behavior in a considerable number who self-report persistent non-symbolic experience (Falk, 2009). Theorists have also pointed to work done on the development of the human species (Combs, 2002; Wilber, 1981). Many points in time from the emergence of early humans on seem to suggest that non-symbolic experiences were present. However, this work also suggests that achievable developmental levels varied widely in different periods of human evolution (Combs, 2002; Wilber, 1981). These types of discrepancies eventually led Combs (2002) and Wilber (1981) to propose that non-symbolic experiences are accessible across a wide range of developmental levels, challenging the orthodox view that they represented “higher” developmental levels. A very small amount of empirical work suggests that this view may be correct.

In two previous studies, small populations (5 and 11) of individuals who self-reported persistent non-symbolic experience were given the Washington University Sentence Completion Test (WUSCT), a well-known instrument for measuring ego development (Butlein, 2005; Travis & Brown, in press). Ego development involves a frame of reference that represents the fundamental structural unity of the personality. Research has suggested that it spans four primary domains of character development, cognitive style, interpersonal style, and conscious preoccupations; and measures an integrated range of personality characteristics, including: cognitive function, personal and interpersonal emotional awareness, and character development (Loevinger, 1976; Manners & Durkin, 2001). None of the participants in these populations scored at the highest

stage as would be predicted by the hypothesis that linear stage development is related to persistent non-symbolic experience. Instead, the participants' results spread across a range of developmental stages, suggesting support for the idea that non-symbolic experience may occur across a range of developmental levels (Travis & Brown, in press). This finding alerted the investigator to the possibility that a more thorough inquiry might provide data that supported Combs (2002) and Wilber's (1981) hypotheses regarding the independence of developmental levels and non-symbolic experience.

The question of whether non-symbolic experiences represent advanced developmental levels or, alternatively, a certain type of experience that can be accessed across a range of developmental levels is an important one. This study attempts to answer this question by using two well-known instruments with a larger and more demographically and culturally diverse range of participants who self-report persistent non-symbolic experience. Falsification of the hypothesis that persistent non-symbolic experience is a marker of high levels of development requires that it be shown not to be the case for individuals reporting persistent non-symbolic experience, preferably using a well-known and reliable developmental measure. No credible measures exist for any of the mixed developmental domains that form the basis of this hypothesis. For this reason, the Washington University Sentence Completion Test (WUSCT) was used in the present study to assess the ego development domain (Loevinger, 1976). Loevinger and Cook-Greuter's theory of ego development shows it to be a complex developmental construct. It is the only domain with a highly regarded measure

that has been specifically adapted to examine the question of higher developmental stages that might match persistent non-symbolic experience (Cook-Greuter, 2000). Hood's (1975) Mysticism Scale (M Scale) was used to attempt to quantify participants' persistent non-symbolic experience. The Mysticism Scale operationalizes Stace's (1960a) phenomenological categories of mystical experience and is the most widely used academic self-report measure for non-symbolic experiences (Macdonald & Friedman, 2002).

### **The Research Hypotheses**

The first hypothesis underlying this research is that individuals who self-report persistent non-symbolic experience are distributed across a range of psychological developmental levels, specifically tested here as ego development using the Washington University Sentence Completion Test (WUSCT).

The second hypothesis is that individuals who self-report persistent non-symbolic experience score higher on Hood's Mysticism Scale than individuals who do not report persistent non-symbolic experience. Individuals self-reporting persistent non-symbolic experience are generally regarded as at the highest level of non-symbolic experience (Combs, 2002; Wilber, 2006), which the Mysticism Scale is purported to measure.

The third hypothesis is that there is no obvious or apparent relationship between ego development level, evaluated using the Washington University Sentence Completion Test (WUSCT), and scores on the Mysticism Scale for individuals who self-report persistent non-symbolic experience. This hypothesis uses the purported ability of the Mysticism Scale to measure degree of non-

symbolic experience to further examine the relationship between degree of non-symbolic experience and ego development level.

### **Relevance of the Study**

This inquiry is potentially relevant for humanity as a whole, as well as several more specific audiences. It is relevant to those interested in the study of religion. All major religions deal with these types of experiences through their dogma. Any inquiry into experiences of this nature will provide new lenses and information for consideration. Spiritual and religious questions touch all of humanity. Within this, experiences of union with God or nature are paramount. This study examines aspects of these types of experiences in new ways. It may also be relevant at this level if it can lead to further research that assists the population at large in having these experiences. It is possible that more widespread persistent non-symbolic experience could radically alter humanity and society.

The inquiry is also relevant for the study of religious experience within a psychological context. To date only limited efforts have been made to bring the examination of these experiences into mainstream psychological research. Rather than addressing these experiences through introspection, which has been the norm in the past, standardized self-report instruments are used. Introspection is of limited use and acceptance; however, standardized and well-established instruments allow for a basic research foundation to be laid that is more credible within the academy.

Finally, the inquiry is relevant to the participants, others like them, and anyone interested in having the types of experiences described. It is unlikely that the participants, or others like them, had previously taken these types of measures to assess their experiences. The results may have informed these participants and challenged or supported what they believed about their internal experiences in relation to what the instruments revealed.

## **Chapter 2**

### **Review of the Literature**

#### **Introduction and Terminology**

The family of non-symbolic experiences is very broad. It encompasses religious experiences, spiritual experiences, and experiences that fall into neither of these categories (Newberg et al., 2001; Newberg & Waldman, 2006, 2009). Defining it for this inquiry presents the same problems that serious researchers have wrestled with for hundreds, if not thousands, of years. As noted previously, these experiences go by many labels such as enlightenment, nondual, and mystical to name just a few of the more popular ones. The language used typically relates to the context.

Despite a vast literature, there is no widely accepted theoretical or operational understanding of non-symbolic experiences. They remain one of the great unsolved problems in religion and spirituality, philosophy, the psychology of religion, consciousness studies, transpersonal psychology, and humanistic psychology. The analytical portions of the literature in these areas primarily involve self-reported introspection and phenomenological accounts, and detailed comparative and hermeneutical analyses of these self-reports. They also include a much smaller number of empirical studies involving an array of physiological measurement, most commonly EEG based, and an even smaller handful of studies using other psychological instruments. A substantial portion of the studies involving self-reports concern persistent non-symbolic experiences, while all but a handful of the measurement studies focus on temporary ones.

Non-symbolic experiences have been reported in a wide range of cultures throughout human history (Hanson, 1991; Wilber, 1981). Traditionally, each culture has used its own descriptors for them. Some of today's most common terms include *enlightenment*, *nondual awareness*, and *mystical experience*; coming from traditions such as Yoga, Buddhism, and Christianity. All have been used within the academy. For example, *mystical experience* is the dominant term in the section of the American Psychological Association that deals with the psychology of religion, possibly because their studies have traditionally been so heavily weighted towards Christianity.

Thomas and Cooper's (1980) literature review found a range of associated terms including *mystical experiences*, *cosmic consciousness*, *peak experiences*, *intense spiritual experiences*, *intense religious experiences*, and *transcendental experiences*. MacDonald's (2000) review found experiential spiritual phenomenon variously labeled: *spiritual*, *religious*, *peak*, *mystical*, *paranormal*, *transpersonal*, *transcendent*, and *numinous*. Levin and Steele (2005) also delimited a range of alternative terms for non-symbolic experiences, including: *transcendent experience*; *clear light*; *cosmic consciousness*; *deautomatization*; *fana*; *flow experience*; *God experience*; *intensity experience*; *inward light*; *living flame of love*; *love-fire*; *mystic experience*; *the numinous*; *objective consciousness*; *the peace of God, which passeth all understanding*; *peak-experience*; *Samadhi*; *satori*; *shamanic ecstasy*; *the silence beyond sound*; and *subliminal consciousness*. No single organization has done more empirical research into non-symbolic experiences than Maharishi University of

Management. Terms their researchers have used include: *pure consciousness* (Travis & Pearson, 2000), *self-referral consciousness* (Travis et al., 2004), *transcendental consciousness*, *cosmic consciousness*, *refined cosmic consciousness*, *unity consciousness*, and *transpersonal-postsymbolic modes of processing* (Alexander et al., 1990; Alexander, Druker, & Langer, 1990).

Some researchers further quantified terms based on whether the non-symbolic experiences were temporary or persistent. For example, Butlein (2005) used the term *awakening* for temporary experiences and *enlightenment* for long-term or persistent ones. Maslow (1970, 1973) used *peak experience* for the former and *plateau experience* for the latter. Each of these terms, along with hundreds (or possibly even thousands) of others that have been used, carries a specific cultural or philosophical paradigm with it.

This inquiry is transdisciplinary. Although it draws heavily from a range of academic research, it is not situated solely within a specific sub-discipline. It uses measures from the psychology of religion and developmental psychology. For this reason, the term *non-symbolic* (Cook-Greuter, 2000) is used to describe this family of experiences. It does not carry the connotations of any religious or spiritual set of beliefs as its historical basis, nor is it tied to a specific discipline or sub-discipline within the academy. It is felt to be representative of the core experiences these various terms relate to and meant to represent this family of experiences.



## **Altered States of Consciousness**

The persistent non-symbolic experiences that this inquiry focuses on form one small part of the research involving altered states of consciousness. Altered states of consciousness include research domains such as hypnosis, unidentified flying objects, alien abduction, dreams, meditation, psychedelic substances/entheogens, out of body experiences, near-death experiences, and past-life experiences. Many of these experiences were formerly considered pathological, and they are still generally regarded as anomalous (Berenbaum, Kerns, & Raghavan, 2000; Reed, 1974; Zusne & Jones, 1989). Often they are considered the domain of transpersonal, humanistic, or para psychology (Greenwood, 1995; Tart, 1975).

Generally speaking, this inquiry does not concern itself with most of these experiences, although some are reported by people who also self-report non-symbolic experiences (Fox, 1992; Hood, 1995; Spilka, Hood, Hunsberger, & Gorsuch, 2003; Yamane, 2000; Yamane & Polzer, 1994; Zollschan, Schumaker, & Walsh, 1995). Despite this, altered states of consciousness such as those mentioned previously have not been consistently linked with persistent non-symbolic experience (Cardena, Lynn, & Krippner, 2000; Hood, 1995). As unusual as experiences such as alien abduction may appear, it is important to note that reports of these types of experiences appear to be as common in the general population as among the mentally ill (Berenbaum, Kerns, & Raghavan, 2000; Jacobson & Bruno, 1994; Parnell & Sprinkle, 1990). Other studies have shown that belief in altered states such as the ability to pray in tongues or receive

prophecies can be considered a psychologically accepted norm, even in sophisticated Western populations (e.g., Poloma, 1989).

These types of studies have led to questions regarding whether these experiences can be considered pathological or delusional (Williams & Fallconer, 1994). Hood (1975) noted that his Mysticism Scale failed to correlate with the Minnesota Multiphasic Personality Inventory (MMPI), a widely used measure of psychopathology. Spilka, Brown, and Cassidy concluded, “Mysticism is a normal phenomenon, reported by healthy and functioning persons struggling to find a meaningful framework within which to live out their experience as foundational” (1993, p. 267). Spilka et al. (2003) also stated that non-symbolic experiences are normal and occur among non-religious populations,

The report of mystical experience is thus firmly established as a normal phenomenon among healthy individuals-who, if lacking a religious commitment, are unlikely to use traditional religious language to describe the experience, or only reluctantly use it as the only available language to express their experience. (p. 328)

Some altered states may relate more directly to non-symbolic experiences and have the potential to induce both temporary and persistent forms of them. These include meditation, psychedelic substances/entheogens, and near death experiences. Meditation has long been regarded as a potential path to persistent non-symbolic experiences, and it is a preferred path in many traditions such as Buddhism. Psychedelics that induce religious and spiritual experiences are referred to as entheogens within the contemporary academy (Forte, 1997). While the results of ingesting these substances are usually temporary, they are capable of producing long-term results (Griffiths, Richards, McCann, & Jesse, 2006, 2008).

Several researchers have noted the ability of some substances to provide non-symbolic experiences as well as lasting deep meaning (Doblin, 1991; Griffiths et al., 2006, 2008; Hood, 1995; Pahnke, 1964, 1970; Strassman, 2001). Others have gone so far as to argue that the mystical dimensions of all religions have entheogens as their foundation (Kramrisch, Otto, Ruck, & Wasson, 1986).

Research in the area of entheogens is vast, but several good reviews are available including one which focuses on religious, spiritual, and other transpersonal experiences (Lukoff, Zanger, & Lu, 1990). Many of the spiritual states produced are clearly non-symbolic in nature (Griffiths et al., 2006, 2008; Oxman, Rosenberg, Schnurr, Tucker, & Gala, 1988), and set and setting appear to be highly relevant in the production of religious and spiritual imagery with entheogens (Barber, 1970; Barr, Langs, Holt, Goldberger, & Klein, 1972; Griffiths et al., 2006, 2008; Pahnke, 1964, 1970; Strassman, 2001). Near death experiences are similar to entheogens in that they can produce experiences of a non-symbolic nature and also create deep and lasting meaning in those who experience them, but rarely leave someone with persistent non-symbolic experience (Strassman, 2001).

### **Self-Reported Descriptions of Non-Symbolic Experience**

Most of the work on non-symbolic experiences has been based on introspection. This is as true of thousand-year-old texts in religions such as Buddhism as it is in the more recent work within the academy. Three general forms of phenomenology or phenomenological hermeneutics exist in the literature. The general public has typically used introspection and informal forms

of phenomenological self-description. In some cases, such as Buddhism and Hinduism, considerable bodies of description and analysis exist regarding these types of experiences; however the methodologies do not adhere to modern academic standards. A second type involves academic scholars of religion using more formal forms of phenomenology and hermeneutics, and also incorporating their own religious lenses and filters in the interpretation of the, mostly textual, accounts.

The third form attempts to analyze texts and direct reports through a more psychological lens. James (1902/1985) is probably the best known in this regard, but others followed his path of using a more psychologically reflective form of phenomenology on both themselves and others (Wulff, 1995). In the 1950s Carl Albrecht pioneered the phenomenological psychology of religion on living participants. Albrecht had a method, now lost, that he claimed could induce non-symbolic experiences in his participants and a second that allowed them to communicate the experience while they remained in it (Wulff, 1995).

In relation to the academy, most have agreed (Hood, 1995; Wulff, 1995) that the research in this area firmly traces back to William James' *Varieties of Religions Experience* (1902/1985), in which James made it clear that he did not have these experiences but did systematically study the writings of others who self-reported them. His thesis that these various reports relate to similar if not identical underlying experiences is widely known today as the *common core* or *unity thesis* (Hood, 1995, 2003, 2005). Early phenomenological and hermeneutical attempts laid much of the framework that persists in the

psychology of religion. The concepts of the numinous and the mystical are reflected in the work of Schleiermacher, which predated James by a century and continues to be influential (Hood, 1995). Otto (1917/1958) is credited with later becoming the classical theorist on the numinous, while Stace (1960a) is regarded as building, in part, upon both Schleiermacher and Otto to provide the classic formulation of the mystical (Hood, 1995). More recently, studies have been carried out by researchers associated with the Maharishi University of Management (e.g., Travis & Pearson, 2000). These involve the use of Transcendental Meditation to induce non-symbolic experiences that can be studied scientifically.

### **Survey, Questionnaire, and Interview Research**

In addition to introspection and phenomenology, there have been several attempts to identify the core components of religious and spiritual states through surveys and questionnaires, many of which suffered from severe methodological issues (e.g., Hardy, 1979; Laski, 1961). Something nearly every study has had in common is a surprisingly high percentage, ranging from 21-72%, of people reporting what appear to be non-symbolic types of experiences (Back & Bourque, 1970; Bourque & Back, 1971; Gallup, 1978; Glock & Stark, 1965; Greeley, 1974; Hay & Heald, 1987; Hay & Morisy, 1978; McClenon, 1984; Pafford, 1973; Tamminen, 1991; Thomas & Cooper, 1978, 1980; Vernon, 1968; Yamane & Polzer, 1994). The studies uniformly demonstrated the difficulty of formulating survey questions that identify people who have had non-symbolic experiences. It

is likely that no researcher has found a single question that narrows in on non-symbolic experiences.

Open-ended responses can be equally difficult to analyze properly (Spilka et al., 2003). Often multiple techniques are needed to identify the actual portion of participants reporting non-symbolic experiences. For example, Hood (1973) used Allport's Intrinsic and Extrinsic religious orientation scales to pre-qualify participants for interviews, with good results. Thomas & Cooper (1978, 1980) used a previously well established question "Have you ever had the feeling of being close to a powerful spiritual force that seemed to lift you out of yourself" (1978, p. 434) along with open-ended responses. Although 34% answered that they had experienced what the question referred to, analysis of the open-ended responses revealed that only 1-2% of these might have actually been non-symbolic experiences.

Probably the best known survey research is Hardy's (1979), which was initially drawn from a pool of 3,000 participants. These participants responded to an advertisement similar to the following:

All those who feel they have been conscious of, and perhaps influenced by, some Power, whether called God or not, which may either appear to be beyond their individual selves or partly, or even entirely, within their being, are asked to write a simple account of their feelings and their effects. (Hardy, 1979, p. 20)

When the responses were coded, only 5.6% were considered to be non-symbolic. Efforts such as this failed to define the core elements of non-symbolic experiences. Reanalysis of the Hardy data has produced a variety of classification schemes over the years (Hay, 1994; Spilka et al., 2003). Another highly regarded

survey of 1,467 participants (Greeley, 1975) had coding and classification findings that overlap partially with the Hardy study but also differ in many respects. A later study that used a derivative of the Hardy advertisement failed to classify any responses as non-symbolic (Hay & Morisy, 1985). One that was worded to specifically attract people with non-symbolic experiences produced a 65% affirmative response from participants, but additional analysis revealed that only a little over 9% may have actually had a non-symbolic experience (Hay, 1979).

Classification discrepancies have proved common among these types of studies. It is also important to note that none of these studies sought to distinguish between persistent and temporary forms of non-symbolic experience. The available empirical literature suggests that most people have the temporary experience. This means that the number of people experiencing a persistent form of it is likely to be only a fraction of these, 1-9.5%.

### **Comparisons and “Family Resemblance”**

Research suggests that these experiences are sufficiently colored by cultural influences that a common set of characteristics for all reports of non-symbolic experience may not be possible, and that these experiences are probably best considered in terms of their family resemblance (Hood, 1995; Kroll, Bachrach, & Carey, 2002; Lukoff, 1985; Spilka et al., 2003; Wittgenstein, 1945-1949/1953; Woodhouse, 1996). According to Hood, non-symbolic experiences:

suggest the dilemma of trying to assess experience. How religious experience is assessed requires a clear conceptualization of its nature. Influenced by the Schleiermacher tradition, mystical and numinous states are difficult to ultimately confirm. Reports of their occurrence must

contrast first and third person judgments. Even assessments by measurement criteria such as questionnaires indicated only self reports. Ultimately a judgment must be made for which no single criterion will suffice. (1995, p. 584)

A variety of operational definitions for non-symbolic experiences exist (Thomas & Cooper, 1978), and empirical research has shown that it is possible to meaningfully study the subject (Hood & Morris, 1981; MacDonald, 2000; Spilka et al., 2003; Travis et al., 2004). Similar descriptions and characteristics can be seen in various categorizations of non-symbolic experience. James felt that ineffability and a noetic quality were the two characteristics that qualified an experience to be considered non-symbolic. He also associated two secondary characteristics with these experiences: transiency and passivity. *Transiency* refers to the temporary nature of the experiences. It may be the mention of this characteristic by James that led to subsequent research primarily focusing on temporary types of these experiences. *Passivity* refers to the mystic feeling as though his or her personal will is being held in abeyance by a superior power (James, 1902/1985).

Perhaps the first modern psychological attempt at finding common characteristics was Starbuck's (1899, pp. 160-161) response patterns in relation to religious conversion experiences, which included: self-surrender, determination (to change), forgiveness (from God), divine aid, public confession, spontaneous awakening, and a sense of oneness with God. Spilka et al. (1993) examined a broad range of psychologically orientated texts that outlined characteristics of non-symbolic experiences. The texts began with Starbuck's (1899) and extended through the 1980s. Their (Spilka et al., 1993) consolidation hypothesized the



components of non-symbolic experience as: a sense of the presence of the divine; feelings of unity and completeness; impressions of reverence, sacredness and holiness; awareness of new knowledge and spiritual enlightenment; positive emotions of happiness, joy and peace; a variety of strong emotional and physical reactions; and some evidence of extreme sensory stimulation and possibly hallucinatory behavior.

Maslow (1970, 1973), a founder of humanistic psychology, is well-known for his theory of human motivation as well as for his term for temporary non-symbolic experiences: peak experience. Maslow considered these experiences as associated with the final stage of his hierarchy of needs. This stage, self-actualization, refers to the optimal fulfillment of inborn personality potentials (Maslow, 1970). Maslow (1970) defined several characteristics in relation to peak experiences, including: an experience of the universe as a unified whole, a feeling of ego-transcendence, a sense of awe/reverence, a sense of being in touch with ultimate reality, and transcendence of dichotomies.

This inquiry primarily draws upon Stace's (1960a) analysis of these types of experiences, in part because of their successful operationalization by Hood (1975). Stace believed that these experiences had universal and identifiable features, and focused his attention on the aspects that were not limited by culture or ideology. He argued that the experiences of loss of self and unity are common to all non-symbolic experiences. He stated that the experience of loss of self brings about an experience of a transcendent unity, and delimited a number of core phenomenological characteristics that were obtained by studying self-reports

from both the East and West. The list not only includes key elements identified by Stace's predecessors and contemporaries (Lukoff & Lu, 1988; Stifler, Greer, Sneck, & Dovenmuehle, 1993), but is also general enough to include non-theistic experiences, which he clearly believed were possible (Nixon, 1990; Stace 1960a). Two important distinctions that emerged from Stace's (1960a) work were the introvertive and extrovertive classification of non-symbolic experiences:

There appear to be two main distinguishable types of mystical experience. Both of which may be found in all the higher cultures . . . Both are apprehensions of the One, but they reach it in different ways. The extrovertive way looks outward and through the physical senses into the external world and finds the One there. The introvertive way turns inward, introspectively, and finds the one at the bottom of the self. (p. 15)

As Stace (1960b) mentioned, introvertive experiences find the experience of unity by turning inward. A person experiencing it is said not to experience any objects of perception. Stace defined the introvertive experience as follows, "we have everywhere found that the mystic, having suppressed the empirical factors of the stream of consciousness, arrives at a pure ego or pure consciousness, and that the emergence of this pure ego *is* the introvertive experience" (1960a, pp. 124-125). Extrovertive experiences, by contrast, find the experience of unity in the external world. A person experiencing it feels that s/he becomes one with all objects of perception, and that s/he and these objects form a totality or oneness. Stace (1960a) believed that the underlying extrovertive experience was one of undifferentiated unity and that although its interpretation, and thus reports of it, may vary across cultures, a common experience of unity underlied them.

The extrovertive mystic with his physical senses continues to perceive the same world of trees and hills and tables and chairs as the rest of us, but he

sees these objects as transfigured in such a manner that the Unity shines through them. (Stace, 1960b, p. 15)

. . . it is a perception of the world as transfigured and unified in one ultimate being. In some cultures the one being is identified with God . . . But in some cultures—for example Buddhism—the unity is not interpreted as God at all. (Stace, 1960b, p. 17)

Stace lists the characteristics of introvertive experience as: the unitary consciousness, the one, the void, pure consciousness; nonspacial, nontemporal; a sense of objectivity or reality; a feeling of blessedness, peace, etc.; a feeling of the holy, sacred, or divine; paradoxicality; and as alleged by mystics to be ineffable (1960a, p. 131-132). He lists the characteristics of the extrovertive experience as: the unifying visions—all things are one; the more concrete apprehension of the one as an inner subjectivity, or life, in all things; a sense of objectivity or reality; a feeling of blessedness, peace, etc.; a feeling of the holy, sacred, or divine; paradoxicality; and as alleged by mystics to be ineffable (Stace, 1960a, p. 131-132).

Hood defined non-symbolic experiences, as “experience of unity beyond subject/object dichotomies” (1995, p. 575), and as follows:

First, mystical experience is itself a universal experience that is essentially identical in phenomenological terms despite wide variations in ideological interpretation of the experience. Second, the core categories of mysticism are not all definitionally essential to any particular individual mystical experience since there are always borderline cases forming what are “family resemblances” based upon fulfillment of only some of these core categories. (1975, p. 30)

Researchers associated with the Maharishi University of Management have gone even further, suggesting that non-symbolic experiences represent a fourth state of consciousness that exists in addition to waking, dreaming, and deep sleep (Travis et al., 2004). Over the last 40 years, these researchers have produced several

hundred published studies that examine Transcendental Meditation, prolonged practice of which is said to lead to non-symbolic experiences (Badawi, Wallace, Orme-Johnson, & Rouzere, 1984; Farrow & Hebert, 1982; Travis & Wallace, 1997). Several reviews of this work covering some of its major themes are available (e.g., Alexander, Rainforth, & Gelderloos, 1991; Alexander, Robinson, & Rainforth, 1994; Anderson, Liu, & Kryscio, 2008; Calderon et al., 1999; Hawkins, 2003).

The Maharishi University of Management research has progressed through the basic level and now consists of theoretical contributions, such as the “Junction Point Model” (Travis, 1994), and the “Object-referral, Self-referral continuum of self awareness” (Travis et al., 2004). The latter posited a continuum of experiences that ranges from individuals who primarily describe themselves in terms of concrete cognitive and behavioral processes, to individuals who describe themselves in terms of an abstract, independent sense-of-self underlying thought, feeling, and action (Travis et al., 2004, p. 401). This latter description fits into the non-symbolic family of experiences. Travis and Pearson (2000) described non-symbolic experience as pure consciousness:

Pure consciousness is “pure” in the sense that it is free from the processes and contents of knowing. It is a state of “consciousness” in that the knower is conscious through the experience, and can, afterwards, describe it. The “content” of pure consciousness is self-awareness. In contrast, the contents of normal waking experiences are outer objects or inner thoughts and feelings. Pure consciousness is a direct experience of the natural structure of human experience. (p. 79)

## Persistent Non-Symbolic Experiences

In their review of non-symbolic experiences Levin and Steele (2005) defined two categories of non-symbolic experience: green (temporary) and mature (long lasting). In Stace (1960a) we also find the notion of a more persistent form of non-symbolic experience. He hypothesized a final version of the experience wherein a person can take part in the world while continuing to experience the non-symbolic. Stace used St. Teresa of Avila, a well-known Christian mystic, as an example of a person who did not appear to have attained this at the time she wrote her autobiography (1904), but apparently had by the time she wrote her highly regarded text, *The Interior Castle* (1921). This notion of the non-symbolic experience as integrative is seen in the work of other key theorists and researchers (e.g., Allport, 1970; Maslow, 1970; Underhill, 1990). Maslow described a personal shift from temporary to persistent non-symbolic experiences, with extensive examples of the differences:

For me, part of the loss of peak experiences was the loss of newness and novelty . . . As these poignant and emotional discharges died down in me, something else happened . . . which is a very precious thing. A sort of precipitation occurred of what might be called the sedimentation or the fallout from illuminations, insights, and other life experiences that were very important-tragic experiences included.

The result has been a kind of unitive consciousness which has certain advantages and certain disadvantages over the peak experiences. I can define this unitive consciousness very simply for me as the simultaneous perception of the sacred and the ordinary, or the miraculous and the ordinary, or the miraculous and the rather constant or easy-without effort sort of thing.

I now perceive under the aspect of eternity and become mythic, poetic, and symbolic about ordinary things . . . There is nothing excepted and nothing special, but one lives in a world of miracles all the time. There is a paradox because it is miraculous and yet it doesn't produce an autonomic burst . . . These elements are present, but are constant rather than climactic...it's possible to sit and look at something miraculous for an

hour and enjoy every second of it . . . There tends to be more serenity rather than an emotionality.

. . . The important point that emerges from these plateau experiences is that they're essentially cognitive . . . they represent a witnessing of the world . . . a witnessing of reality.

. . . There is a sense of certainty about plateau experience. It feels very, very good to be able to see the world as miraculous and not merely in the concrete, not reduced only to the behavioral, not limited only to the here and now . . . these plateau experiences are described quite well in many literatures. This is not the standard description of the acute mystical experience, but the way in which the world looks if the mystic experience really takes . . . you go about your business as the great mystics did... You can run a grocery store and pay the bills, but still carry on this sense of witnessing the world in the way you did in the great moments of mystic perception. (Krippner, 1972, pp. 112-119)

Underhill (1990), known for being partially responsible for recovering the Christian mystical tradition (Hogan, 1992), also referred to a final stage in which non-symbolic experiences become persistent. She identified five stages on the path to persistent non-symbolic experience: the awakening of the self, the purification of the self, the illumination of the self, the dark night of the soul, and the unitive life. While these types of stages can be seen in the writings of others (Nixon, 1990), they are not agreed to by all. For example, after an examination of Eastern non-symbolic literature, Stace (1960b) came to believe that “dark night of the soul” type experiences were limited to Christianity. Conversely, Wilber (2006) suggested that there are “dark nights” associated with the transition between several levels of non-symbolic experience in the Eastern traditions.

Most of the handful of researchers that have empirically examined persistent non-symbolic experiences have been associated with Maharishi University of Management. Travis et al. (2004) described a theory of integration that is similar to the personal story recounted by Maslow (Krippner, 1972):

Repeated experience of the fourth state of pure, self-referral consciousness alternated with customary waking activity gives rise to a new integrated brain state in which pure, self-referral consciousness or awareness co-exists across the 24 h of waking, dreaming and sleeping consciousness (Maharishi, 1969). In this new integrated state, pure self-referral consciousness is experienced as a foundational state that gives rise to ongoing experience during waking, sleeping and dreaming (Maharishi, 1969, p. 404)

Travis et al. (2004) base their theory in part on an experiment involving 51 participants who were divided into three groups relating to the length of time they had practiced Transcendental Meditation (TM). One group had no meditation experience but was interested in learning it (the 'non-TM' group), a second had approximately 8 years of experience (the 'short-term' group), and a third had around 25 years (the 'long-term' group). Despite the variance in practice time, the mean ages of the groups were not vastly different (39.7, 42.5, and 46.5, respectively). Content analysis of unstructured interviews led to three high-level categories that defined how the participants experienced their lives. They found that the non-TM group identified their self with thoughts, feelings, and actions; the short-term group identified their self as the director of thoughts, feelings, and actions; and the long-term group identified their self as independent of and underlying thoughts, feelings, and actions (Travis et al., 2004, p. 409).

### **Critiques of the Common Core Thesis**

Although many researchers generally accept that the work of James, and later Stace, pointed to a common core of non-symbolic experience, there are dissenters. The most highly regarded and widely referenced are the strict constructivist critiques from Katz (1978, 1992). Strict constructivism holds that no unmediated experience is possible. Thus Katz argued that descriptions of a

non-symbolic experience, or for that matter the experience itself, is phenomenal in nature and a response to a deeper reality or level of experience that is out of reach. According to Katz, "The experience itself as well as the form in which it is reported is shaped by concepts which the mystic brings to, and which shape, his experience" (1978, p. 26). Essentially the argument is that we cannot get beyond the content or characteristics of an individual's experience and that, in part, it cannot be separated from the cultural indoctrination of that individual. Katz saw an individual's language as central to the experience itself. The most extreme views of strict constructivism hold linguistic descriptions as equivalent to the experience.

Katz (1978, 1992) argued that most research in this area is lacking in sufficiently sophisticated linguistic analysis, and that the experiences described should be treated as individual representations of distinct experiences that are different from one another. An obvious example is how non-symbolic experiences differ in relation to the culture they are experienced in (Katz, 1978), including whether they are theistic or non-theistic. Stace (1960a), a supporter of both the common core thesis and non-theistic interpretations of non-symbolic experiences, acknowledged the ineffability of the experiences and believed that the language used by writers attempting to describe them was both literal and paradoxical, because of the nature of the experience being described.

More recently the transpersonal philosopher Ferrer (2000, 2002) introduced an argument that rejects both the common core theorists as well as Katz's constructivist arguments. Ferrer saw both groups as agreeing that the



“contextual and conceptual” (2000, p. 14) influence the interpretation of mystical states, but disagreeing over the constructivist argument that it also influences the actual phenomenological content. Ferrer (2000, 2002) rejected common core theories as being an a priori philosophical stance, privileging a nondual monistic metaphysic, being geared to an objectivist epistemology, leaning towards essentialism, and tending towards dogmatism and intolerance (2000, p. 15). He believed that the common core theorists did not arrive at their position by neutral interpretation of accumulated data, but rather by fitting the data to their pre-existing assumptions. Like many transpersonal philosophers Ferrer expressed open contempt for Cartesian-derived science, which he linked to the common core theorists through their theory of a core objective reality.

As mentioned, Ferrer (2000, 2002) also rejected the constructivist arguments, which he viewed as being shaped by neo-Kantianism. Just as he perceived problems with the idea of a core, fixed reality underlying common core theories, he also disliked the rigidity and fixedness of the constructivist argument. An example of this is summed up well in his statement that, “mystics are prisoners of their conceptual frameworks and . . . spiritual knowledge must always be shaped or screened through them” (2000, p. 23). His larger issue, however, is with the very notion of dualism, which he contended is foundational to both the common core thesis and the constructivist position.

Once we fully exorcise the Cartesian-Kantian spell in spiritual studies and give up our dependence on essentialist metaphysics, in contrast, the various mystic traditions can be better seen as vehicles for the creative unfolding of different spiritual ultimates and metaphysical worlds. Spiritual inquiry then becomes a journey, an endless exploration and disclosure of the inexhaustible possibilities of an always dynamic and

indeterminate being, Krishnamurti notwithstanding, spiritual truth is not a pathless land, but a goalless path. (Ferrer, 2000, p. 26)

Ferrer's (2000, 2002) invalidation of the common core and constructivist theorists is a pretense to his own participatory theory. This theory rests on the idea of relationships and the co-creation of reality, and it has been increasingly important among transpersonal theorists for the last several years. It posits spirituality as an 'ocean with many shores,' each of which is independent from the others. One's spirituality may take an individual to the experiences of a traditional shore, such as Buddhism, or to a new and unique one. Ferrer's theory posited this simultaneously with a rejection of dualism, leading critics to question how one can have many shores that are separated by boundaries in a unified system (Lahood, 2008).

While these philosophical critiques can be interesting, generally they do not lead to testable claims. Indeed, often the authors' worldviews reject the very notion of objective scientific testing. As regards Ferrer's (2000, 2002) claims of a priori bias, certainly one can assume that many researchers operate from the suspicion that thematic and other forms of analysis will lead to commonalities across datasets from individuals who self-report persistent non-symbolic experiences. I suspect that most people who have read the accounts of even a handful of these individuals will spot what appear to be similarities. That trained, interested scholars who possess tools for valid in-depth comparative analysis have explored whether this is actually the case is not surprising. In my opinion, more than enough data has been accumulated through these efforts to suggest that similar psychological claims are present across individuals self-reporting

persistent non-symbolic experience. Most importantly, many of these psychological claims appear to be testable.

### **Non-symbolic Experiences in Relation to Developmental Psychology**

Psychological stage theories posit that development occurs as a process of distinct, generally linear and hierarchical, stages that can be identified by qualitatively and quantitatively measured differences in behavior. Several domains of stage theories exist, including: Piaget's (1970, 1971) theory of cognitive development, Commons' (Commons & Richards, 1984) model of hierarchical complexity, Erikson's (1982) stages of psychosocial development, Fowler's (1981) stages of faith, Freud's (1949) psychosexual stages, Kohlberg's (1984) stages of moral development, Loevinger's (1976) and Cook-Greuter's (1994) stages of ego development, Marcia's (1976) theory of identity achievement, Maslow's (1970) hierarchy of needs, Graves' (2005) emergent cyclic levels of existence, and so forth. These types of theories are primarily based on sequential passage through a series of hierarchical stages. The stages typically increase in complexity with each one building on, transcending, and integrating its predecessors. Progression to a new stage enables one to understand previous stages, but not the stages that lie ahead in the hierarchy. One's capability at a given stage determines interpretation of experience, with all the contents of experience filtered through and adjusted by the current stage's level of understanding.

Several attempts have been made at situating non-symbolic experiences within these types of developmental models, generally by adding them above

existing levels. Some of these attempts have been made by mainstream academics. For example, in the late 1980s Charles Alexander began a collaboration with Susanne Cook-Greuter. Alexander was a Ph.D. psychology graduate from Harvard University who studied under and often collaborated with Harvard's Ellen Langer. After graduation he took an academic position at Maharishi University of Management. At the time, Cook-Greuter was collaborating with developmental psychologists in Harvard's Education School. She would later earn her Ed.D. there under Robert Kegan.

The two began to question whether persistent non-symbolic experience represented a further level of development within the individual. Building on the well recognized concept of a shift from preverbal to verbal processing in young children, and non-symbolic theory based on Vedic philosophy, Alexander's research led him to postulate that a different kind of shift, personal-verbal to transpersonal-postsymbolic, might exist in adulthood (Alexander & Langer, 1990; Cook-Greuter, 2000). Cook-Greuter (2000) reported that around the same time she had noticed that people who scored high on the Washington University Sentence Completion Test (WUSCT) (Loevinger, 1976), a well-known measure of ego development, seemed to become aware of a "language habit." These research participants described how the personal-verbal or discursive frame of mind prevented them from remaining in an open, nonevaluative witnessing stance that they enjoyed during peak moments and altered states of consciousness. Cook-Greuter identified six attributes of the language habit: it constitutes a universal, all-pervasive dimension of human existence; it is innate but needs activation and

modeling by expert speakers in early childhood to emerge; it is a learned behavior that becomes automatic and unconscious once acquired; it bundles the flux of sensory input and inner experience into labeled concepts shared with one's speech community; it is so deeply engrained that speakers of any given language are not aware of the reality construction imposed on them by their language; and it can become a barrier to further development if it remains unconscious, automatic, and unexamined (Cook-Greuter, 2000, p. 228).

Cook-Greuter (2000) suggested that individual enculturation into a society's linguistic systems may limit access to further ego developmental levels. Her research extended Loevinger's (1976) well-known ego development work, and her stages can be seen in Table 1. One primary difference between Cook-Greuter and Loevinger's work was an expansion of Loevinger's *integrated* stage into two new stages: *Construct Aware* and *Unitive*. Cook-Greuter (2000) also specified a possible "transcendent self" stage which refers to the possibility of ego transcendence, but did not consider it something that could be measured by the Washington University Sentence Completion Test (WUSCT) because of the limitations of language. Characteristics associated with each ego development stage can be found in Appendix A.

Maharishi University of Management researchers such as Alexander have consistently argued that most societies have cultural patterns (such as linguistic norms) that retard development, and that non-symbolic stages are possible if additional developmental tools (in their case, generally, Transcendental Meditation) are provided to individuals (Alexander, Davies, et al., 1990;

Alexander, Heaton, & Chandler, 1994). Alexander's stages, which are related to Maharishi's interpretation of Vedic philosophy, can be seen in Table 1 alongside Cook-Greuter's.

Table 1

*Four-tier Comparison of Models*

4 tiers of development (Miller & Cook-Greuter; Wilber)	Levels of mind (Alexander et al.)	Ego-development stages (Loevinger; Cook-Greuter)
IV. Postpostconventional Ego-Transcendent	Unity consciousness Refined cosmic consciousness Cosmic consciousness	Transcendent self
III. Postconventional or Postformal	Ego	Unitive Construct aware
	Feelings/intuition	Autonomous/integrated <i>Mature, connected self</i> Individualistic
II. Conventional	Intellect	Conscientious <i>Separate, individual self</i> Self-aware
	Mind	Conformist <i>Communal self</i>
I. Preconventional	Desires	Self-protective
	Behavior/senses	Impulsive
	Physical world	Presocial <i>Undifferentiated self</i>

*Note.* Reprinted from Cook-Greuter, S. R. (2000). Mature ego development: Gateway to ego transcendence? *Journal of Adult Development*, 7(4), 227-240. Reprint by blanket permission.

The stages in tiers I-III have, for the most part, received considerable empirical research within the academy across a range of areas including cognition, morality, faith, and so forth. Cook-Greuter's (2000) Unitive stage, and the stages in tier IV may refer to non-symbolic experiences. These stages have received the extensive phenomenological, hermeneutical, survey, and interview research mentioned previously. However, as Smith (2007) noted, only a small body of published research has empirically examined the nature of non-symbolic experiences and the field studying personality and non-symbolic experience appears to be wide open. This seems to be even more the case for persistent non-symbolic experiences, for which almost no studies exist beyond a range of interviews and self-reports.

Building on this theme, Wilber (1981, 2000, 2006) has continued the "Great Chain of Being" work of scholars such as Huxley (1945), Smith, (1976, 1992) and Lovejoy (1976) as well as the consciousness structuring work of Gebser (1986) and constructed elaborate comparisons across religions, cultures, and even academic research disciplines. In his book *Integral Psychology* (Wilber, 2000) he claimed to compare and synthesize over 100 such models. Wilber's work has led him to extensively theorize about these additional developmental levels, and to construct elaborate mixed developmental domains. One example of a mixed developmental domain that is based on Wilber's (e.g., 2000, 2006, n.d.) ideas is shown in Table 2. It is an example of the way models from developmental psychology and non-symbolic theories have traditionally been visualized.

Table 2

*Example of a Mixed Developmental Domain*

Stage/Level
Supermind (Aurobindo)
Overmind (Aurobindo)
Meta-Mind (Wilber)
Global Mind (Wilber)
Late Vision-Logic (Wilber)
Middle Vision-Logic (Wilber)
Early Vision-Logic (Wilber)
Formal Operational (Piaget)
Concrete Operational (Piaget)
Preoperational (Piaget)
Sensorimotor (Piaget)
Author's table.

The lower portions of this domain are made up of Piaget's (1970, 1971) well-known stages of cognitive development: Sensorimotor, Preoperational, Concrete Operational, and Formal Operational. At the top lie some of Sri Aurobindo Ghose's developmental stages (Overmind and Supermind). Sri Aurobindo was one of the most respected mystics of the 1900s (Combs, 2002). Between these lie some of Wilber's theoretical stages (Early Vision-logic, Middle vision-Logic, Late Vision-Logic, and Global Mind, Meta-Mind).



While the Piaget (1970, 1971) stages are well defined and grounded in decades of empirical research, Wilber's stages are theoretical constructs that have changed over time. Table 3 illustrates how Wilber (e.g., 2000, 2006, n.d.) might match this mixed developmental domain up to other developmental domains.

Table 3

*A Cross Comparison of Some Major Developmental Domains*

Example Wilber (e.g., 2000, 2006) Cognitive Line	Kegan's (1994) Orders of Consciousness	Cook-Greuter (2000) Ego Development
Supermind		
Overmind		
Meta-Mind		Unitive
Global Mind		Construct-aware
Late Vision-Logic	5th Order	Autonomous
Middle Vision- Logic	(4-5th Order)	Individualistic
Early Vision- Logic	(4-5th Order)	Conscientious
Formal Operations	4th Order	Self-aware
Concrete Operations	3th Order	Conformist
Preoperational (Conceptual)	2th Order	Self-protective
Preoperational (Symboitic)	1st Order	Impulsive
Sensorimotor	-	Presocial

Author's table.

This is only one example; these types of comparisons have changed significantly across his various writings (e.g., Wilber, 2000, 2006, n.d.). While some scholars have made serious attempts to clean up and synthesize these various theoretical levels and mixed domains (e.g., Combs, 2009), they remain problematic because of the diverse and conflicting literature on them. The incorporation of Aurobindo's levels is no less confusing because of their complexity and many variations. Even Wilber (n.d.) appeared to recognize the problems with his use of them in comments such as:

Aurobindo's use of "supermind" was quite specific; in a sense, it is the first form of manifestation in a transformed bodymind. Still, the word "supermind" has escaped into popular parlance and taken on a life of its own; I use it as a generalized term for the highest recognizable wave of cognitive development. (p. 160)

While trying to draw these comparisons between developmental levels and add non-symbolic and other theoretical stages above traditional developmental domains, considerable license is often taken with the foundational, highly researched, developmental domains. In one illustration Wilber (n.d.) referred to a "self-sense" developmental domain that he associates with the work of Loevinger and Cook-Greuter. The stages he listed for it have only a partial resemblance to the actual model, and include: autistic, impulsive, self-protective, conformist, conscientious, individualistic, autonomous, integrated (centaur), deeper psychic, soul-self, spirit-self. He often failed to provide definitions for many or even all of the stages he listed.

At least some of what they relate to may be partially gleaned by how stages are matched up across developmental domains such as in Table 3. For

example, in the table containing the “self-sense” domain (Wilber, n.d., p. 83) there is also a cognitive line that is similar (though not precisely the same) to Table 2. In it he listed Supermind as the top stage. He also listed a third column that is labeled “morals” and is associated with Kohlberg’s theory of moral development. Like the Loevinger/Cook-Greuter column, the Kohlberg column contains many stages that are not found in Kohlberg’s orthodox theory, including a top level item labeled “nondual.” In this table, if one reads across the top it appears that he is associating Supermind (in the Piaget/cognitive column) to spirit-self (in the Loevinger/Cook-Greuter column) to nondual (in the Kohlberg column). However, he did not offer any definitions in the text for key terms such as *spirit-self* that allow one to know how these additional terms relate to the developmental domains they have been associated with.

This type of formulation has been a relatively typical way to express how non-symbolic ‘development’ unfolds, and has formed a theoretical foundation in disciplines such as Transpersonal Psychology for decades (Ferrer, 2002). Lower levels were often drawn from various established domains in developmental psychology, with higher theoretical levels changing significantly from one text to the next, going largely undefined, and culminating in labels meant to express various forms of non-symbolic experience (Combs, 2002, 2009; Wilber, 2000, 2006, n.d.). This mixing of developmental domains by theorists such as Wilber hasn’t gone unnoticed and has been criticized by developmental psychologists for both inconsistent use over time and lack of depth of understanding (e.g., Ross, 2008).

Aside from the obvious problems of lack of consistency and clear definition, there are two additional major issues with this formulation. First is that there is evidence that non-symbolic experiences have been present throughout human development, and also that consciousness has continued to evolve and develop over time. Thus the idea that non-symbolic experiences represent the highest developmental level is problematic since they potentially predate much later developmental stages across a range of psychological domains (Combs, 2002; Wilber, 1981, 2006). Put another way, if the Buddha attained the highest level of development possible, how do we explain the fact that it appears various psychological developmental domains have continued to expand their number of stages since that time (Wilber, 2006)?

A second major issue is the question of whether someone must progress through all of the stages in each developmental domain, as is generally believed to be the case with stage theories, prior to arriving at non-symbolic experience. It is possible to argue that an individual must only progress through the stages that have unfolded within their culture at the time of the person's existence (Wilber, 1981). However, there are numerous well documented contemporary examples that appear to suggest this does not happen (Butlein, 2005; Falk, 2009; Wilber, 2006). For example, researchers have documented what appears to be highly questionable moral behavior in a considerable number of contemporary individuals who report persistent non-symbolic experience (e.g., Falk, 2009). This view is also supported by the apparent ability of children to have non-symbolic experiences (e.g., Travis & Brown, in press).

Theorists wrestled with these issues for decades before arriving at a possible solution. These types of discrepancies eventually led Combs (2002) and Wilber (1981, 2006) to propose that non-symbolic experiences are accessible across a wide range of developmental levels, directly challenging the orthodox view that they represented “higher” developmental levels. As seen in the next section, a very small amount of empirical work suggests that this view may be correct. Two small, homogeneous populations (5 and 11) of individuals self-reporting persistent non-symbolic experience have taken the Washington University Sentence Completion Test (WUSCT), a well-known construct that measures ego development, and their results were spread across a range of stages (Butlein, 2005; Travis & Brown, in press).

One way to view the Combs/Wilber interpretation is that non-symbolic experiences are, to an unknown degree, independent of developmental level. Combs (2002) and Wilber (2006) suggested that an individual’s composite developmental level (across all psychological development domains) affects how the person interprets (and, possibly, perceives) their non-symbolic experiences but may not affect whether the individual can have the experience. Of course, it is possible that there are certain levels of development in some domains that might be necessary for the emergence of non-symbolic experiences, however basic these might turn out to be. Though a plausible theory with reasonable anecdotal support, at present there is very little empirical research into this hypothesis, and it remains disputed by other theorists as well as leaders in various religious traditions (Wilber, 2006).

### **Possible Psychological Correlates of Persistent Non-Symbolic Experience**

The question of whether self-report instruments can capture meaningful data on individuals who report persistent non-symbolic experience has been rarely explored. Perhaps the most promising developmental example is Cook-Greuter's (1994, 1999) research with the Washington University Sentence Completion Test (WUSCT) (Loevinger, 1976), a well-known measure of ego development. This is probably the only data-driven developmental research that has made an extensive effort to include persistent non-symbolic experience (Cook-Greuter, 2000).

In his 2005 dissertation, Butlein examined the impact of therapy sessions with 10 transpersonal psychotherapists and 5 nontranspersonal psychotherapists. Five of the transpersonal psychotherapists reported persistent non-symbolic experience. One of the instruments given to the psychotherapists was the Washington University Sentence Completion Test (WUSCT). It rated all of the purported non-symbolic psychotherapists in the mid- to low- postconventional range, and thus failed to classify participants at the Unitive stage that has been theorized to possibly be indicative of non-symbolic experiences (Butlein, 2005).

The study also used an 'exemplar' as a non-symbolic baseline. The exemplar was described as a senior meditation teacher from the Eastern coast of the United States. Cook-Greuter rated his test as "unscorable" with most items scored at very low levels of ego development. Cook-Greuter guessed that the person she was scoring was either a disturbed mental patient or someone with extreme superiority and ego inflation who may be toying with the test. When later asked, the exemplar stated that he felt the test was "'incredibly irrelevant' to the

way he experiences the world and [that] he was tempted to not answer any of the questions” (Butlein, 2005, p. 113). During the test, the exemplar wrote the following in the comment section, “Seems like the questions were asking about my story or point of view or reactions. But I have none till I’m in the moment” (Butlein, 2005, p. 113).

Maharishi University of Management researchers Travis and Brown (in press) reported similar findings in long-term Transcendental Meditation practitioners who reported persistent non-symbolic experience and were administered the Washington University Sentence Completion Test (WUSCT). Of the 11 long-term Transcendental Meditation practitioners in their study, 4 were classified as Self-Aware, 3 as Conscientious, 1 as Individualistic, and 3 as Autonomous; all short of the highest possible (Unitive) level.

### **The Washington University Sentence Completion Test (WUSCT)**

The developmental instrument used in this study is the Washington University Sentence Completion Test (WUSCT) (Loevinger, 1976), as extended by Cook-Greuter (1994, 1999, 2000). The WUSCT is a well-known and robust semiprojective instrument that measures a construct referred to as “ego development.” It and the developmental system it relates to are widely referenced by developmental theorists who have an interest in non-symbolic experience (e.g., Combs, 2009; Cook-Greuter, 2000; Forman, 2004; Wilber, 2000). It is generally regarded by theorists as a leading candidate for potentially measuring individuals who report persistent non-symbolic experience.

As used here the term *ego* is not related to the popular Freudian definition. *Ego* represents a frame of reference that represents the fundamental structural unity of the personality (Loevinger & Wessler, 1970; Loevinger, Wessler, & Redmore, 1970). Loevinger (1976) referred to it as a “master trait,” one that is primary among the various other known developmental traits, such as moral development. She (Loevinger, 1976; Manners & Durkin, 2001) felt that it integrated a range of personality characteristics, including: cognitive function, personal and interpersonal emotional awareness, and character development. Loevinger stated that her theory encompassed four primary domains: character development, cognitive style, interpersonal style, and conscious preoccupations. *Ego* relates to both a process and a structure (Cook-Greuter, 1999). The structural component of the definition represents the way information is seen, processed, and understood. The process component relates to the way an individual filters and integrates interpersonal and intrapersonal information. Manners and Durkin (2001) referred to it as a:

holistic construct representing the fundamental structural unity of personality organization. It involves both the person’s integrative processes in dealing with diverse intrapersonal and interpersonal experiences, as well as the consequent frame of reference that is subjectively imposed on those life experiences to create meaning. (p. 542)

The WUSCT is comprised of 36 sentence stems that a participant must complete, such as: “What gets me into trouble is” (Loevinger, 1976). According to Cook-Greuter, the structure of the instrument elicits participants’ ontological, teleological, and epistemological perspectives. The format of the instrument is based on the theory that people codify meaning via the symbolic medium of



language, and this unconsciously reflects their self-concept, worldview, concept of other, and preoccupations (Miller & Cook-Greuter, 1994). Items are scored by using one of several manuals, which have been revised over time (e.g., Hy & Loevinger, 1996). There are separate versions for men and women. Copies of the instruments used can be found in Appendix B.

Several critical reviews of Loevinger's theory and instrument have supported its validity (Hauser, 1976, 1993; Loevinger, 1979, 1993). The most recent (Manners & Durkin, 2001) found, "substantial empirical support for the conceptual soundness of ego development theory and the WUSCT" (p. 541). Over hundreds of studies during its three decades of use, the WUSCT has consistently demonstrated high face validity, interrater reliability, test-retest reliability, and construct validity (Manners & Durkin, 2001). It is one of the most widely used and highly validated developmental measures.

Individual studies have called into question the degree of WUSCT correlation with intelligence level (Cramer, 1999; Loevinger, 1979) and also the degree to which ego development actually subsumes the four primary domains Loevinger elucidates (Novy et al., 1994). Because of the preliminary nature of the results, additional work is called for in these areas. There is also a general question regarding if and what type of cognitive development is being measured. Manners and Durkin's (2001) review suggests that the WUSCT measures cognitive development within the socioemotional domain, rather than the logico-mathematical domain that is reflected in other measures.

Based on her extensive work in scoring the WUSCT, Cook-Greuter (1994) created a revised version of Loevinger's ego developmental stages, and her own scoring manual. Cook-Greuter (1994) argued that Loevinger's Integrated stage was not adequately supported and replaced it with two levels representing advanced levels of complexity: Construct Aware and Unitive. Cook-Greuter (1994) placed both of her newly created categories at the upper range of the postconventional tier (Table 1). While she places a transcendent category in a postpostconventional tier to allow for comparisons between various developmental theories, she feels it is beyond language and thus not able to be measured with the WUSCT (Cook-Greuter, 1994). Some notable developmental theorists have disagreed with her placement (e.g., Foreman, 2004; Torbert, 1994), feeling that at least the Unitive level should have been placed within the highest tier. According to Cook-Greuter (1994), approximately 10% of participant responses fall into the preconventional tier, 80% in the conventional tier, 10% in the postconventional tier, and less than 1% in her Construct Aware and Unitive stages. The characteristics of each ego development stage can be found in Appendix A.

As the name suggests, Cook-Greuter's Unitive stage is highly suggestive of persistent non-symbolic experience. The Unitive stage is described as having the qualities of effortlessness, nonattachment, lack of anxiety in not knowing, extreme openness and appreciation for what is, a high capacity for experiencing and describing reality as it is with minimal to no distortion, an effortless capacity to simultaneously experience and conceptualize both the mundane and the

sublime, a familiarity and comfort with highly frequent altered states of consciousness, and a understanding of all objects as nondiscrete systems interacting with each other (Cook-Greuter, 1994). There is much here that seems readily comparable to many items in the previously provided lists of elements that non-symbolic experiences are said to possess. While not totally opposed to this notion, Cook-Greuter (2000) also pointed out that it is possible that what is being measured is a type of experience that is very close to non-symbolic, but not actually non-symbolic.

Currently there is no known way to directly measure and detect non-symbolic experience, or even know if it exists as it is purported to. Everything we know about it comes from self-reports, which use language. It seems at least possible that the WUSCT could detect responses from research participants who self-report periodic or persistent non-symbolic experience, yet still communicate using language for practicality. These types of participants may exhibit response patterns that are consistent with their degree of non-symbolic experience.

### **The Mysticism Scale (M Scale)**

The Mysticism Scale (Hood, 1975) is the most widely used academic self-report measure for non-symbolic experiences (Macdonald & Friedman, 2002). It was originally published in 1975 as an operationalization of Stace's phenomenological categories of mystical experience. Hood omitted Stace's category of paradoxically stating (1975, p. 31), "In none of our preliminary work did it effectively discriminate nor do we consider it an essential characteristic of

the mystical experience. Stace himself seems to waver on this point (Stace, 1960a, pp. 270-276).”

The remaining eight categories, along with Hood’s original descriptions of what each measure, are listed below:

**EGO QUALITY (E):** Refers to the experience of a loss of sense of self while consciousness is nevertheless maintained. The loss of self is commonly experienced as an absorption into something greater than the mere empirical ego.

**UNIFYING QUALITY (U):** Refers to the experience of the multiplicity of objects of perception as nevertheless united. Everything is in fact perceived as "One."

**INNER SUBJECTIVE QUALITY (Is):** Refers to the perception of an inner subjectivity to all things, even those usually experienced in purely material forms.

**TEMPORAL/ SPATIAL QUALITY (T):** Refers to the temporal and spatial parameters of the experience. Essentially both time and space are modified with the extreme being one of an experience that is both "timeless" and "spaceless."

**NOETIC QUALITY (N):** Refers to the experience as a source of valid knowledge. Emphasis is on a nonrational, intuitive, insightful experience that is nevertheless recognized as not merely subjective.

**INEFFABILITY (I)** Refers to the impossibility of expressing the experience in conventional language. The experience simply cannot be put into words due to the nature of the experience itself and not to the linguistic capacity of the subject.

**POSITIVE AFFECT (P):** Refers to the positive affective quality of the experience. Typically the experience is of joy or blissful happiness.

**RELIGIOUS QUALITY (R):** Refers to the intrinsic sacredness of the experience. This includes feelings of mystery, awe, and reverence that may nevertheless be expressed independently of traditional religious language. (Hood, 1975, pp. 31-32)

There are four questions for each category (32 total), two phrased positively and two negatively. The questions are Likert style with five response options ranging

from -2; "this description is definitely not true of my own experience or experiences" to +2; "this description is definitely true of my experience or experiences." The fifth response option is "I cannot decide." The full instrument can be found in Appendix C.

Initial analysis of the Mysticism Scale uncovered two factors, one associated with unity characteristics and a second, considered interpretative, that was related to noetic characteristics (Hood, 1975). Subsequent research uncovered a three-factor model, with factors matching Stace's introvertive and extrovertive mysticism, as well as a third interpretative factor (Caird, 1988; Hood, Morris, & Watson, 1993; Reinart & Stifler, 1993). These three factors remain the recommended model (Hood et al., 2001), although most of the research conducted to date has used the original two-factor model (MacDonald, LeClair, Holland, Alter, & Friedman, 1995). More recently a second three-factor model has been employed that is drawn from Stace's original concepts rather than statistical analysis (Hood et al., 2001; Lazar & Kravetz, 2005). Both three-factor models perform well statistically. The difference between the three-factor models lies in the placement of the ineffability items. Hood's model placed them within the interpretative factor while Stace's model placed them within the introvertive factor. For some groups, such as an Iranian sample, both seem applicable (Hood et al., 2001). For other, typically American, samples Hood's model is often superior (Hood et al., 2001). In an Israeli/Jewish sample, both appeared to be applicable but the Stace model performed slightly better (Lazar & Kravetz, 2005).

Although a significant amount of research has used this instrument, there hasn't been a great deal of research that examined its psychometric properties (Macdonald & Friedman, 2002; MacDonald, Friedman, & Kuentzel, 1999; MacDonald, LeClair, Holland, Alter, & Friedman, 1995). Accordingly, some have raised questions regarding the absence, for example, of test-retest data as well as with certain aspects of overall reliability and validity (MacDonald et al., 1995). Nonetheless, it remains the standard for research of this kind (MacDonald et al., 1995). Another area of concern relates to generalizability. The instrument has been heavily used, and had most of its validity work done, with U.S.-based Christian populations. Recent research has expanded this to Iranian/Islamic (Hood et al., 2001) and Israeli/Jewish (Lazar & Kravetz, 2005) populations, with good results. Although it has been used, as mentioned previously, by Maharishi University of Management researchers in their studies on persistent non-symbolic experiences, no studies of sufficient statistical power have examined the instrument's performance with other practitioners of Eastern religions.

## **Chapter 3**

### **Methods and Procedures**

The Washington University Sentence Completion Test (WUSCT) (Loevinger, 1976; Cook-Greuter, 2000) and Mysticism Scale (Hood, 1975) were administered to 36 participants (F = 9, M = 27) who self-reported persistent non-symbolic experience. The WUSCT was used to measure participants' ego development level. The Mysticism Scale was used to assess participants' degree and type of non-symbolic experience. Because of the rarity of persons reporting persistent non-symbolic experience, participants were selected on an ad-hoc, opportunistic basis. Participants were drawn from people who self-report persistent non-symbolic experience as defined by Stace (1960a). The primary investigator (the author) made all decisions as to who participated in the study. The factors considered included: the potential participant's self-reports, corroboration from others that validated the potential participant's self-reports, and communication between the primary investigator and the potential participant. The primary investigator has spent the last few years interacting with and interviewing dozens of individuals who self-report persistent non-symbolic experience.

### **Instruments**

**The Washington University Sentence Completion Test (WUSCT).** The Washington University Sentence Completion Test (WUSCT) is a well-known and robust semiprojective instrument that measures a cognitive development construct referred to as "ego development." It and the developmental system it relates to are

widely referenced by theorists who have an interest in non-symbolic experience (e.g., Combs, 2009; Cook-Greuter, 2000; Forman, 2004; Wilber, 2000). It is generally regarded by these theorists as a leading candidate for potentially measuring individuals who self-report persistent non-symbolic experience. The characteristics of each ego development stage can be found in Appendix A. The version of the instrument that was used can be found in Appendix B.

The WUSCT is comprised of 36 sentence stems that a participant must complete, such as: “What gets me into trouble is” (Loevinger, 1976). The structure of the instrument is designed to elicit participants ontological, teleological, and epistemological perspectives. The instrument is based on the theory that the way individuals codify meaning via the symbolic medium of language can unconsciously reflect their self-concept, worldview, concept of other, and preoccupations (Miller & Cook-Greuter, 1994). Items are scored by using one of several manuals, which have been revised over time (e.g., Hy & Loevinger, 1996). Based on her extensive work in scoring the WUSCT, Cook-Greuter (1994, 1999, 2000) created a revised version of Loevinger’s ego developmental stages, and her own scoring manual. The Cook-Greuter scoring system was used for this study.

Several critical reviews of Loevinger’s theory and instrument have supported its validity (Hauser, 1976, 1993; Loevinger, 1979, 1993). The most recent (Manners & Durkin, 2001) found, “substantial empirical support for the conceptual soundness of ego development theory and the WUSCT” (p. 541). Over hundreds of studies during its three decades of use, the WUSCT has consistently



demonstrated high face validity, inter-rater reliability, test-retest reliability, and construct validity (Manners & Durkin, 2001). It is one of the most widely used and highly validated developmental measures.

**The Mysticism Scale (M Scale).** The Mysticism Scale is a 32 item self-report instrument that operationalizes Stace's theory of mystical experience (Hood, 1975). Eight categories are drawn from Stace's (1960a) theoretical work: Ego Quality, Unifying Quality, Inner Subjective Quality, Temporal/Spatial Quality, Noetic Quality, Ineffability, Positive Affect, and Religious Quality. The instrument contains four questions for each category, two are phrased positively and two negatively. The Likert style questions have five response options ranging from: "this description is definitely not true of my own experience or experiences" (valued at -2) to "this description is definitely true of my experience or experiences" (valued at +2). The fifth response option is "I cannot decide." Individuals rate each item based on the degree to which it applies to their life experience. Scoring is done by adding +3 to all positively expressed items. All negatively expressed items first have their algebraic sign reversed and then a +3 is added. A 7 or a blank is assigned a value of 3. Hence, scores can range from 32 (least mystical) to 160 (most mystical).

Currently Hood (Hood et al., 1993, 2001) recommends a three-factor analysis, with the first two factors matching Stace's introvertive and extrovertive mysticism, and a third representing an interpretative factor. More recently a second three-factor model has been employed that is drawn from Stace's original theory rather than statistical analysis (Hood et al., 2001; Lazar & Kravetz, 2005).

Both three-factor models perform well statically, though results using them vary slightly by population. Research to assess the validity of the instrument has been conducted cross-culturally with participants from the three Abrahamic religious traditions and found support for both sets of three factors (Hood et al., 2001; Lazar & Kravetz, 2005); however, no validity research has been performed with members of indigenous religions or adherents of Eastern religions. Because this study included the latter, both three-factor designs were analyzed.

A significant amount of research has used this instrument, but some of its psychometric properties remain thinly or completely unevaluated (Macdonald & Friedman, 2002; MacDonald et al., 1995, 1999). Questions have been raised regarding the absence, for example, of test-retest data as well as with certain aspects of overall reliability and validity (MacDonald et al., 1995). Nonetheless, it remains the standard for research of this kind (MacDonald et al., 1995).

In addition to the traditional answer options, a second set of answer options was used. For each item, the traditional form of the Mysticism Scale asks people if they have ever had a certain experience. Because this inquiry dealt with a population that was self-reporting a persistent, ongoing, experience it was felt that an answer option that provided persistence data would be beneficial. Ralph Hood, the scale's original creator and one of the committee members for this dissertation, was consulted and a 0 (never) to 100 (always) scale in 10 step increments was agreed upon. This second answer option has not been used in other studies.

Having both answer options wound up being confusing for participants, and it took significant piloting to reduce errors. Despite this, errors continued to occur. For example, participants were instructed to use 0 if the traditional answer they chose for a negatively phrased question was -2. Several selected 100 instead of 0. These types of errors were corrected in the raw data prior to analysis. The full version of the Mysticism Scale used, including instructions, can be found in Appendix C.

## **Procedures**

**Participants.** The participant pool consisted of individuals who self-report persistent non-symbolic experience. They were selected on an ad-hoc, opportunistic basis. While well supported philosophically and consistently self-reported, there is little or no empirical evidence for the purported existence of persistent non-symbolic experience. Accordingly, there was no empirical examination that could be administered to potential participants who reported experiencing it. Because of this, the participants were necessarily drawn from people who self-report persistent non-symbolic experience as defined by Stace (1960a). The primary investigator, the author, made all decisions as to who participated in the study. The factors considered included: the potential participant's self-reports, corroboration from others that validated the potential participant's self-reports, and communication between the primary investigator and the potential participant. The primary investigator has spent the last few years interacting with and interviewing dozens of individuals who self-report persistent non-symbolic experience.

Every effort was made to recruit as diverse a population as possible. Participants were recruited in a variety of ways, including: through relationships the primary investigator had been cultivating, through the relationships of other study participants, from the Center for the Study of Non-Symbolic Consciousness participant pool, and from searches performed through media sources including the Internet. These efforts produced sizable contact databases across a range of religious and spiritual traditions, culture, and geography. Over 500 individual requests were emailed to solicit possible participation in the study. This number does not include additional solicitations sent out by others who had a relationship with the primary investigator, or by those who received the request and forwarded it. Ultimately there is no way to know how many people were contacted.

Fifty-two participants agreed to initially participate and were accepted. Thirty-six (F = 9, M = 27) completed it. Experience with this population has shown that it is very difficult to get them to fill out standardized psychological instruments but these particular surveys were even more challenging than usual. Some participants objected to the Washington University Sentence Completion Test (WUSCT), others to the Mysticism Scale. The latter was surprising given that the Mysticism Scale has traditionally been assumed to match the experience defined by Stace (1960a), and the fact that this definition was used to qualify people for the study. Commentary on this can be found in the discussion section.

The research participants also responded to questions regarding their age, the year when non-symbolic experience became persistent, education, gender, race, and religious identity. Because of a combination of privacy concerns and

personal beliefs concerning this type of information, participants were not required to provide this information in order to participate in the study. Two refused to do so, with the others answering the questions they felt were appropriate. Summary information from each participant can be found in Appendix D. The average age of participants was 51.03 (SD = 12.63, Median = 53.50, Minimum = 23, Maximum = 69). Age diversity was better than expected. Of participants responding to the question about their age: 10 were in their 60s, 14 were in their 50s, 6 were in their 40s, 1 was in his 30s, and 5 were in their 20s.

The approximate average age when non-symbolic experience became persistent was 39.94 ( $n = 32$ , SD = 11.32, Median = 41, Minimum = 4, Maximum = 57). Age cannot be calculated precisely because the information form asked for the year, not the specific date, when non-symbolic experience became persistent. It was calculated by subtracting their birth year from the year they reported non-symbolic experience becoming persistent. From my interview research I know that individuals sometimes have difficulty providing a specific date. I asked for only the year so that participants would be more likely to respond. The approximate number of years that a participant had reported persistent non-symbolic experience by the time of the study was 11.88 ( $n = 32$ , SD = 13.61, Median = 7, Minimum = <1, Maximum = 65).

Geographic diversity was good, with nine participants from the Central US, seven from the Southwestern US, six from the Eastern US, three from the Southern US, three from the Western U.S., three from Canada (two Western, one Eastern), and one each from Australia, Germany, Ireland, the Netherlands, and

Switzerland. Racial diversity was poor; all participants were white. Nineteen participants were married, 7 were divorced, 6 were single/never married, 4 had significant others/partners. Of participants reporting their educational level ( $n = 34$ ), 18 had post graduate education; 10 had at least some college, with most having a degree; 4 had high school level degrees; 1 had some high school, and 1 graduated from junior high school. The religion participants were raised with ( $n = 35$ ) was highly mixed but predominantly Christian ( $n = 24$ ), Jewish ( $n = 5$ ), or Agnostic/Atheist ( $n = 5$ ). Most participants ( $n = 22$ ) have no current religion. The remainder are generally a mix of various forms of Buddhism, Hinduism, Christianity, and Judaism. Participants practiced a wide variety and amount of meditation ( $n = 31$ ), from 45 years to 18 months prior to their experiencing persistent non-symbolic experience. Four participants had never meditated or practiced any form of centering or contemplative prayer. Nineteen participants reported never having used hallucinogenic drugs, while 15 reported having used them.

**Data collection.** The instruments being used are typically administered in paper and pencil format. For this study, they were converted to an online format and administered over the Internet. Current best practices for electronic instrument conversion and Internet delivery were used (e.g., Balch, 2007; Conrad, Couper, Tourangeau, & Peytchev 2006a, 2006b; Couper, 2000, 2005; Couper, Kapteynb, Schonlaub, & Winter, 2007; Couper, Kenyon, & Tourangeau, 2004; Couper, Tourangeau, & Conrad, 2004; Couper, Traugott, & Lamias, 2001; Crawford, Couper, & Lamias, 2001; DeRouvray & Couper, 2002; Nosek, Banaji,

& Greenwald, 2002; Peytchev, Couper, McCabe, & Crawford, 2006; Tourangeau, Couper, & Conrad, 2004). The primary investigator had been successfully administering both of these instruments online for over 18 months prior to data collection, using open source survey software (LimeSurvey, Version 1.87+, Build 8498) professionally hosted on a Linux server. This study used the same software and server. All data was presented from, entered into, and stored time and date stamped in the LimeSurvey database. Prior to accessing the instruments, participants were presented with online disclosure and privacy statements (Appendix E). Consent was indicated by a participant typing his or her full name into an electronic text box, along with the date. Participants were also asked, but not required, to fill out a participant information form that contained demographic type questions (Appendix F).

**Data analysis.** Data was exported from the LimeSurvey system for analysis. A participant's randomized database ID was stored with their instrument data, and used to group responses. Analysis of the individual instruments was conducted as outlined in the following two sections.

***Scoring the Washington University Sentence Completion Test (WUSCT).*** Sue Brown, an experienced independent rater currently affiliated with Maharishi University of Management, was retained to score the Washington University Sentence Completion Test (WUSCT) using the Cook-Greuter system, and return a list of participant ID's matched with developmental stages via email. Dr. Brown scored all protocols blind to the context and hypotheses of the study. She was chosen, in part, because she is one of only a few who have significant

experience with this type of population. Dr. Brown trained directly under Cook-Greuter, and was verified by her as appropriate to retain for this study. Her work focuses on the study of possible developmental aspects relating to non-symbolic experience. There was no second scorer so inter-rater reliability is not available, however, in a previous study with 300 protocols Brown's inter-rater correlation with Cook-Greuter was  $r = 0.93$  (Brown, 2008).

There are two numerical numbering systems that are used with the ego development stages. Both are listed below and in the results section. The newer numerical system, 1 (Presocial) to 10 (Unitive), was used to calculate an average and median value that encompassed all scores, as well as average and median values for female and male participants. The older numbering system (1, 2, 2/3, 3, 3/4, 4, 4/5, 5, 5/6, 6) is included for completeness and because, at present, many researchers are more familiar with the older numbering system than the newer one. The data returned from Dr. Brown matched each participant with one of the following developmental stages: 10 (6) - Unitive, 9 (5/6) - Construct Aware, 8 (5) - Autonomous, 7 (4/5) - Individualist, 6 (4) - Conscientious, 5 (3/4) - Self-conscious, 4 (3) - Conformist, 3 (2/3) - Self-defensive, (2) 2 - Impulsive, or 1 (1) Presocial. The characteristics of each ego development stage can be found in Appendix A.

***Scoring the Mysticism Scale (M Scale).*** The Mysticism Scale is a 32 item self-report instrument that operationalizes Stace's theory of mystical experience (Hood, 1975). This study used two answer options for each item. The first, referred to as the *traditional* answer option because it is the one the instrument



has used since its inception, was a Likert style answer that simply asked if a participant had ever experienced what the item referred to. This answer option had five response options ranging from: "this description is definitely not true of my own experience or experiences" (valued at -2) to "this description is definitely true of my experience or experiences" (valued at +2). The fifth response option was "I cannot decide."

In addition to the traditional answer option, a second answer option was used. For each item, the traditional form of the Mysticism Scale asks people if they have ever had a certain experience. Because this inquiry dealt with a population that was self-reporting a persistent, ongoing, experience it was felt that an answer option that provided persistence data would be beneficial. A 0 (never) to 100 (always) scale in 10 step increments was used as the second answer option for each item. Participant answered both the traditional and *persistence* answer option for each item.

Having both answer options wound up being confusing for participants, and it took significant piloting to reduce errors. Despite this, errors continued to occur. For example, participants were instructed to use 0 if the traditional answer they chose for a negatively phrased question was -2. Several selected 100 instead of 0. These types of errors were corrected in the raw data prior to analysis. The full version of the Mysticism Scale and the instructions used can be found in Appendix C.

***Scoring the traditional Mysticism Scale (M Scale) responses.*** Participants rated each Mysticism Scale item based on the degree to which it applied to their

life experience. Scoring was done by adding +3 to all positively expressed items. All negatively expressed items first had their algebraic sign reversed and then a +3 was added. A 7 or a blank was assigned a value of 3. Hence, scores can range from 32 (least mystical) to 160 (most mystical). Both the Hood and Stace three-factor analyses were performed on the collected data.

There has been some confusion in the literature about which items should be assigned to each factor. This study used the following recommendations from Hood (Smith, 2007) for his version of the factors. The extrovertive factor was scored with numbered items: 8, 10, 12, 19, 28, 29, 30, and 31. The introvertive factor was scored with numbered items: 1, 2, 3, 4, 6, 11, 15, 21, 23, 24, 27, and 32. The interpretive factor was scored with items: 5, 7, 9, 13, 14, 16, 17, 18, 20, 22, 25, and 26. Hood (Hood et al., 1993) lists the following reliability alpha coefficients for the introvertive, extrovertive, and interpretive factors as .69, .76, and .76 respectively; however it should be noted that some items have shifted between factors since this analysis was published. In the three-factor analysis based more strictly on Stace's theory the items associated with the ineffability category (2, 21, 23, and 32) were associated with the interpretation factor instead of the introvertive factor.

The distribution of the traditional scores was skewed to the high end (Pearson Skewness Coefficient = -0.783) and thus suffered from a restricted range problem. Accordingly, no attempt was made to calculate a correlation between these scores and the Washington University Sentence Completion Test (WUSCT) results, or to perform significance test comparisons with Mysticism Scale findings

from other investigations. The data from the current study were, however, compared with those from other known studies to determine if the mean and median reported here were higher than what was reported elsewhere.

***Scoring the persistent Mysticism Scale (M Scale) responses.*** The second, persistent, answer option was a 0 (never) to 100 (always) scale in 10 step increments. Persistence scores were averaged by both item and participant. It was clear from the raw data, and feedback, that participants remained confused about how to respond to negatively phrased questions using this answer option. Accordingly, averages and medians were only calculated from the 16 positive items. This data was used to rank participants and items, and in the statistical analysis of hypothesis three.

**Statistical analysis.** The third hypothesis involved the relationship between ego development scores and Mysticism Scale scores (Coolican, 2004). As previously mentioned, the data from the traditional Mysticism Scale scores were skewed to the high end and suffered from a restricted range problem. Accordingly, no comparative statistics were calculated using these scores. The persistence Mysticism Scale score set did not suffer from these problems. For these scores, the strength of the relationship between the Mysticism Scale and ego development level scores was evaluated using a Pearson's  $r$ . Significance was calculated at the .05 level (two tailed). Power estimates were calculated, with Howell's (1992) formula. Variance was calculated as  $r^2$ . The analytical software used was Minitab 16.

## **Data Privacy and Handling Procedures**

The Linux server was professionally hosted by one of the largest Internet service providers (HostGator.com). The survey software was installed and maintained by an experienced consulting software engineer (Nick Temple, [nick@nicktemple.com](mailto:nick@nicktemple.com)). Mr. Temple performed quarterly security checks on both the software and the underlying system. All individuals with access to the server and its data were professional information technology experts. Because the server was professionally hosted, the system administrators at HostGator.com had full access to the server and all data. Mr. Temple also had full access to the server and its data, as did the primary investigator. The primary investigator is an acknowledged expert on server operating systems and computer security.

Data was downloaded from the server for analysis. All downloads took place over a secure, encrypted communications channel between the primary investigator's laptop computer and the server. All raw data was stored in encrypted form using military-grade encryption (PGP version 10) when not under analysis. Statistical data was analyzed on the primary investigator's laptop using Minitab 16. The raw Washington University Sentence Completion Test (WUSCT) data was emailed to the independent rater in encrypted form using PGP encryption, decrypted locally on her computer for analysis, scored, and deleted from her computer. At the conclusion of the study, all raw data was archived in encrypted form to an external hard drive by the primary investigator, and deleted from his laptop. This hard drive is used for archiving the primary investigator's study data, and is stored in a locked cabinet in his home.

## **Chapter 4**

### **Results**

#### **Results for Hypothesis One**

The first hypothesis underlying this research was that individuals who self-report persistent non-symbolic experience would be found to exhibit a considerable range of psychological developmental levels, specifically as tested here as ego development using the Washington University Sentence Completion Test (WUSCT) (Loevinger, 1976). This hypothesis was confirmed. There are two numbering systems that are used to designate ego development stages. The newer system, 1 (Presocial) to 10 (Unitive), was used to calculate an average and median value that encompassed all scores. Separate average and median values were calculated for female and male participants. The older numbering system (1, 2, 2/3, 3, 3/4, 4, 4/5, 5, 5/6, 6) is included for completeness and because, at present, many researchers are more familiar with it. The older number system will be found in parenthesis when it is provided in this report alongside the newer system. The range of possible developmental stages were: 10 (6) - Unitive, 9 (5/6) - Construct Aware, 8 (5) - Autonomous, 7 (4/5)–Individualist, 6 (4) - Conscientious, 5 (3/4)–Self-conscious, 4 (3)–Conformist, 3 (2/3)–Self-defensive, (2) 2–Impulsive, and 1 (1) Presocial.

As seen in Table 4, the participants ego development scores ranged from 5 (3/4, Self-conscious) to 10 (6, Unitive). The average score for all participants was 7.14 (SD = 1.33), which is just slightly into the postconventional tier. The median score for all participants was 7. Average (F = 6.56, SD = 1.42; M = 7.33, SD =

1.27) and median ( $F = 7$ ,  $M = 7$ ) scores were similar for women and men. The ego development stage for each participant can be seen in Table 14 (Appendix G).

Table 4

*Number of Participants by Ego Development Stage*

	Stage	Total	Female	Male
10 (6)	Unitive	1	0	1
9 (5/6)	Construct Aware	6	1	5
8 (5)	Autonomous	6	1	5
7 (4/5)	Individualist	11	3	8
6 (4)	Conscientious	8	1	7
5 (3/4)	Self-conscious	4	3	1

Author's table.

### Results for Hypothesis Two

The second hypothesis was that individuals who self-report persistent non-symbolic experience would score higher on Hood's Mysticism Scale than individuals who do not report persistent non-symbolic experience. The possible range of traditional scores on the Mysticism Scale are 32 (least mystical) to 160 (most mystical). The scores were all in the top 25th percentile, ranging from 131 to 160, as seen in Table 5.

Table 5

*Number of Participants by Mysticism Scale Score*

Score	No. of participants	Score	No. of participants
160	9	148	1
159	2	147	1
156	5	145	1
155	2	144	1
154	1	138	1
152	6	136	1
151	2	132	1
150	1	131	1

Author's table.

The data from the traditional scores was badly skewed toward the top end of the range, which produced a restricted range limitation on significance testing. Accordingly, comparative statistics were not calculated between the traditional Mysticism Scalescores in this study and those reported from other populations. Instead, the mean and median from the current study were compared with those from other known studies to determine if the mean and median reported here were higher than what was reported elsewhere.

The average score for all participants was 152.42 (SD = 7.97). The median score for all participants was 154.50. Average (F = 154.11, SD = 6.85; M = 151.85, SD = 8.35) and median (F = 156, M = 152) scores were slightly higher for women than men. Data for each participant can be seen in Table 15 (Appendix

H). Factor scores were also high. Both the Hood and Stace factors can be seen in Table 17 (Appendix H). Factor data for individual participants can be found in Table 18 (Appendix H).

There are at least three studies that have participants with traditional Mysticism Scale scores that are within the range of the current study. A study with demographics that were similar to the current research examined psychedelic use and mystical experiences, and reported an average traditional Mysticism Scale score of 150.10 ( $SD = 8.90$ ) and median of 153 (Jagel, 2007). The minimum score was 128 and the maximum was 160. A second study that also examined psychedelic use reported post drug use average traditional scores of: 132.00, 133.64, 138.48, and 140.51 (Trichter, 2006). A third study that examined contemplatives, psychotics, and normals reported a traditional Mysticism Scale score for all groups of 136.18 ( $SD = 14.61$ ) (Reinart & Stifler, 1993). The average traditional score for the contemplatives, the highest group, was 142.80. Psychotics in the study scored only slightly lower at 141.90. Most studies report average total scores in the 70 to 120 range (e.g., Byrom, 2009; Caird, 1988; Hood, 1975; Hood et al., 1993, 2001). Very few studies have screened participants based on their level of non-symbolic experience, so it cannot be known if scores in other studies are from individuals who had unreported persistent non-symbolic experience. A range of comparative studies can be found in Appendix I.

Based on the study data and comparisons with the Jagel (2007), Trichter (2006), and Reinart and Stifler (1993) inquiries, hypothesis two is supported in relation to traditional Mysticism Scale scores. Some participants in these studies



clearly score within the range uncovered by the current study, however the average score and median for the current study exceeds all published studies I could find. It is not clear how many participants might have reported persistent non-symbolic experience if asked in the contemplative group of the Reinart and Stifler (1993), or in the Jagel (2007) and Trichter (2006) studies.

**Mysticism Scale persistence scores.** The possible range for persistence scores was from 0 (Never) to 100 (Always). Only positive items were used for analysis. The average persistence score for positive items ranged from 39.72 to 70 (Table 16, Appendix H). The average persistence score for all participants was 59.65 (SD = 26.38). The median persistence score for all participants was 62.19. Average (F = 66.74, SD = 23.86; M = 57.29, SD = 27.17) and median (F = 70, M = 61.25) persistence scores were higher for women than men.

**Top Mysticism Scale items.** The average for each item's traditional score across participants was high, ranging from 5 (out of 5) to 4.25 (Table 15, Appendix H). The top eight items sorted from high to low by traditional score are listed in Table 6. Negatively phrased items are reverse scored, so high numbers on them indicates that the item was not agreed with. Differences existed between top items when sorted by gender (see Appendix J).

Table 6

*Top M Scale Items, Traditional Scores, Sorted High to Low*

Item	Ave. Score
I have never had an experience in which time and space were nonexistent.	5.0
I have had an experience which left me with a feeling of awe.	5.0
I have had an experience in which something greater than myself seemed to absorb me.	4.97
I have experienced profound joy.	4.97
I have had an experience in which I realized the oneness of myself with all things.	4.97
I have never had an experience in which time, place, and distance were meaningless.	4.97
I have never had an experience in which I became aware of the unity of all things.	4.97
I have had an experience which was both timeless and spaceless.	4.94
Author's table.	

The top eight items sorted from high to low by persistence score are listed in Table 7. Differences existed between the top 10 items when sorted by gender (see Appendix J). Overall the top traditional and persistent items for women seemed more similar to each other than the men's.

Table 7

*Top M Scale Items, Persistence Scores, Sorted High to Low*

Item	Ave. Score
I have had an experience in which I felt everything in the world to be part of the same whole.	70.00
I have had an experience in which I felt that all was perfection at that time.	68.89
I have had an experience in which I realized the oneness of myself with all things.	68.61
I have had an experience in which I felt nothing is ever really dead.	68.06
I have had an experience which I knew to be sacred.	65.00
I have had an experience in which all things seemed to be conscious.	64.72
I have had an experience that cannot be expressed in words.	63.61
I have had an experience in which a new view of reality was revealed to me.	62.50
Author's table.	

**Results for Hypothesis Three**

A third hypothesis was that there would not be a relationship between ego development level, as measured by the Washington University Sentence Completion Test (WUSCT), and Mysticism Scale scores for individuals who report persistent non-symbolic experience. This hypothesis was meant to possibly lend support to the amount of relationship between degree of persistent non-symbolic experience and ego development level. The inability of the traditional Mysticism Scale scores to differentiate individuals who self-report persistent non-symbolic experience from those who do not was problematic, as was the strong skew and restricted range in those scores. The latter prevented a correlation from

being calculated for traditional scores. Correlation was moderately significant ( $r = 0.366, p = 0.028, \delta = 0.58, r^2 = 0.11$ ) for persistence scores, and moderate to strongly significant ( $r = 0.449, p = 0.019, \delta = 0.76, r^2 = 0.20$ ) for men's persistence scores. No significant correlation was found for women's persistence scores.

## **Chapter 5: Discussion**

### **Discussion for Hypothesis One**

The first hypothesis was that individuals who self-report persistent non-symbolic experience would be found to exhibit a range of psychological developmental levels, specifically tested here as ego development using the Washington University Sentence Completion Test (WUSCT). This hypothesis was supported. The data showed that participants who self-report persistent non-symbolic experience do not all score at the highest stage of ego development, but rather across a range of developmental stages (5-Self Aware to 10-Unitive). Characteristics associated with each ego development stage can be found in Appendix A. Only one participant scored at the Unitive stage. The median stage was 7 (Individualistic), the lowest stage in the postconventional tier. This result is in line with the only two similar studies I could find. The current study expands on them by providing a larger and more diverse sample size. Compared to these previous studies, the current study had a much greater number of participants at the postconventional development tier (67%), and at its higher end (19%): 7-Individualistic = 11 participants, 8-Autonomous = 6 participants, 9-Construct-aware = 6 participants, and 10-Unitive = 1 participant.

Previous to this study, a sample of 5 psychologists who self-reported persistent non-symbolic experience were all scored by Cook-Greuter at the mid-to low-postconventional level (Butlein, 2005). An “exemplar” used in the study was rated by Cook-Greuter as unscorable. A separate study by researchers at Maharishi University of Management of 11 long-term Transcendental Meditation

practitioners who self-reported persistent non-symbolic experience produced similar results (Travis & Brown, in press). Four were classified as Self-Aware, 3 as Conscientious, 1 as Individualistic, and 3 as Autonomous, all well short of the highest possible (Unitive) level. The current study used the same scorer as the Travis and Brown study.

Twenty-two participants in Page's (2005) study of Buddhist, Hindu, and Christian long-term renunciates failed to find any who scored at the Unitive level. Despite an average of 9 to 14 years of renunciation between the groups, 55% scored within the conventional tier of development and 44% scored in the post-conventional tier. One Hindu renunciate scored at the Construct Aware level, which is one level below Unitive. It was unclear from the data if some participants experienced persistent non-symbolic experience. The study is cited here as an example of research performed on a variety of religious populations that are generally said to be likely to lead to persistent non-symbolic experience.

**Possible explanations for the results.** Maharishi University of Management researchers have been strong advocates that non-symbolic experience represents higher stages of human development (e.g., Alexander et al., 1990, 1994). When the study data from 11 long-term Transcendental Meditation practitioners went contrary to this claim, Travis and Brown (in press) offered a thoughtful analysis centering around three possible options. They began with the idea that the Washington University Sentence Completion Test (WUSCT), and perhaps any written instrument, might not meaningfully capture the essence of what they termed *post-symbolic* states. Another way of saying this would be that

the ineffability that seems to be reported in relation to non-symbolic experience may make a structural developmental level involving it difficult to detect with language-based constructs.

However, as they correctly observe, such an explanation would ignore decades of progress in this area by Cook-Greuter and others (Travis & Brown, in press). It would also minimize decades of evidence behind the Mysticism Scale and similar measures seemingly successful ability to query people about their non-symbolic experiences. There appears to be significant evidence to support communication of non-symbolic experiences using language. While it is not possible to verify these experiences using language, or perhaps even to describe them with exacting detail, this is true of many types of experiences we encounter in our daily lives such as witnessing a beautiful sunset. Nonetheless, assuming the account is honest, we can accurately determine through language if someone has seen a sunset, and gather many facts about both it and the effect it produced on the individual. The same seems to be true of non-symbolic experiences, so a structural linguistic pattern may be possible involving them.

Travis and Brown's (in press) second option relates to Cook-Greuter's (1999, 2000) comments that persistent non-symbolic participants might be answering at a "functionally adequate" level, as defined in her dissertation:

postconventional individuals commonly 'choose' to respond to some items at lower levels than they are capable of-most often at the conventional stages-because to do so is functionally adequate . . . Being in a position to make such choices can be seen as a sign of the greater flexibility that accompanies higher development. Of course, as mentioned above, lower stage responses can also be a form of acting out or avoidance of emotionally loaded sentence stems for subjects at all levels of development . . . Thus under the test conditions of the SCT, one can assert

that a person seems to be capable of appreciating the world at least at such and such a level. (Cook-Greuter, 1999, p. 76)

Travis and Brown (in press) noted that the individuals in their study “may be responding to the sentence stems in a way that completes the task, but doesn’t reflect their true inner life” (p. 18). In other words, there is the possibility that individuals at higher developmental levels have the ability to communicate at lower levels, and individuals reporting persistent non-symbolic experience sometimes state that their communication arises in the moment and at the needed level. Travis and Brown (in press) summarized this point by stating, “a sentence completion test, especially with a minimal amount of space provided for responses, may elicit lower, more conventional responses; especially compared with an interview, involving direct communication with another person” (p. 19).

Work has continued in this area that suggests that anecdotal accounts such as these might not be an accurate analysis of participant responses (Cook-Greuter, in press). Cook-Greuter (personal communication, March 11, 2010) and some of her affiliated researchers have continued to refine responses from individuals who are known to report persistent non-symbolic experience in order to detect and reduce these types of possible effects. Others have looked into this from different angles. For example, in his dissertation Hewlett (2004) examined individuals who scored at the highest ego development levels (using the Washington University Sentence Completion Test), including the Unitive stage, and interviewed them using the Subject Object Interview. He found remarkably close estimations between the Washington University Sentence Completion Test (WUSCT) scores and his ratings from direct interviews. From his reported data, it appears likely



that at least some of his participants would have self-reported persistent non-symbolic experience if asked. His protocols were scored by himself and Cook-Greuter with nearly perfect inter-rater reliability. Results such as this suggest that it is possible to accurately score individuals who report persistent non-symbolic experience at the Unitive level, and also that results of instruments such as the Washington University Sentence Completion Test (WUSCT) can correlate favorably with in-depth interview data.

It is also important to consider the new data added by the present study. As stated, previous studies with individuals self-reporting persistent non-symbolic experience have primarily reported scores in the mid-postconventional tier and lower, while approximately 19% of participants in the current study scored at the upper-postconventional level. In Butlein's (2005) study, which involved a group of psychotherapists who self-reported persistent non-symbolic experience and two groups of psychotherapists that did not, there was no significant difference between the groups. The average score was Individualistic (7), and the highest score (9-Construct Aware) was from an individual who did not self-report persistent non-symbolic experience. Unlike the current study Butlein found a relationship between age and ego development level. Generally, conventional and postconventional stages are not well predicted by age (Travis & Brown, in press).

Where does this leave us in relation to Travis and Brown's (in press) second point? First, it is possible that the Washington University Sentence Completion Test (WUSCT) scored using the Cook-Greuter system is unreliable at detecting individuals who self-report persistent non-symbolic experience, for one

or more of the reasons stated previously. Perhaps all such individuals should properly be classified at the Unitive level, but the scoring technology is not sufficiently developed yet. Alternatively, it is possible that not all individuals who self-report persistent non-symbolic experience are at the Unitive level of ego development. What is being measured by the Washington University Sentence Completion Test (WUSCT) using the Cook-Greuter scoring system may appear to be similar in many ways to, but ultimately different from, persistent non-symbolic experience.

Cook-Greuter (2000) suggested that these are different phenomena. In her seminal article on the topic, she commented on her belief that ego development theory has no equivalence with ego transcendence, “I no longer think that developing to the Unitive stage in ego development represents an early form of higher consciousness, or that developing through the whole personal realm constitutes a rational road to ego-transcendence” (Cook-Greuter, 2000, p. 237). She went on to suggest a relationship between egoic developmental stages and persistent non-symbolic experience, “one’s current ego stage will color one’s experience, expression, and understanding of the higher consciousness stages” (Cook-Greuter, 2000, p. 239). These views are similar to those proposed by Combs (2002) and Wilber (2006). If this is the case, it would make sense that individuals self-reporting persistent non-symbolic experience would score across a range of ego development stages.

This concept that ego development may be separate developmentally from persistent non-symbolic experience is Travis and Brown’s (in press) third point,

and mirrors my analysis of the literature (Chapter 2). Developmental stage theories generally require individuals to pass sequentially through a series of levels. These levels have changed over the course of time, as humanity has evolved (Combs, 2002; Wilber, 2006). It seems likely that many historical figures self-reported persistent non-symbolic experience. A prominent example would be the Buddha. However since the Buddha's time, humanity has continued to evolve in ways that are measured by constructs such as ego development. It does not seem possible that someone from his era could have progressed through all of the ego development levels that are currently known. On the other end of the spectrum are children. Travis and Brown (in press) note that children age 10 and up seem capable of self-reporting non-symbolic experience. One of the participants in the current study listed age 4 as when she began to experience persistent non-symbolic experience. I've interviewed others who make similar claims. It is essentially impossible that someone could have progressed developmentally through all of the known ego developmental levels by such an early age.

Overall, hypothesis one seems to be the strongest evidence obtained from this study in relation to the question of whether persistent non-symbolic experience represents a higher level of psychological development. The Washington University Sentence Completion Test (WUSCT) is one of perhaps two or three "gold standard" tests within developmental psychology and the only one that has received decades of work attempting to make it increasingly sensitive to detecting the highest developmental levels, including those that appear to

match descriptions of persistent non-symbolic experience (Cook-Greuter, 2000). The individuals in this study all self-report persistent non-symbolic experience, yet only one scored at the highest level of this measure. It is possible that the decades of work on this measure by researchers like Cook-Greuter have succeeded in detecting a category that appears to match descriptions of persistent non-symbolic experience but have not yet reached the point where participants can be correctly placed in it. It is also possible that no measure involving language may accurately detect persistent non-symbolic experience. However, the amount of work put in to the Washington University Sentence Completion Test (WUSCT) by Cook-Greuter and others and their success in creating a category that seems to match the experience must be recognized. It is more likely, as Cook-Greuter (2000) suggests, that what is being reported here are different phenomena.

**Participant feedback on the Washington University Sentence Completion Test (WUSCT).** A comment section was included after the Washington University Sentence Completion Test (WUSCT) that said, “If you have any thoughts or opinions you'd like to share about the previous questions, please enter them below (not required).” This brought a range of responses from participants, which can be seen in Appendix K. The comments mirror email exchanges and voice conversations I had with some participants regarding the measure. They generally fall into critiques of the instrument and of it being a valid way to measure their experience. Having administered the Washington

University Sentence Completion Test (WUSCT) to other populations, I know that people often don't feel there is a point in their taking 45 minutes to fill it out.

However, comments from 4 participants (M5, M15, M24, and F2) are of a different nature than I've previously seen. Their sentiments seem reminiscent of the thoughts Butlein's (2005) exemplar expressed when he stated that the test was "incredibly irrelevant' to the way he experiences the world and [that] he was tempted to not answer any of the questions" (Butlein, 2005, p. 113). The comments imply that the construct is designed to bring out one aspect of their experience, which is variously referred to as a "side of the fence," "mind state," "stories" versus "the witness of all stories," and "opinions, conditioning, and other egoic perceptions." Three of these participants (M15, M24, and F2) directly stated that these answers come from conditions or conditioning, which they appeared to put in opposition to another way of experiencing the world. M24 discussed the "stories" unfolding without "much juice behind them." F2 discussed this conditioning as something she is "no longer interested in or engaged in for the most part."

These comments are interesting because it does not appear that these are the comments of individuals who are at a higher level of development but engaging in behavior that is appropriate to the situation they find themselves in. The participants were scored at the 6-Conscientious (M15) and 7-Individualistic (F2, M5, and M24) ego development stages. I sometimes received emails from individuals who started but failed to complete the survey. Often the survey was

abandoned after the person had invested substantial time in it. Their reasons for doing so mirrored the previous comments.

### **Discussion for Hypothesis Two**

The second hypothesis was that individuals who self-report persistent non-symbolic experience score higher on Hood's Mysticism Scale than individuals who do not report persistent non-symbolic experience. This hypothesis was supported for average and median traditional Mysticism Scale scores, but not consistently at an individual score level. The average (152.42, SD = 7.97) and median (154.50) scores for this study were considerably higher than most other studies (Byrom, 2009; Caird, 1988; Hood, 1975; Hood et al., 1993, 2001; see also Appendix I). A handful of studies were within the range of scores reported (131-160) and did not seem to involve persistent non-symbolic experience. While some were very close, their average and median scores were below the current study. A study by Jagel (2007) of psychedelics and mystical experience reported an average traditional score of 150.10 (SD = 8.90) a median score of 153, and individual scores that ranged from 128-160. Trichter's (2006) study of psychedelic use also reported scores within the range of the current study, including: 132.00, 133.64, 138.48, and 140.51. Reinart and Stifler (1993) examined contemplatives, psychotics, and normals and reported a traditional Mysticism Scale score for all groups of 136.18 (SD = 14.61). The contemplatives' average traditional score was 142.80 with the psychotics' average only slightly lower at 141.90. While they clearly believe that some of the contemplatives

experienced persistent non-symbolic experience, the same cannot be said of the psychotics.

**Persistence data.** Individuals reporting temporary non-symbolic experience may score highly using the traditional answer option on the Mysticism Scale. These answers attempt to assess whether someone has had a given experience, not how often, when, and so forth. An individual could have a powerful, but momentary, non-symbolic experience that encompasses many or all of the items the Mysticism Scale asks about and thus score highly. Because of this, a second answer option was added for each Mysticism Scale item that attempted to learn how often a given experience occurred. The range of answers for this persistence score was from 0% of the time (never) to 100% of the time (always), in 10-degree increments.

There were some issues with this new scoring method that did not allow it to be used effectively with the 50% of the Mysticism Scale items that are negatively phrased. However, the results from the 16 positively phrased items proved to be both interesting and unexpected. The literature on persistent non-symbolic experience often makes it sound very similar to temporary non-symbolic experience, except that it is ongoing. Based on this it initially seemed reasonable to expect high persistence scores, especially for core items that asked about unity or oneness (Stace, 1960a).

The results did not bear this out. Only 23 of the participants had average persistence scores of 50% or higher, with 15 having an average score between 70-100, 15 between 30-67.50, and 6 between 11.25-24.38. Overall the number of low

persistence scores may call into question not only the unified nature of this experience, but also what may constitute its core.

**Differences between traditional and persistence Mysticism Scale scores.** The traditional answer option asks only if someone has ever experienced what an item refers to. The persistence option asks how often they experience it. Accordingly, differences between the traditional and persistent Mysticism Scale responses provide a window into both whether an item has been experienced and how frequently. These responses seem to support the earlier supposition (Krippner, 1972) that there are key differences between temporary non-symbolic experiences and persistent ones. When sorted based on all responses, the top two traditional answers (which both averaged to the highest possible score) for the Mysticism Scale involved a negative question about time and space, and a feeling of awe (Table 6, also see Appendix J). The top two persistence answers involved experiencing the world as a whole and as perfect (Table 7, also see Appendix J). Having spent the last few years traveling around and interviewing participants, I hear the latter two described much more frequently when participants refer to their ongoing experience than the former two. There is, however, great variability in this experience. The former two are often represented as transient during my interviews but are, of course, considered common in the temporary form of the experience (Krippner 1972; Maslow 1970, 1973; Stace, 1960a).

The next five traditional items are tied at 4.97, and they fill out the picture that one would expect regarding non-symbolic experience, they include themes of being absorbed by something greater than oneself, profound joy, oneness and



unity, and dissolution of temporal importance and experience (Table 6, also see Appendix J). A somewhat similar pattern is seen in Beauregard and Paquette's (2008) work with Carmelite nuns who report, at a minimum, temporary non-symbolic experiences. The researchers administered 15 items from the Mysticism Scale and noted high scores in the following (in descending order): absorption by something greater than the self, profound joy, sacredness, ineffability, and wholeness. This ranking may be colored by a mixture of persistent with temporary experiences, the religious nature of their inquiry, and the subset of items chosen.

The next five persistent items are different from the traditional answers, and include (in descending order): oneness, feeling as if nothing is ever dead, sacredness, feeling that all things are conscious, ineffability, and an ongoing experience of newness (Table 7, also see Appendix J). The top traditional answers are clearly being driven by the men. The female top traditional answers are very close to the overall group persistence answers. The first two in the list above are in the high 68s (out of 100) with the others dropping to the mid to low 60s in frequency of report. It seems notable that themes of positive affect, and time and space frequent the top of the traditional answers but are not seen among the top persistence answers.

A practical reason for the lack of persistence regarding the positive affect items may have been provided by M23 in his comment, "I have had numerous satoris, ecstatic experiences of joy and oneness. Some lasted minutes, some for days. However, I do not remain in that exalted state. I would not be able to

function.” Maslow (Krippner, 1972) noted a significant difference in arousal between his peak (temporary) and plateau (persistent) non-symbolic experiences. Certainly one can suspect functional issues with persistent disruptions involving orientation in time and space, which may make these more likely to be shorter in duration as well. M25 may provide a supplementary explanation, “The time and space one is interesting, how 'often' can I experience a 'timeless' state? Not the easiest to answer, these experiences simply can't be measured.” Interestingly, Stace (1960a) chose to include temporal and spacial characteristics as part of the introvertive experience but not the extrovertive. Both of these items appear to make sense as temporary aspects of non-symbolic experience that occur when one does not need to have a high level of functioning in the world.

There is clearly a great deal of room for additional exploration of these findings. They seem to represent a significant diversity of experience among categories that have traditionally been regarded as relatively fixed, except among constructivists. As Chapter 2 points out, the findings when one examines the global non-symbolic literature are generally similar regardless of who does the analysis. Labels can differ, certainly, but it is not difficult to look across the overall body of analysis and see a great deal that is in common. These results may very well lead to a new view of this, at least in relation to the differences between temporary and persistent non-symbolic experience.

On the other hand, the results do not seem to necessarily support a constructivist view of the experience. One group of participants consistently answered that they experienced the positive Mysticism Scale items, but only 10%

of the time. There was another group who experienced most of them 100% of the time. In other words, there were clear similarities between the way people reported their experiences that emerged in the data. It's possible that this persistence data will emerge as the best way to address hypothesis two, and that a better way to state the hypothesis is that that people reporting persistent non-symbolic experience will exhibit one of several answer patterns on a persistence scale such as the one used here.

**Relationship of the Mysticism Scale persistence score variability to other aspects of my research.** Though the analysis of the subjective reports gathered in my overall inquiry into persistent non-symbolic experience is ongoing and they are not the primary focus of this dissertation, a few observations are provided here for interest's sake. Over the last few years my interviews and experimental research with this population have hinted that there may not be a typical persistent non-symbolic experience. If one were to attend a gathering with a mix of the general public and members from this population, it is unlikely the persistent non-symbolic attendees could be picked out. For the most part they seem like everyone else. Persistent non-symbolic experience generally does not remove an individual's style preferences, hobbies, political views, and so forth. Most are quite happy to talk about their favorite TV show or sports team. They may even discuss an anti-anxiety meditation that they are on or offer you a cigarette.

My interviews generally last for between 5-12 hours, and my questions do not center on the types of things one generally reads in other interviews with this

population or the types of items on the Mystical Scale. Rather, I ask about cognitive processes, memory, emotion, sensory perception, and so forth. I look for testable claims that I can falsify or find support for experimentally. Over time virtually everything that I thought was correlating across these participants has fallen away. What's emerged is a very complex picture that seems like a blending of the constructivist and common core views.

At present, the core of the experience appears to be related to a change involving identity. It seems to be a shift away from a sense of being a localized individual to something that feels difficult for participants to localize. There are many ways this is expressed. When interviewing adherents of the Abrahamic traditions it is might referred to as the divine or God. When interviewing others such as agnostics, Buddhists, or neo-Advaitists it might be represented as a sense of spaciousness. Some members of all groups define their identity as highly fluid. The thing that virtually everyone has in common is that when asked to define their 'self' participants state they cannot find a persistently fixed, generalized, localized or focal version of their 'self.'

A second report that consistently accompanies this relates to a change in thoughts. As with most aspects of the experience, this seems to fall along a range. Some participants say that all thoughts have fallen away. I've yet to find that this is the case when I probe more deeply. Rather it seems as if the type of thought that involves rumination on things relating to the individual self, and which makes up the self narrative that most of us experience in our mind throughout the day is diminished in some combination of intensity, quantity, and importance. There

appears to be a small percentage of participants who no longer have these types of thought. Another, also very small, percentage only have these types of thoughts a few times each day, such as during the first 10-15 minutes after waking, during periods of extreme hunger (if they are hypoglycemic), or if they are very tired. For the latter, some will have many or most of these types of thought return while others will only have specific patterns of them return, such as thoughts relating to self-esteem.

The rest of the population reports little or no diminishment in these types of thoughts, however their relationship to them is very different from what was experienced before persistent non-symbolic experience. They report that the thoughts are more visible to them, more 'transparent,' generally more difficult to believe or accept as true. For many these thoughts continue to run through their minds, but they claim to essentially be able to ignore them. For others, they can occasionally be 'grabbed' by them much like the rest of us routinely are, however they are much more capable of noticing this and releasing from it. Often these individuals report being grabbed by only certain types of thoughts, such as thoughts involving their children's welfare. The ability to be grabbed by specific thoughts appears to be something that can diminish over time. Participants often view this as something to work on and transcend. Other participants fall between these extremes and report a variety of related experiences.

Another major item that often occurs in self-reports of persistent non-symbolic experience is a sense of presence or beingness. When I ask participants if there is any emotional state that is persistent for them, I generally hear them

discuss degrees of deep inner peacefulness. However, if I probe more deeply for the core feeling of their self at any moment, often a sense of beingness is their response. It can be difficult to know how to interpret words such as this, because often the literature in this area speaks in metaphor and discusses the problems of communicating the experience with language. However, over time I've learned that frequently a spade is just a spade. When a participant describes the moment of their transition into persistent non-symbolic experience as being like "waking up from a dream," for example, they often literally mean it that way. I think it is helpful to consider reports such as this sense of presence or beingness in the same matter-of-fact way.

Something else that almost always occurs with reports of persistent non-symbolic experience is a lack of interest in or attachment to one's personal history. Often it is referred to as a "story" and some participants go so far as to express their story as being no more important than anyone else's to them. These individuals generally do not express personal goals, and frequently seem to experience the dissolution of the goals they had prior to persistent non-symbolic experience. This is most extreme in individuals with the strongest detachment from the day-to-day events. These types of participants can also be concerned about episodic memory loss, even in their twenties. They generally describe individual memories as diminishing over time as they arise from one instance to the next, leading me to wonder if persistent non-symbolic experience can affect hippocampal re-encoding in some individuals.

On the other end of the range are individuals who feel detached in varying degrees from their story. They may still recognize their actions as being *selfish*. It is interesting to hear this term used by members of this population, but it seems to come from an honest attempt to examine their actions and evaluate them. So in one sense these members of the population feel detached from their story but in another they still recognize many of their actions, goals, and so forth as selfish. These individuals can still have materialistic goals including career aspirations, the desire to purchase luxury goods, and so forth. Others report a range of variation between these two extremes.

As mentioned, another aspect that is generally reported is a sense of deep inner calm or peace despite what is happening in the external environment. While virtually all participants report some form of this, its expression varies widely. There are those for whom it seems to consistently be in the foreground. I've informally tested them in the field by attempting to trigger their startle response while monitoring their heart rate and skin conductivity, and it can be difficult to produce arousal in them. Some of these individuals were used for a small experiment involving body awareness during a private yoga session. The instructor (a Ph.D. level researcher) asked for a desired outcome for the yoga, and I was surprised to hear most of the members of this group ask for increased energy. When I followed up with them they suggested that one aspect of their persistent feeling of deep inner peace was that they sometimes wished they could experience arousal as they had before persistent non-symbolic experience.

It is important to note that, like the other aspects of this experience, this varies widely. There are many members of this population that report ongoing deep inner peace with varying degrees of change in arousal, and even no apparent change. Some participants can have their experience of deep inner peace suppressed by what is going on in and around them. When these events cease, the peace returns. They describe it as if it can be pushed down, but always bubble back up. Even for this group it is never absent. For many members of the population it may go unnoticed for periods until it is focused on. Participants often describe the constant companionship of this inner peace as an important psychological component that helps them to accept the persistence of the experience. Some participants have made significant life changes to avoid situations that suppress it, including: getting divorced, moving away from where their lives had been centered, and so forth. Others did not make these changes, but rather allowed the responses that suppressed the peace to diminish as they worked through them over time. These claims involving deep inner peace are not always directly related to persistent non-symbolic experience. At least 2 participants began to experience a sense of deep inner peace years before they experienced any form of non-symbolic experience. While the literature in this area sometimes suggests that these go together, this may not be the case.

It seems as though a great deal of conditioning remains after participants are no longer identified with the individualized self. At the same time there is another piece that is weakened or absent all together. It appears to be a core part of what is traditionally considered the self, and to be involved with connecting



and reacting to thoughts, emotions, sensations, and memories that arise because of this conditioning. For most people in the general population these reactions seem to start longer chains of rumination or action, but for members of this population this is often not the case. They are able to have conditioning trigger without it being prolonged by this second process. Where a 'normal' person might be upset several minutes after being cut off in traffic and made to be late to an appointment, for example, these participants would have generally let go of such an incident within seconds of it happening if they reacted to it at all.

This aspect of the experience involves how participants react to internal and external stimuli. An example of internal stimuli would be thoughts or emotions that spontaneously arise and produce a reaction in the participant. External stimuli include the many events that happen as we live our lives. Strong ones for participants seem to relate to their immediate and extended family, politics, sports, events that induce anger while driving, and so forth. Generally it seems like the things that produce strong reactions in most people as they go through their day also produce reactions in members of this population.

As with other things, these reactions vary between participants. Some participants report no or almost no reactions to events. This is often accompanied by a lack of emotion and a sense of having no agency. By no agency I mean literally having no sense of being able to take any action or make any decisions. For these individuals, events are just unfolding and their sense is that they are primarily an observer. Others state that they have full agency. Often these individuals have a heightened sensitivity to internal and external stimuli.

Sometimes they are taken over by their reactions to them, much as normals are. More often they are able to see a clear choice between engaging or not engaging with their reactions. They make an explicit decision to let these reactions take over their actions or to let go of whatever reaction is beginning to arise in them.

Unless their initial experience of persistent non-symbolic experience involves little or no emotions, agency, and so forth; for many members of the population this is something that seems to change over time. As conditioning is triggered, either they automatically do not engage with it or they choose whether or not to. Participants who initially have to make a conscious choice not to engage in a response to conditioned triggers often report that over time this process of non-engagement becomes increasingly automatic. For others it seems to be automatic immediately after they begin to experience persistent non-symbolic experience.

Over time when the same or similar conditioning is triggered but not engaged with, the conditioning seems to diminish. Participants who have experienced persistent non-symbolic experience for many years can report that very little conditioning arises. Some participants report a time range (most commonly 3-7 years) following the initial onset of persistent non-symbolic experience in which this process feels like it is accelerated, and after which it feels mostly completed. Overall these reports sound a great deal like the concept of extinction from the theory of behaviorism. When asked to quantify how long arousal, thought, emotion, or something similar lasts when triggered, reports usually center around either a few moments (generally reported as less than 2

seconds) or cluster at less than 30, 60, or 90 seconds. The latter is sometimes referenced as how long it takes for biochemical processes involving certain emotions to pass through the body if not cognitively engaged with (Pert, 1999), which may provide additional evidence regarding these participant's claims of psychological detachment.

Participants sometimes do not tell their family and close friends about the experience, and apparently these individuals often don't suspect anything has changed. When asked participants most commonly reply that they choose not to talk about it because they don't want to be socially ostracized. Other participants describe their surprise at going to work and not having anyone spot a difference in them. This is striking, of course, because internally these participants feel that their sense of being an individualized self has vanished. They often literally feel that "John" or "Jane" is gone. I knew one of my participants for 15 years prior to him experiencing persistent non-symbolic experience. To me, he is very much the same person I remember him being all those years ago. I would not have been aware of his persistent non-symbolic experience if he had not mentioned it. Ultimately I think this is one of the most curious aspects of the research in this area. Inside participants feel completely different, but externally they often seem the same. Some participants speculate that people are primarily communicating with the participant's remaining conditioning.

There is one reasonably common exception to this. Often people were miserable before experiencing persistent non-symbolic experience. Reports of extreme depression, despair, deeply felt ongoing anger, and so forth occur

regularly and generally seem to dissipate when persistent non-symbolic experience occurs. When this happens, the people around these individuals notice a change in them. However, many other participants do not experience negative affect prior to the experience becoming persistent and those around them generally don't notice anything has occurred.

Over time I've come to visualize a core *zoom in/zoom out* process that seems to happen for many participants. Internally participants report an aspect of them that can focus in and focus out. The fluidity that it suggests involving the experience of self at any moment is something I've come to see as a key component of persistent non-symbolic experience. In a sense most of us have this to some degree. How individuals feel when they relax is very different from when they are working on a problem or engrossed in a movie. This seems to be true for many of my participants as well, but with some significant differences. When the average person is working hard on a problem and takes a break, in a sense his or her broader sense of self comes back into focus. S/he might think about other things to do with the day, a conversation from 3 hours ago, or any range of other things.

When these participants zoom out, they don't seem to land in an individualized self. They also seem to have a much greater range and fluidity in terms of zooming in and out. At the furthest reaches of zooming out, they often report being immersed in or existing as a non-local self, spaciousness, union with the divine or god, and so forth. Not all participants can zoom this far out, and those who can usually stop short of it in their day-to-day lives. This process of

zooming can be intentional or automatic. Generally it is reported as feeling automatic.

The zooming in process is also an interesting one. Again, in some ways they are typical of the general population. Most can still get pulled into a movie, for example. The differences, however, are quite striking. Many can also experience a sense of versions of their 'old self' as part of the zoom in process. This is especially true when they are engaged in conversation or immersed in environments involving long lasting and complex relationships. They often describe it in terms of the conditioning that was discussed earlier, and in terms of relational clusters of thoughts, emotions, and memories that have a unique sense of self associated with them. What they describe is very similar to the concept of Lancaster's (1993) I-tag's. Many participants can zoom into this type of sense of self and experience it just as they can identify with a character in a movie, and then zoom back out again. They often relate that everyone does this, but that most do not realize it because the sense of having an individualized self smooths out the experience of switching between these various self-like experiences. To them, this also seems to relate to the overall story that is generated by the sense of having an individualized self. Many participants have viewed the generation of, and buying into, this story as integral to the smoothing out process.

There are often conflicts between the way a participant's zoomed out sense of self-experiences life, and the way their various zoomed in versions do. While this is true for all of us, it often seems pronounced in them. One striking example is morality. Sometimes this changes radically after people experience

persistent non-symbolic experience, other times very little if at all. As suggested by items in the Mysticism Scale, these individuals typically have some kind of experience of oneness or unity. How this manifests varies, but it is generally experienced in some way. Something that often goes along with it is a sense of perfection. The deep feeling that everything is perfect exactly as it is.

As you can imagine, when zoomed in this becomes fairly difficult to accept. Looking around one can readily find examples of poverty, violence, and so on. By their own admission, some participants view the zoomed in version of themselves as selfish. There seems to be no consistent way for how this population deals with this disparity in their experience. Some individuals I meet with just accept that all of the suffering they see when zoomed in is part of an overall perfection and do nothing to try to change it. Others live their day-to-day lives deeply engaged in environmental or social activism. Still others believe that there is a proper choice or way to live in each moment that lessens the suffering in their own lives and the lives of others. Another example of disparity is that when zoomed out, there seems to be a sense of ‘fullness’ or ‘completeness’ that is experienced. Yet when zoomed in this can be greatly diminished. A full range of emotions, thoughts, doubts, and so forth can arise in any moment for a portion of this population. Generally the experience of this is brief but can still occur.

For those who are new to the experience these seeming discrepancies can be rather unnerving. This is especially true for those who do not come from spiritual or religious traditions, because these individuals are often already questioning their sanity. There are, in fact, many expressions of how the apparent

dichotomies that this experience brings are dealt with. Some are denied, some get explored, some get tolerated, and so on. Virtually everyone describes the initial experience of persistent non-symbolic experience as just the beginning of a long and seemingly never ending path.

So what might be going on with these participants? It seems possible that they might have switched their identity away from a collection of thoughts, emotions, memories, and so forth that filter incoming sensory experience to a lower level of the brain's perceptual system. It also seems like at least one level of that filtering might be what is felt by most people to be their self, but not by the members of this population. There may be lower levels of perception that we build on over the course of our life. As we develop, our life experience may add additional layers on top of these more fundamental levels of perception. It also seems possible that one or more of those layers may contribute to what we feel as and call our 'self.' The participants I interact with seem to have pierced through at least some of these layers and it affects their experience of both the zoomed in and zoomed out states.

The term *non-symbolic* seems to deeply resonate with them and their experience. They often describe the zoomed out experience as, literally, of 'no thing.' The sense of oneness they experience in it appears to prevent them from sensing an otherness in anything they perceive and block a perception of 'things' apart from a unified whole that they experience themselves to be. This can also occur for members of the population during their zoomed in experiences, but

often they must work at it. Only a small percentage of this population seems to experience this relatively or fully independent of their current state.

Participants generally feel that every experience is temporary, that it arises and falls within a fundamental level of perception, generally expressed as a 'field.' Often they refer to this perception as 'awareness.' But, not everything is temporary. They also feel that they have uncovered a level of perception that is not only unchanging but also unable to be changed. Many participants identify with this as their 'true self' while others are able to perceive it but see their self as unattached to it. The latter generally identify with a nonlocal sense of self that is highly fluid in nature and able to assume any number of zoomed in or out states at a given time. On a separate measure that I'm currently refining based on Butlein and Astin's (Butlein, 2005) NETI instrument, so far all participants have answered "all the time" to having, "conscious awareness of my nonseparation from (essential oneness with) a Transcendent Reality, Source, Higher Power, Spirit, God, etc." So this item appears to suggest that, at least on some level, unitive type experiences are being experienced in both the zoomed in and zoomed out states by all participants who have taken this measure to date. Participants sometimes also report interesting sensory effects during the experience of oneness, such as a flattening of dimensionality in visual perception or the experience that they are stationary and the world is moving through them as they walk or drive.

Participants' descriptions do not seem unreasonable from a neuroscientific perspective. If there is some kind of low level perceptual system in the brain that



our experience of the world is built upon, and we can perceive or even identify with it, it may very well be experienced in the way this population describes. It would likely appear to be unchangeable and it seems reasonable that everything would appear to be arising and disappearing within it. Such a low level of perception would literally frame and allow the objectification of all other information that the brain presents to conscious awareness. Thus the ability to subjectively identify with this system could lead to the objectification of all other elements of experience that the brain presents, including what is normally experienced as an individual sense of self. Because it appears unable to be changed by the 'higher' levels of information that form moment to moment experience and are constructed on top of it, one can understand how it could be perceived as the 'true' self. Participants regularly differentiate the real from the false based on whether or not it relates to experience that changes.

Even though they feel they have found this fundamental level, in practicality most participants choose to remain skeptical of it and continue to be vigilant in looking for the temporary nature of things they currently assume are permanent. This is especially true of those who continue to experience a degree of agency and emotionality. There is a difference between their beliefs about the unchanging nature of this core perception, and the changes most observe in relationship to it. They do not feel that the core perceptual level can be deepened, but over time many seem to experience a change in their experience of it as they continue to uncover previously hidden aspects of their thoughts, emotions, memories, beliefs, and so forth.

Apparently, subjective identification with this low level of perception occurs before ‘time and space’ are experienced as we normally define them. I have spoken to several participants who seemed able to detail the process of going from a state where time and space are not experienced to where they are. These participants appeared to be especially keen observers of the zoom in/out process and they could identify the moment when a sense of time subjectively emerged. In the furthest reaches of the zoomed out state it was not present. Descriptions such as these raise questions about the extent to which the zoom in/out process may relate to the ability to experience different levels and degrees of perception. It is possible that the very lowest levels of perception are essentially a container for all other experience, and that in these lower levels even the perception of temporal time is not present. However, one would expect it to emerge very early as one rose up through the layers of information that the brain would stack on top of that fundamental container. This closely parallels what these participants describe.

The fact that no time and space related items are in the top 50% of persistence scores seems to confirm that this is not an ongoing experience for these participants. This cannot be the whole story because some participants do state that they experience this 100% of the time, while others list it as low as 10% of the time. There are also differences that emerge based on whether the item mentions an “experience which was both timeless and spaceless” (persistence score = 58.52) or an “experience in which . . . [there is] no sense of time or space” (persistence score = 47.41). So part of this may reflect the limitations of

language in expressing these types of concepts and how seemingly identical phrases can be viewed quite differently by these participants.

To varying degrees a sense of timelessness is reported in my interviews, and not just at the zoomed out level. A participant's story being reduced and their individualized sense of self being marginalized or eliminated seems to minimize the importance of the past and future. Even during zoomed in states, participants describe being much more 'present' in each moment than they were prior to persistent non-symbolic experience because they are not distracted by an ongoing stream of thoughts regarding the past or future, the need to manage their self image, and so forth.

From a practical standpoint, it definitely still seems like they do the latter when I'm with them. For example, when I ask participants who don't generally tell other people about their persistent non-symbolic experience why they keep it private I get a range of answers that often seem related to self-image management. They mention how people will react and treat them, and so forth. Occasionally I point out the seeming dichotomy and when I do it often leads to agreement that on the one hand it feels like there is no individual sense of self there to protect but on the other hand their actions and justifications do seem to suggest a protective mechanism. Often this is attributed by participants to conditioning that is still present but no longer associated internally with their sense of self.

Some of the items traditionally associated with non-symbolic experience and the Mysticism Scale match up quite nicely to descriptions I hear regarding the zoomed out state, but not all. Participants regularly state that there is no sense of

time or space when zoomed very far out. As mentioned they also report unitive experiences. Other aspects of the zoomed out experience are not as regularly experienced and seem to lend themselves more to a constructivist perspective. Not everyone feels a sense of being absorbed into something greater; the sacred, holy, or divine; positive affect; all things as conscious or alive; or of everything disappearing from the mind until they become conscious of a void. And, when these types of items are reported, because they are experiences that change they are often regarded by participants as not relating to the core persistent non-symbolic experience. They are generally reported as experiences that permanently ceased over time, or are viewed as experiences that are expected to cease at some point. Many participants feel that this relates to the extent that they have been able to make progress in removing conditioning.

Another example of a Mysticism Scale item with highly variable scores between participants is: "I have had an experience in which a new view of reality was revealed to me." This is an example of an item which I feel can easily be interpreted in multiple ways. I suspect that the way it has traditionally been interpreted by the research community relates to the ability of temporary non-symbolic experiences to bring a different worldview with them. It is not hard to imagine that experiencing the dissolution of one's individualized sense of self, for example, would produce such a result. At first glance it is a little surprising that the item's traditional score ranking of 15 out of 32 is not higher in this study. However it is important to consider that all of the traditional scores are very skewed to the high end of the range. This items average was 4.86 (out of 5). There

was only one subject that stated he had not experienced what the item referred to, and he was also the only subject who said that he experienced it 0% of the time. One other person said that they had most likely experienced it, and listed its persistence at 40%. All others said they had definitely experienced it.

Excluding the participant that rated it as 0%, the persistence scores for this item are in a wide range from 10-100%. This may reflect some people interpreting the item in the way I describe previously, and others interpreting it differently. In my interviews, some participants express a sense of each moment being ‘new’ for them. This can extend to them feeling that there is no causation from one moment to the next. I suspect that this interpretation is reflected in the mid- to higher-level persistent answer responses to this item.

#### **Zooming in/out in relation to Damasio’s theory of consciousness.**

Antonio Damasio (1999), a neuroscientist at the University of Southern California, put forth a theory of consciousness that partially overlaps with some of my findings. His hierarchical theory postulated a series of neuronal levels that range from the preconscious to various levels of consciousness. It is possible that the zoom in/out process discussed previously may relate to Damasio’s (1999) levels of the core self (zoomed out) and the autobiographical or extended self (zoomed in). However, there are several disparities between the way he described his theory and what my participants report. These are especially prevalent in the way that Damasio described the autobiographical or extended self.

One example is the importance that Damasio (1999) placed on identification with autobiographical memory as a key component of the

autobiographical self such as when he stated, “Extended consciousness still hinges on the same core ‘you,’ but that ‘you’ is now connected to the lived past and anticipated future that are part of your autobiographical record” (p. 196). As mentioned previously, the participants I interact with generally feel a sense of estrangement from their autobiographical memory. They often feel that the story it contains is not especially important or relevant to them. In addition, much of Demasio’s (1999) premise is built around a sense of a unitary, individualized self for the (generally human) organism. My participants do not report this, regardless of whether they are zoomed in or out. Their perceptions of self can generally be thought of as unable to be localized.

*Demasio’s theory of core self.* The core perceptual process I outlined previously may be related to Demasio’s notion of the core self, and there may also be relationships between my observations and his components of the autobiographical and extended self. Demasio’s model of consciousness is based on neuronal activity resulting from genetics merged with various forms of conditioning, which matches some of my speculation. The traits that he imbued core consciousness with have overlap with my observations of the zoomed out state, for example:

consciousness, provides the organism with a sense of self about one moment—now—and about one place—here. The scope of core consciousness is the here and now. Core consciousness does not illuminate the future, and the only past it vaguely lets us glimpse is that which occurred in the instant just before. There is no elsewhere, there is no before, there is no after. (Demasio, 1999, p. 16)

The sense of presence and beingness that I described previously are often accompanied by descriptions of participants experiencing the current moment in

ways that sound similar to Demasio's quote. There is an emphasis on 'now' and a diminishing of both a concern for and a sense of the past and future.

There are also similarities between Demasio's concept of how core consciousness may result in higher level attention and focus, and my understanding of how participants react to conditioned responses. The following statement about core consciousness could be viewed as in line with participant self-reports about becoming aware of a stimulus that they observe their own automatic reactions to or that they can choose how to respond to.

Low-level attention precedes core consciousness; it is needed to engage the processes that generate core consciousness. But the process of core consciousness results in driving higher-level attention toward a focus. (Demasio, 1999, p. 91)

Another example is Demasio's (1999) view that "emotions and core consciousness tend to go together, in the literal sense, by being present together or absent together" (p. 100). As I've noted, there are a variety of emotional effects (including the absence of emotions by some of those who most persistently experience the zoomed out state) that seem to be reported by participants in relation to both the zoomed in and zoomed out states. The reports I've collected are not as simple as Demasio's view, but his evidence primarily comes from patients with neurological problems. It is reasonable to assume that these types of patients may lead to more extreme generalities.

Perhaps the most important similarity is that Demasio (1999) considered core consciousness foundational, "Core consciousness serves the entire compass of thoughts that can be made conscious, the full scope of things to be known. Core consciousness is a central resource" (p. 123). In this sense it may match up

well with the way the zoomed out state feels to the participants I interview. They report that it encompasses everything in the zoomed in state; that all experience occurs within the container of this more foundational sense of awareness.

Demasio suggested that the autobiographical and extended sense of self goes away when core consciousness does, which may lend further support to the container like nature of core consciousness. We can easily see what might arise in core consciousness by Demasio's (1999) description of what it is not:

core consciousness does not depend on making a stable memory of an image or recalling it, that is, it does not depend on the processes of conventional learning and memory; core consciousness is not based on language; lastly, core consciousness is not equal to manipulating an image intelligently in processes such as planning, problem solving, and creativity. (p. 122)

Because of its foundational nature, Demasio (1999) suggested that we are always experiencing core consciousness:

You can, to a certain extent, willfully control the activity of the more elaborate sense of you that I call the autobiographical self; you can allow it to dominate the panorama of your mind, or be minimal. But you cannot do much about the presence of the core you; you cannot make it vanish entirely—a substantial presence always remains and a good thing, too. (p. 130)

This may match claims made by participants that suggest we cannot lose the fundamental form of awareness they claim to experience as the zoomed out state. To these participants it is always there, just not always able to be differentiated in what one is aware of at any given time. Likewise, Demasio's core state would always be present but may be very difficult for most people to perceive given how much is built on top of it and the relationship of these higher levels to our moment-to-moment perception and experience.



*Summary of Demasio's theory in relation to the current research.* From the above we can clearly see that it is possible that zoomed in/out states relate to Demasio's (1999) theory of consciousness. His concept of the core self seems to overlap with portions of the description of the furthest reaches of the zoomed out state. However, it is hard to recognize participant's zoomed in experiences in Demasio's descriptions of the autobiographical or extended self. This could be because his work is theoretically grounded in the normal population's notion of sense of self. It might be possible to extend his work to include the population this inquiry works with.

A shift in core identity away from the extended/autobiographical self to the core self, or some other aspect not detected and defined by Demasio, may produce the effects observed in my research. Perhaps the extended/autobiographical self is highly self referencing in most individuals, as Demasio suggested, and this generally forms a certain type of foundation for its own experiences. If this foundation shifts away from a higher degree of self-referential feedback to something like the core self it may produce the effects seen in the population I study. The strong sense of individuation that normally comprises the sense of self may shift to adapt to foundational elements provided by the core self, including: transience of experience, a high degree stability and resistance to change, a powerful involvement in the present moment, nonverbality, and so forth. This is certainly in line with the reports I've collected to date.

## **Participant Feedback on the Mysticism Scale**

A comment section was included after the Mysticism Scale, which said, “If you have any thoughts or opinions you'd like to share about the previous questions, please enter them below (not required).” This brought quite a range of responses from participants, which can be seen in Appendix K. The comments mirror email exchanges and conversations I had with some participants regarding the measure. They generally fall into critiques of the instrument, the method of inquiry, and confusion regarding how to answer the questions.

A significant number of the participants felt that the Mysticism Scale did not capture their experience. In email exchanges I often heard participants take issue with the word “experience.” From my interviews, I know that language is highly important when dealing with this population. Early on I learned that if I could not synchronize my language with a participant, I would lose them and have a short and unproductive interview. Over the years I’ve found no consistency regarding core terms such as *consciousness*, *awareness*, and *experience*. One person may use a word as the ideal expression of something, while another may feel it is the exact opposite of what could ever express the very same thing.

In my opinion, these language differences represent one of the most significant problems in trying to use a standardized instrument with this population. I’m not sure there is any way to overcome this because of how strongly, and conflicted, the individuals are regarding the language of many core terms and concepts. It might be best to make slight modifications to the instructions and items in instruments like the Mysticism Scale to try to minimize

the use of words like “experience.” A theme that has emerged again and again in my interviews is that experience is regarded as something transitory and relatively unimportant to most of this population. To them, anything that asks about it is a waste of their time and a researcher doing so can seriously hamper the desire for someone to move forward as a research participant.

### **Discussion for Hypothesis Three**

My third hypothesis was that there would not be a relationship between Mysticism Scale scores and ego development stages for individuals who self-report persistent non-symbolic experience. This hypothesis was meant to possibly lend support to the amount of relationship between degree of persistent non-symbolic experience and ego development level. There was a moderate correlation ( $r = 0.366, p = 0.028$ ) for persistence scores, however it was not possible to calculate a correlation for traditional scores because of a strong skew in the data towards the upper end of the range. A moderate relationship between persistent Mysticism Scale scores and ego developmental stages may potentially be a significant finding if a relationship between persistence scores and degree or type of persistent non-symbolic experience is supported by further research.

### **Revisiting the Wilber-Combs (W-C) Lattice**

This study provides strong support for several of the fundamental theories behind the Wilber-Combs Lattice (Combs, 2002, 2009; Wilber, 2000, 2002c, 2006). Among other things, the lattice was intended to help visualize how an individual’s experience in the moment might relate to the intersection of their various levels of development and their state of consciousness. Table 8 is a well-

known use of the lattice. Along the X-axis at top we see five different temporary states of consciousness represented. Along the Y-axis on the left we see a mixed developmental domain. In this case the lower levels are comprised of Piaget's cognitive developmental stages, and the top levels are generalized representations of a range of non-symbolic experiences.

Table 8

*A Wilber-Combs Lattice Incorporating a Composite of Developmental Levels*

Levels/Realms	Gross	Psychic	Subtle	Causal	Nondual
Nondual (Supermind)	--	--	--	--	--
Causal	--	--	--	--	--
Subtle (higher Subtle)	--	--	--	--	--
Psychic (lower Subtle)	--	--	--	--	--
Integral or Vision Logic (systems thinking)	--	--	--	--	--
Formal Operations	--	--	--	--	--
Concrete Operations	--	--	--	--	--
Early Concrete Operations	--	--	--	--	--
Preoperational	--	--	--	--	--
Sensorimotor	--	--	--	--	--

*Note.* Adapted from Combs, A. (2009). *Consciousness explained better: Towards an integral understanding of the multifaceted nature of consciousness*. St. Paul, MN: Paragon House. Adapted with permission.

While the top items in the Y-axis have the same name as the states across the X-axis, they are not meant to represent the same thing. The labels across the

top represent temporary forms of the experience, while the labels along the left represent persistent forms. In other words, one could experience a ‘nondual’ state from a range of persistent developmental levels, including persistent nonduality. Presumably this would be the ‘highest’ level of experience one could have under this representation, as it would represent the highest state filtered through the highest persistence level.

There is no ‘correct’ Wilber-Combs Lattice. The model being represented is always simplified. For example, the Y-axis could represent a single domain of developmental psychology, a constructed composite that mixed two or more domains together, or a mixture of an established developmental domain with levels from spiritual or religious traditions as in Table 8. A range of states of consciousness are generally placed across the X-axis. These could be as simple as sleeping, dreaming, and waking. Or, they might be representations of a range of symbolic to non-symbolic states drawn from a specific spiritual or religious tradition, or a composite from several as in Table 8. This makes it possible to graphically illustrate that the developmental influences on the Y-axis provide a snapshot of how the individual interprets the experience of specific states. The overall schema was designed to illustrate that a given moment would be comprised of a state of consciousness experienced and interpreted through the lens of an individual’s composite psychological developmental level. Table 9 shows an example using ego development levels.

The success of hypothesis one presents a challenge to mixed developmental domains, such as the one seen in Table 8. As stated previously,

these are predicated on the theory that persistent forms of non-symbolic experience are higher developmental levels. In the current study, the claim that individuals reporting persistent non-symbolic experience would score at the highest possible developmental levels was tested using the ego development domain as a proxy. As predicted, participants scored across a range of ego development levels making examples of mixed developmental domains that stack persistent non-symbolic experience on top of domains such as ego development problematic.

The traditional view of stages and developmental levels has suggested that states such as those represented in Table 8 are glimpses of developmental levels that can be achieved persistently (Combs, 2002; Wilber, 2002a, 2002b). Within developmental psychology there is very little evidence for this view. The developmental psychology literature does not broadly suggest that people have temporary experiences of the next highest developmental level, during which their experience of reality is unexpectedly and temporarily transformed for a period ranging from seconds to years before it reverts back. Yet this is what is specified in this model as the relationship between states and developmental levels.

Table 9

*A Wilber-Combs Lattice Incorporating Ego Development Levels*

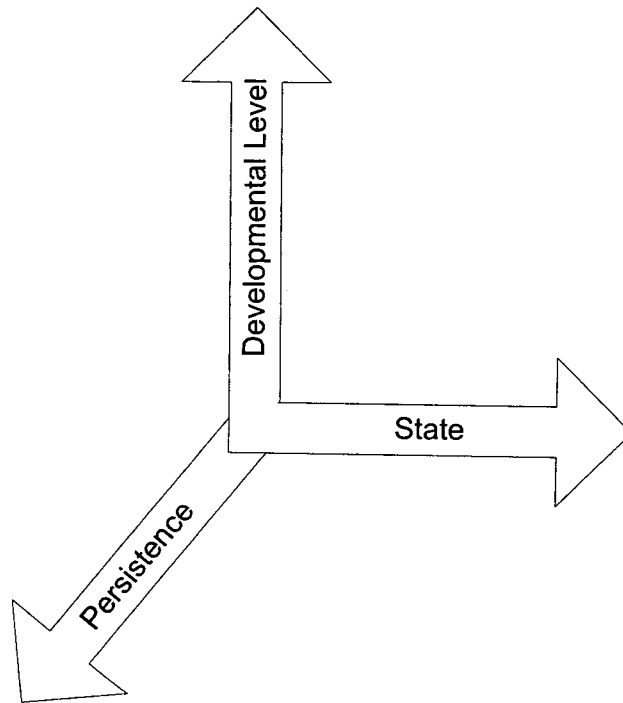
Stages	Gross	Psychic	Subtle	Causal	Nondual
Unitive	--	--	--	--	--
Construct Aware	--	--	--	--	--
Autonomous	--	--	--	--	--
Individualist	--	--	--	--	--
Conscientious	--	--	--	--	--
Self-conscious	--	--	--	--	--
Conformist	--	--	--	--	--
Self-defensive	--	--	--	--	--
Impulsive	--	--	--	--	--
Presocial	--	--	--	--	--

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Author's table.

This study also introduces a finding involving degree of persistence. Stace (1960a) and others (e.g., Spilka et al., 2003) have theorized that non-symbolic experiences have certain core features. This study found that these features varied and were not always present for individuals self-reporting persistent non-symbolic experience. It may be tempting to consider the persistence data as comprising the underlying components of an individual's current state, and in some sense this is true. However one could say the same for their psychological developmental

level. It seems more accurate to consider each of these as separate factors that come together to form a composite. The most simple way to represent them may be to make the lattice into a three dimensional matrix, as shown below in Figure 1.



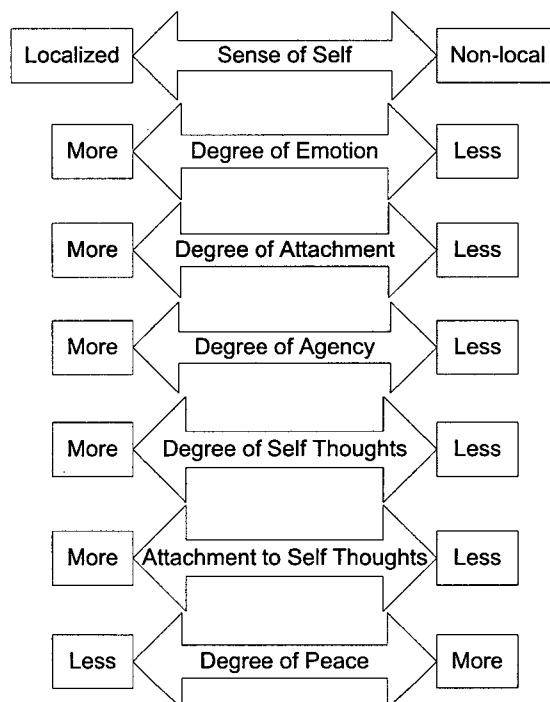
*Figure 1. A three-factor matrix. (Author's image.)*

Figure 1 provides one possible abstract view that encompasses the three factors, just as the original lattice provided an abstract view of two factors, however it does not provide a strong sense of what is really going on in terms of persistence. As stated previously, the persistence element is a composite of several constituent items extracted from my interviews, including degree of: emotionality, attachment, agency, self-thoughts, attachment to self-thoughts, peace, and so on. While these elements vary and may or may not even be reported by individuals experiencing persistent non-symbolic experience, one aspect does



not. Using varying language, all participants report a sense of self that is not able to be localized.

It is tempting to make this a fourth factor, however I feel it may be the overarching representation of the third factor. As previously mentioned, my research to date has only spotted one pattern among my participants in terms of the persistence data. There are individuals who report no agency, emotion, attachment, self-thoughts, or individualized sense of self. These individuals also report persistent inner peace. Obviously there are also individuals outside of the population I study who report the opposite of all of these. These exemplars seem to provide useful ends for a scale that can help visualize the third factor, which I label “Identity” (Figure 2).



*Figure 2.* Sample components for the persistence/identity factor. (Author’s image.)

The Y-axis is best thought of as the output of a mixture of all possible developmental domains. So, for example, it might comprise the momentary cumulative output from a range of developmental levels such as those seen in Figure 3. This notion is not new (Combs, 2002, 2009; Wilber, 2006), but this is a more constrained view than has been visualized in the past. The Y-axis has changed from the lattice version and now consists of the cumulative effect from an individual's orthodox psychological developmental levels, not mixed domains that contain an orthodox base with speculative layers placed above it (Figure 3). Another way to view this might be that it is a composite of developmental levels that together relate to how we construct meaning in each moment, and I label the axis as "Meaning" for this reason.

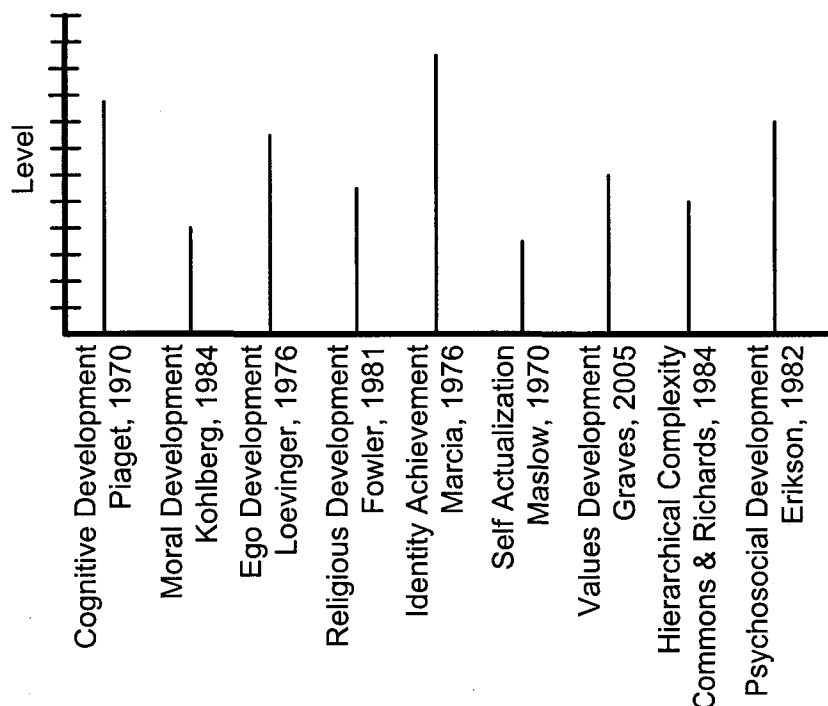


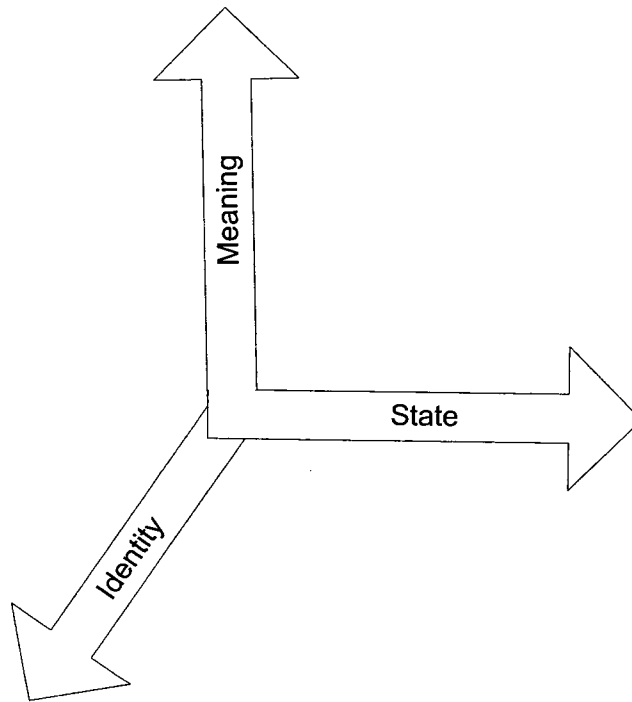
Figure 3. Example of differing developmental levels. (Author's image.)

In the matrix version of the model, 'identity' splits off from the Y-axis to become the Z-axis. As previously mentioned, the core of the change in the population of individuals reporting persistent non-symbolic experience seems to be one of identity. Participants no longer report a local, individualized identity but rather a sense of self that is not able to be localized or that is fluid. Obviously this is a key additional element that informs how each moment is experienced. Just as with the Y-axis many components may go into the composite represented by the Z-axis (see Figure 2), however it is difficult to definitively state this because we are in the early stages of research into what may constitute this axis.

The X-axis remains relatively the same as theorists have previously discussed (e.g., Combs, 2002; Wilber, 2002a, 2002b, 2006). Like the other axes it is a composite, in this case relating to an individual's state in the moment. Sometimes state is represented as: awake, REM sleep, and slow wave sleep. Other times, as in Table 8, it is represented by generalized or more specific concepts from a given spiritual, religious, or philosophical tradition. The two are even linked by some theorists such as Wilber (2002a, 2002b, 2006), who endorse various forms of Eastern religion and spirituality. To theorists like Wilber, periods of slow wave sleep are deep and dreamless, a time when every individual dips into non-symbolic consciousness. Scientific findings have increasingly challenged these views. To modern sleep researchers these periods of slow wave sleep appear to be yet another variation of conscious experience, and one which does involve dreaming.

This debate involving what should constitute the X-axis is a very good example of the complexity of both the biological systems involved, and the theoretical points of view. The emphasis placed on these types of spiritual-physical state linkages often means that the broader complexity underlying the concept of states goes largely unexamined. One rarely hears discussion, for example, of a myriad of other elements that could be involved in the X-axis notion of states, including: psychological or physical conditions that produce state effects, effects from drugs, and so forth. A simple Internet query on ‘states of consciousness’ produces a wide range of elements that may need to be considered in relation to the X-axis. Combs (2009) noted, I think correctly, that it will take many years and significant effort to even begin to work this out.

Because each of these axes represent a highly dynamic and complex set of relationships it is very likely that most of the key data points relating to them are yet to be discovered. It’s not clear what the best way would be to represent combined output from each of these composite systems. Theorists such as Wilber (2006) have attempted this in the past, however these efforts are generally polluted with the Z-axis data. While admirable, and even helpful in what they represent, these efforts also seem overly simplistic and skewed towards perennialist transpersonal philosophy (Edwards, 2003). The current representation of the model with the proper labels can be seen in Figure 4.



*Figure 4.* The state-identity-meaning three-factor matrix. (Author's image.)

### **Limitations and Delimitations**

This research must be considered basic, and exploratory. It cannot be seen as definitive or generalizable. This inquiry surveyed 36 people who fit the study criteria. The population surveyed was self-selected and opportunistic. There is no comparative data that can be used to determine how representative the participants are of the underlying population that the study attempts to address. While every attempt was made to reach a broad, representative sample, ultimately it cannot be known if this was achieved and, in fact, there are indications that it was not.

This inquiry was not concerned with theories involving these experiences, creating detailed classifications of them, matching participants up to existing classifications, or taking a position on the underlying ontology of these

experiences. This inquiry was not primarily concerned with the collection and analysis of introspective data. It sought to assess the developmental levels of individuals who self-report persistent non-symbolic experience using well-known and validated instruments.

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## APPENDIX A: EGO DEVELOPMENT STAGE CHARACTERISTICS

Table 10

### *Ego Development Stage Characteristics*

Stage Name	ID1	ID2	Characteristics
Presocial	1	1	“Describes adults who are unaware of themselves as separate individuals. They may be nonverbal, driven by basic needs and fundamentally helpless without others.” (Cook-Greuter, 1999, p. 260)
Impulsive	2	2	“Describes individuals who show signs of the beginning use of language simultaneously with the emerging ego as reflected in such statements as "I want" and "mine." They are concerned with safety and the gratification of basic needs. It is the first stage measured by SCT, and shows the first-person perspective. The inability to understand fully the verbal stimuli of the SCT is a sign of this stage.” (Cook-Greuter, 1999, pp. 260-261)
Self-Protective	2/3	3	Describes people who see the world only from the perspective of their own wants and needs. To get what they want, they need to control others and safeguard their interests. It is the first stage of beginning purposeful social interaction. "Opportunists" see the world from an "I win/you lose" perspective. Power is used where useful: "Might makes right" (Cook-Greuter, 1999, p. 261)
Conformist	3	4	“Describes persons with an early adolescent frame of mind. They identify themselves mostly as members of familiar groups. The boundaries between self and others are confused. But unlike people at the Self-protective stage, there is real concern for the well-being of others. One takes responsibility for others. Dependency needs are high. Fear of rejection leads conformists to be overly and nice and to repress negative feelings. There is unquestioned acceptance of the Family and in-groups (such as peer groups, family values, club, church) and loyalty is important. The unfamiliar (out-groups) is rejected and easily maligned. External social status and material goods are important as indices of one's value. Simple shoulds and oughts are adhered to, but now include more socially desirable behavior. Experience is concrete, practical, and reactions immediate without much reflection.” (Cook-Greuter, 1999, p. 261)

(continued)

Table 10 (continued)

Stage Name	ID1	ID2	Characteristics
Self-Aware	3/4	5	<p>“Characterizes people who are able to step back and look at themselves as objects for the first time. They can take the third-person perspective and begin to observe themselves. Generally, however, the focus is directed outside the self. on others. Conventional morality and self-righteousness strong. 5 people often assert and express their newly discovered personhood, albeit in traditional terms and try to differentiate themselves from the previous familiar context. Being able to stand outside oneself permits beginning self-reflection. 5 persons begin to recognize that others have different selves and thoughts, and that they can look at you as an object as well.” (Cook-Greuter, 1999, pp. 261-262)</p>
Conscientious	4	6	<p>“Adds the concept of linear time (sequentiality) as a conscious object to the third-person perspective and expands the meaningful social context to others within the same society with similar ideologies and aspirations. At stage 6 one starts to explore the nature of oneself in terms of traits through more ongoing introspection. Aware of self as having definite traits that distinguish one uniquely from others. One learns to understand oneself backwards (responsibility -&gt;guilt) and forwards in time (plans, dreams) within the roles (prototypes) and functions provided by one's culture. Stage E6 individuals are interested in reasons, causes, goals, costs, consequences, and the effective use of time. Aware of others as individuals with unique personalities - &gt; negotiated mutuality. At 6, one may deeply believe in social progress and human perfectibility. This often translates into a genuine effort at making a difference in the world through action, and mobilizing others around one's causes and beliefs. Clear sense of identity and being in charge of oneself. Life seen as a task to be mastered.</p>

(continued)



Table 10 (continued)

Stage Name	ID1	ID2	Characteristics
Conscientious (continued)	4	6	<p>Formal operations and abstract rationality are at their peak. There may be a conviction that the proper analytical, scientific methods will eventually lead to the discovery of how things really are, that is, to the discovery of the laws of everything and therefore the solutions to all problems. The E6 persons represents "the Adult7" as defined by Western industrialized society and as supported by modern institutions from education to jurisprudence. Because of the expanded view, the Conscientious person plans, prioritizes, and optimizes procedures to achieve goals. One needs society to function smoothly, in order to achieve one's desires.</p> <p>Great need to improve, to make things work more efficiently and more effectively. Quintessential conventional scientific/rational frame of mind. The self is separate from what is observed, thus, objectivity is both desirable and believed to be achievable. The rational mind makes human beings uniquely different from and superior to the rest of creation. Self-analysis can now become intense. Mind capable of exploring inner world "'psycho-logic," and outer world. Emphasis on reason, analysis, logic, prognosis as well as measurement, prediction, probabilistic considerations and proofs." (Cook-Greuter, 1999, p. 263)</p>
Individualistic	4/5	7	<p>"Allows one to look at oneself as changing over time and reacting differently in different contexts. Initial discovery that people interpret experience, that is. Bring their own "meaning" to the same event. The same thing means different things to different people. Self and context (object) form an interdependent system. There are as many truths as there are individuals. No truth can therefore be better than any other. Everything seems relative, undecidable, context dependent.</p> <p>Own sense of self is fluctuating, often seen as contradictory, inconsistent, made up of different subpersonalities. Since all is uncertain, Individualists often concentrate on enjoying the experience of the here and now. They turn inward and are increasingly able to understand themselves in complex ways. They can take a larger view (both in terms of time and space) regarding their own internal and external life." (Cook-Greuter, 1999, p. 263-264)</p>

(continued)

Table 10 (continued)

Stage Name	ID1	ID2	Characteristics
Autonomous	5	8	<p>“Persons at the Autonomous stage realize that they may notice different conflicting aspects of themselves at different times but, unlike persons at stage 7 who may despair about ever knowing who they really are, Autonomous individuals become able to "own" more of the contradictory parts of themselves. They can integrate previously compartmentalized subidentities of the self into a coherent new whole or core identity. The crucial new element is generativity, the commitment to generate a meaningful life for oneself through self-determination, selfactualization, and self-definition-the hallmarks of an Autonomous person.</p> <p>A strong, integrated ego with mostly mature defenses is the basis for such commitments (see Vaillant, 1977) as well as the experience of being part of a meaningful community of similarly committed and principled people.</p> <p>Autonomous individuals have much insight into themselves and into others. They therefore tend to believe that human beings can be known even across cultural boundaries because, according to their experience, underneath people are essentially alike. Because Autonomous persons have found a relative balance between inner and outer, body and mind, thought and feelings, they generally display high self-esteem on SCTs. They are convinced that higher development is better and closer to truth (Kegan, 1982). They are therefore often invested in helping others to grow. Higher is believed to be better because the more differentiated and the more autonomous persons become, the more they can claim that they have a nondistorted (true) and realistic view of themselves and the world” (Cook-Greuter, 1999, p. 83-84)</p>
Construct-aware	5/6	9	<p>“Construct-aware adults start to wonder about the meaningfulness of more and more complex thought structures and integrations such as can be imagined with a fifth or nth person perspective. They start to realize the automatic nature of human map making in the representational domain and understand the logical loops and recursions that one can get into when trying to be as accurate as possible within the language-mediated realm. They are becoming aware of the absurdities to which unbridled complexity and logical arguments can lead . . .</p>

(continued)

Table 10 (continued)

Stage Name	ID1	ID2	Characteristics
Construct-aware (continued)	5/6	9	<p>Adults at the Construct-aware stage realize that the "ego" has functioned both as an integrator for all stimuli (process of meaning making) and as a central point of reference (product of permanent self and object world). Once they realize this fundamental egocentricity, it may be felt as a constraint to further growth . . .</p> <p>During peak experiences one is no longer the center of one's world construction as at prior stages, but just a witness to oneself as an experiencing being. This paradox of being, at the same time, a rational, separate individual locus of consciousness while also feeling interconnected and part of a deeper non-individualized, all-pervasive consciousness, is one of the existential conflicts of the Construct-aware stage . . .</p> <p>Stage C9 (5/6) adults sometimes struggle to find a balance between feeling their unique self-experience and concomitant sense of importance in life, and seeing themselves just as a minute speck in the eternal scheme of things. They are keenly aware of the Pascalian paradox, but incapable of finding a position from which it can be synthesized. They live with great inner tensions. They may become preoccupied with notions of noncontrol, tolerance and acceptance as they find themselves trapped in desiring to be free from desire, and intolerant of intolerance . . .</p> <p>Once the fluidity of experience is realized, the ego can no longer unconsciously organize coherent meaning from experience, but becomes aware of itself as an organizer and as a temporary, though necessary and useful construct. I refer to this stage therefore sometimes as Ego-aware as well as Construct-aware...</p> <p>On the one hand, Construct-aware adults know empirically and intuitively that there is no clear subject/object separation, no either/or, yet they are stymied by trying to transcend this state of affairs . . .</p> <p>At the Construct-aware stage, people show a heightened awareness that the mental habits of thinking, expecting, defending and fearing are problematic in themselves." (Cook-Greuter, 1999, p. 84-88)</p>

(continued)

Table 10 (continued)

Stage Name	ID1	ID2	Characteristics
Unitive	6	10	<p>The Unitive stage represents such an entirely new way of perceiving human existence and consciousness. The previous way of viewing reality almost exclusively through the lens of one's separate personhood is transformed. The new paradigm is multiperspectival and universal. Unitive individuals experience themselves and others as part of ongoing humanity, embedded in the creative ground, fulfilling their evolutionary, karmic or divine destiny depending on their orientation towards the ultimate . . .</p> <p>The Unitive person no longer feels a need to reach after fact and reason. "Objective" self-knowledge no longer satisfies the need for constancy as it does for the highest stages in Loevinger's theory. Instead, unfiltered experience or the perception of ongoing process, rhythm and flux provide inner stability and affirmation.</p> <p>The self-sense of the Unitive stage is fluid, "undulating," based on people's trust in the intrinsic value and processes of life. For those at the Unitive stage, one can truly speak of a different, higher stage integration according to the axioms of cognitive-developmental theory . . .</p> <p>Individuals see through the function of the ego to objectify and reify the self by defining (delimiting) it. They experience the self in its moment to moment transformation and therefore consciously decline to satisfy the implicit demand for objective self-identification. They understand that the striving for individual permanence is an impossible and unnecessary dream in the face of their experience of the continuous change in states of awareness. They also see the ego with its striving for independence and for permanent, objective identity as just one way among others of how one is conscious of being. Thus, the symbolic, representational self has been deconstructed and given way to a whole new mode of perception . . .</p> <p>Their openness to ongoing experience combined with a conscious refusal to reify and codify experience makes this stage fundamentally and structurally different from all previous ego stages. In addition, people with a fluid, transcendent self-sense seem to be free from the anxiety accompanying "not-knowing" that characterizes all earlier ego stages. Consciousness or rational awareness is no longer perceived as a shackle, but as just another phenomenon that assumes foreground or background status depending on one's momentary focus . . .</p>

(continued)

Table 10 (continued)

Stage Name	ID1	ID2	Characteristics
Unitive (continued)	6	10	<p>Individuals no longer try to consciously overcome the rational mental habits, but have relaxed enough to be open to naked experience and to mental activities as they unfold . . .</p> <p>Persons at the Unitive stage transcend narrow ego-boundaries. They have open boundaries and exhibit "attunement awareness," the explicit immersion in the ongoing indeterminate process of being (Chinen, 1985). Truth is imminent in the universe and can be apprehended in this ready, open-process stance, but it cannot be grasped by effort or purely rational means . . .</p> <p>It is important to realize that from a Unitive point of view higher stages are not better than lower ones because all are necessary parts of interconnected reality and an overall evolutionary process where everything is and will be just the way it is. Unitive thinkers also accept themselves "as is" in a non-controlling way . . .</p> <p>The reality that they relate to most is the undifferentiated phenomenological continuum or the creative ground or unified consciousness. Every object, word, thought, and every theory is seen as a human construct: separating out, creating boundaries where there are none and where there need be none . . .</p> <p>For the person at the Unitive stage, peak experiences no longer have an out-of-this-world quality, they have become a habitual way of being and experiencing. The present is where the past and the future interpenetrate. Total openness releases people to be in tune with truth and beauty, to have visionary experiences, that is to comprehend things in a holistic way, not solely through the filter of the rational mind. Expressed differently, individuals at this stage can access reality directly, "im-mediately" as well as mediated through symbolic representation. The difference is they are aware of both... Because of their ability to concentrate on the goings on of their own internal processes, such "flow" states may happen more often than at the conventional stages. Access to the numinous and states of altered consciousness are, of course, possible from all stages and through many gateways. Yet, Unitive stage persons begin to be capable to sustain the universal perspective, that is, to have it as a home base." (Cook-Greuter, 1999, pp. 92-95)</p>

Author's table.

(continued)

Table 10 (continued)

*Note.* ID1 and ID2 are separate numbering schemes that have been used with Loveinger's (1976) and Cook-Greuter's (1999) stages of ego development. ID1 is an older notation and is included for completeness.

## **Appendix B: Washington University Sentence Completion Test (WUSCT, Form 81 for Women and Men)**

After contacting Dr. Le Xuan Hi, I decided not to include the full text from the version of the WUSCT I used in an appendix, as I've done with the Mystical Scale in Appendix C. Although allowed, Dr. Hi feels that the best practice is not to make the instrument widely available because it may spoil the chance that naïve participants can benefit from a fresh encounter with it during research studies. Instead he recommends that research reports refer to the 1996 (Hy & Loevinger) scoring guide, which contains the full text of the instrument. Out of respect for the work he has contributed to the instrument and field, I've opted to honor his view.

The sentence stems used were identical to those on pages 28-31 in Hy and Loevinger's (1996) scoring guide. The male version found there was administered to men, and the female version was administered to women. The stems were presented on a single web page, not divided over two pages as in Hy and Loevinger's text. The information fields for Name, Education, and so forth at the top of the each page in the Hy and Loevinger text were omitted. Only the sentence stems were used.

The instructions used with the instrument varied slightly from Hy and Loevinger's (1996) recommendation, and were: "Instructions: Please complete the following. Take your time and allow yourself up to 45 minutes."

The additional sentence (Take your time and allow yourself up to 45 minutes.) was recommended by Terri O’Fallon from Pacific Integral. She is a highly experienced certified (by Cook-Greuter) scorer, and one of very few scorers who have experience with the type of individual recruited for this study. I consulted her during study design, and she stressed the importance of letting participants know that they could use the full 45 minutes that are allotted for the WUSCT.



### **Appendix C: The Mysticism Scale (M Scale)**

PLEASE READ THESE INSTRUCTIONS CAREFULLY. EACH QUESTION HAS TWO ANSWERS AND IT CAN GET CONFUSING IF YOU DO NOT READ THESE INSTRUCTIONS.

The items contain brief descriptions of a number of experiences. Some descriptions refer to phenomenon that you may have experienced. In each case note the description carefully and then select a response according to how much the description applies to your own experience, depending on how you feel in each case.

There are two answer responses.

The first has the following possible responses:

- +1 This description is probably true of my own experience or experiences.
- 1 This description is probably not true of my own experience or experiences.
- +2 This description is definitely true of my own experience or experiences.
- 2 This description is definitely not true of my own experience or experiences.
- ? I cannot decide.

Please select an answer for each item trying to avoid if at all possible marking any item with a '? I cannot decide'. In responding to each item, please understand that the items may be considered as applying to one experience or as applying to several different experiences. Please leave no items unanswered.

The second answer response asks how frequently the description applies to your experience. The range is from 0% of the time (Never) to 100% of the time (Always)

-----  
Examples:  
-----

1.) The first question is: "I have had an experience which was both timeless and spaceless."

-- If you have had this experience you would answer +2 for the first answer and the percentage of time you experience this in your daily life from 0-100% of the time for your second answer.

-- If you have not had this experience you would answer -2 for the first answer and 0% for the second answer.

-- If you are unsure, you would choose either -1 or +1 for the first answer, depending on which most closely fits. For your second answer you would select the percentage of the time you think you might experience this, from 0-100% of the time.

2.) The second question is: "I have never had an experience which was incapable of being expressed in words." These questions can be 'tricky' because they have a negative in them.

-- If you have never had this experience you would answer +2 for the first answer and 100% of the time for your second answer.

-- If you have had this experience you would answer -2 for the first answer and 0% for the second answer.

-- If you are unsure, you would choose either -1 or +1 for the first answer, depending on which most closely fits. For your second answer you would select the percentage of the time you think do not experience this, from 0 to 100% of the time.

-----

You must answer both response options for each question.

1. I have had an experience which was both timeless and spaceless.
2. I have never had an experience which was incapable of being expressed in words.
3. I have had an experience in which something greater than myself seemed to absorb me.
4. I have had an experience in which everything seemed to disappear from my mind until I was conscious only of a void.
5. I have experienced profound joy.
6. I have never had an experience in which I felt myself to be absorbed as one with all things.
7. I have never experienced a perfectly peaceful state.
8. I have never had an experience in which I felt as if all things were alive.
9. I have never had an experience which seemed holy to me.
10. I have never had an experience in which all things seemed to be aware.
11. I have had an experience in which I had no sense of time or space.
12. I have had an experience in which I realized the oneness of myself with all things.
13. I have had an experience in which a new view of reality was revealed to me.
14. I have never experienced anything to be divine.
15. I have never had an experience in which time and space were nonexistent.
16. I have never experienced anything that I could call ultimate reality.
17. I have had an experience in which ultimate reality was revealed to me.
18. I have had an experience in which I felt that all was perfection at that time.

19. I have had an experience in which I felt everything in the world to be part of the same whole.
20. I have had an experience which I knew to be sacred.
21. I have never had an experience which I was unable to express adequately through language.
22. I have had an experience which left me with a feeling of awe.
23. I have had an experience that is impossible to communicate.
24. I have never had an experience in which my own self seemed to merge into something greater.
25. I have never had an experience which left me with a feeling of wonder.
26. I have never had an experience in which deeper aspects of reality were revealed to me.
27. I have never had an experience in which time, place, and distance were meaningless.
28. I have never had an experience in which I became aware of the unity of all things.
29. I have had an experience in which all things seemed to be conscious.
30. I have never had an experience in which all things seemed to be unified into a single whole.
31. I have had an experience in which I felt nothing is ever really dead.
32. I have had an experience that cannot be expressed in words.

## Appendix D: Participant Information Form Data

Table 11

*Participant Data, Age and Persistent Non-Symbolic Experience*

Participant	Birth Year	Age	First year of PNS	Years in PNS	Approx. Age at PNS
F1	1958	52	2006	4	48
F2	1951	59	1999	11	48
F3	1950	59	1992	18	42
F4	1956	54	2007	3	51
F5	1952	57	-	-	-
F6	1945	65	1996	14	51
F7	1941	69	1945	65	4
F8	1962	48	1999	11	37
F9	1963	47	2003	7	40
M1	1945	65	-	-	-
M2	1950	60	-	-	-
M3	1946	63	2003	7	57
M4	1945	64	1987	23	42
M5	1952	58	1986	24	34
M6	1961	51	2004	6	43
M7	1958	52	2000	10	42

(continued)

Table 11 (continued)

Participant	Birth Year	Age	First year of PNS	Years in PNS	Approx. Age at PNS
M8	1943	67	1998	12	55
M9	1953	57	2007	3	54
M10	1959	54	2006	4	47
M11	1971	39	2010	0	39
M12	1957	53	1997	13	40
M13	1969	40	2007	3	38
M14	1981	28	2008	2	27
M15	1958	51	2004	6	46
M16	1957	53	2006	4	49
M17	1968	42	2006	4	38
M18	1982	27	2009	1	27
M19	1948	63	1993	17	45
M20	1969	41	2006	4	37
M21	1948	61	-	-	-
M22	1984	25	2009	1	25
M23	1949	60	1979	31	30
M24	1982	28	2009	1	27
M25	1987	23	2009	1	22
M26	1954	56	2007	3	53
M27	1963	46	2003	7	40

Author's table.

(continued)

Table 11 (continued)

*Note.* PNS=Persistent non-symbolic experience. Slight discrepancies exist between age, years in PNS, and age at PNS because only the year was recorded for date of PNS.



Table 12

*Participant Data, Various Demographic Data*

Participant	Region	Relationship	Education	Occupation
F1	Eastern US	M	BA, SGS	Property manager, workshop facilitator, author
F2	Southwest US	M	Md	Writer, counselor, spiritual teacher
F3	Eastern US	M	JHS	-
F4	Southern US	D	PhD	Writer, researcher
F5	Southern US	SO		Spiritual counselor, mentor and teacher/facilitator
F6	Netherlands	D	SC	Dharma teacher
F7	Southwest US	S, V until two years ago	MD, PhD	Retired
F8	Germany	M		Venture capital specialist, zen master
F9	Southern US	M	SC	Various
M1	Ireland	M	HS	Artist
M2	Australia	S	HS	Facilitator
M3	Midwest US	SO	MD	Retired, organic farmer
M4	Southwest US	D	HS	Life teacher
M5	Southwest US	S	BBA	Author, speaker
M6	Midwest US	M	SC	Software development manager/programmer

(continued)

Table 12 (continued)

Participant	Region	Relationship	Education	Occupation
M7	Eastern US	M	BA, BS	Executive
M8	Midwest US	M	PhD	Retired, consultant, yoga/meditation teacher
M9	Southwest US	M	MA	Professor
M10	Midwest US	M	MBA	Executive
M11	Switzerland	M	MIL	Lawyer
M12	Southwest US	M	MEd	Spiritual teacher
M13	Midwest US	SO	JD	Lawyer
M14	Midwest US	S	PhD Cand.	Student
M15	Eastern US	M	MA	Dharma teacher, ESL accent reduction tutor
M16	Eastern US	M	HND	Property owner and manager
M17	Midwest US	D	STM	Writer, teacher
M18	Western US	M	MA	Administrative
M19	Midwest US	SO	PhD Cand.	Life mentor, success coach, instructor of intuitive development & practical integration
M20	Eastern US	M	BS	Executive
M21	Western US	M	Md	Science, math, English teacher
M22	Western US	S	BS	None

(continued)

Table 12 (continued)

Participant	Region	Relationship	Education	Occupation
M23	Midwest US	M	Md	Senior technical writer/editor
M24	Southwest US	D	SHS	None
M25	Eastern Canada	S	CD	Field placement student
M26	Western Canada	D	SC	Writer
M27	Western Canada	SO	BA	Wandering luminary, with some IT dabbling

Author's table.

*Note.* S=Single, never married; M=Married; D=Divorced; SO=Significant other/partner; V=Vowed religious; JHS=Junior high school, SHS=Some high school; HS=High school, HND=Higher National Diploma (UK), SC=At least some college, CD=College diploma, SGS=Some graduate school, Md=Master's degree, MD=Medical degree, PhD Cand.=PhD Student or Candidate, MIL=Master in law.

Table 13

*Participant Data, Religious and Spiritual Practice*

Participant	Religion when young	Current religion	Yrs. Meditation
F1	Judaism	None	25
F2	Roman Catholic	None	12
F3	Russian Orthodox	None	5
F4	Methodist; Christian Mysticism		11
F5	Judaism	Involved in many spiritual churches and organizations and still identify as a Jew	30
F6	None	None	WV, ULA
F7	Atheist, Scottish Presbyterian, Quaker, Ramakrishna Order Vedantin	Independent Vedantin	41
F8	Roman Catholic, Agnostic	Agnostic	17
F9	Southern Baptist	None	Rare, ULA
M1			
M2	Judaism	None	0
M3	Roman Catholic	None	5
M4	Protestant, Pentecostal	Alaya	45
M5	Roman Catholic	Agnostic	30
M6	Southern Baptist	None	5

(continued)

Table 13 (continued)

Participant	Religion when young	Current religion	Yrs. Meditation
M7	Roman Catholic	None	6
M8	Methodist	Yoga, Zen, Advaita Vedanta	38
M9	Roman Catholic	Zen Buddhist	37
M10	Agnostic	Agnostic	20
M11	Roman Catholic, Hindu, Zen Buddhism	Zen Buddhism, Western Hermeticism	22
M12	United Church of Christ (Congregational)	None	Various, ULA
M13	None	Nondual, integral, perspective taking	0
M14	Agnostic	None	3
M15	Agnostic	None	20
M16	Parents not religious, but 'by default' Church of England	None	6
M17	Roman Catholic	None	WV, ULA
M18	Pentecostal, Foursquare denomination	Mostly ecumenical Buddhist, but not at all dogmatic.	5
M19	Roman Catholic, Agnostic, Atheist, Spiritualist, Indigenous-Shamanic, Self-Referral	None	40
M20	Reform Judaism	Judaism	3

(continued)

Table 13 (continued)

Participant	Religion when young	Current religion	Yrs. Meditation
M21	Roman Catholic	Christian Mysticism	40
M22	Judaism	None	Periodic, ULA
M23	Baptist	None	0
M24	Pentecostal	None	0
M25	Lutheran	Nonduality	5
M26	United Church of Canada, Christian (Protestant)	Unity/ New Thought, TM	35
M27	Roman Catholic	None	1.2

Author's table.

*Note.* ULA=Unspecified length and amount, WV=Wide variety.

## **Appendix E: Consent Form**

### **CONSENT TO PARTICIPATE IN RESEARCH**

#### **Purpose:**

Jeffery A. Martin, a doctoral candidate at the California Institute of Integral Studies in San Francisco, is conducting a study on ego development levels in relation to degree of non-symbolic experience. Participation involves filling out two online self-report psychological questionnaires, one that measures ego development and one that measures degree of non-symbolic experience. Both must be completed at the same time, and it may take up to 1.5 hours to complete both questionnaires. No prior preparation is required before filling out the questionnaires.

#### **Principal Investigator:**

Jeffery A. Martin

547 Lexington Ave.

Newport, KY 41071, USA

E-mail: [jamartin@fas.harvard.edu](mailto:jamartin@fas.harvard.edu)

Phone: (859) 630-7979 (text message capable)

Fax: (614) 437-1978

**Procedures:**

[1] This study involves filling out forms electronically by use of the Internet. The forms include: this consent form, the Mysticism Scale (M Scale), and The Washington University Sentence Completion Test Form 81 (WUSCT). No prior preparation is required before filling out the M Scale or WUSCT.

[2] For this study, the WUSCT and M Scale will be filled out one time online, after you have read this consent document.

[3] It could take up to an hour and a half to complete the forms.

[4] Please do not begin until you have fully read this consent information and obtained answers to any questions you have. You can stop now, email or call the Principle Investigator with your questions, and return to the survey website later to continue the process.

[5] The M Scale consists of 32 multiple choice questions. It may take up to a half hour to complete this form.

[6] The guidelines for the WUSCT suggest that it may take up to one hour to complete the form in the space provided. There are 36 sentence stems to complete. You will complete a Female or Male version, which will match your sex.

**Possible Risks and Safeguards:**

This study is designed to minimize, as much as possible, any potential psychological and social risks to you. Although very unlikely there are always risks in research, which you are entitled to know in advance of giving your



consent, as well as safeguards to be taken by those who conduct the project to minimize the risks.

By providing your consent to participate, you state that you understand that:

[1] My participation will not have any bearing on my relationship with the Principle Investigator.

[2] Only the Principle Investigator will know my identity, he will hold it in strictest confidence. My identity will be kept separate from my responses on the WUSCT and M Scale. My identity will only be used to notify me of the opportunity to participate in subsequent research and to update me on the results of this research project if I desire.

[3] My response to the questions on the M Scale and WUSCT will be pooled with others and will not be able to be associated to me in any publicly available report written on this research.

[4] The M Scale and WUSCT data collected in its raw form are to be collected and kept anonymous. After the data collection phase is completed it will be downloaded by the Principle Investigator using an encrypted connection from the survey system's database. It will be stored in an encrypted form on the Principle Investigator's laptop when not being analyzed. WUSCT data will be emailed in encrypted form to between two and three independent scorers for analysis. The scorers will decrypt, analyze, and then delete the raw data from their computer. They will send a summary report back to the Principle Investigator via email. These scorers will not have access to personally identifiable data that can be

associated with me unless I enter it when completing a sentence stem in the WUSCT. After study completion, all data will be deleted from the online survey system database and stored in encrypted form on a portable hard drive in a locked container accessible only to the Principle Investigator.

[5] The online survey system and the server which hosts it has been subjected to a full, independent security audit, and security will continue to be monitored by independent experts until all data are deleted from the system at study completion.

[6] All the information I give will be kept confidential to the extent permitted by law. The information obtained from me will be examined and reported anonymously.

[7] There will be no individual feedback regarding my individual responses or interpretations of my responses.

[8] Any personal information I provide regarding my identity will not be released to any other party without my explicit written permission.

[9] If quotes of my responses are used, in any and all publications of these quotations my identity shall remain anonymous, and at most make use of a fictitious name or symbolic representation of me such as a numerical or alphanumeric code.

[10] I have the right to refuse to answer any question asked of me.

[11] I have the right to refuse at any time to engage in any procedure requested of me.

[12] I have the right to withdraw from participation at any time for any reason without stating my reason.

[13] I have the right to participate without prejudice on the part of the Principle Investigator.

[14] The Principle Investigator is available to talk about any concerns I have while the study is ongoing.

[15] If I have any concerns or am dissatisfied at any time with any part of the study, I may report my concerns (anonymously, if I wish) to the Chair of the Human Research Review Committee, California Institute of Integral Studies, 1453 Mission Street, San Francisco, CA 94103, or by telephone at 415-575-6114.

**Possible Benefits:**

I understand no direct benefit, either monetary or resulting from the experience itself, is offered or guaranteed, and that by participating in this research:

[1] I may obtain a greater awareness, knowledge, and understanding of aspects of myself.

[2] I may find the process interesting and thought-provoking.

[3] Through future communications and possible applications of the findings of the research, indirectly my participation may bring future benefits to others.

**Consent:**

It is recommended that you print a copy of this page for your records. You may also request a copy of this form electronically or in printed form by contacting the Principle Investigator.

If you have any questions of the Principle Investigator or the Human Research Review Committee at the California Institute of Integral Studies at this point, please take this opportunity to submit them in person, via Phone, or via E-mail before granting your consent. If you are ready to provide your consent, read the statement below then type your name and the current date into the input boxes provided below.

I have read the above information, have had an opportunity to ask questions about any and all aspects of this study, and give my voluntary consent to participate.

**Please type your Full Name: <Text Box for Name>**

**Please type Today's Date: <Text Box for Date>**

*(Typing your name above and dating this form will signal consent)*

<SUBMIT BUTTON>

## **Appendix F: General Information Form**

### **General Information Form (NS)**

1. Full Name:
2. Date of birth (month/day/year):
3. In what year did your awakening occur (if possible to discern):
4. Place of birth (city, state/province, country):
5. Current residence (city, state/province, country):
6. Current relationship status (for example: Single-never married, Married, Divorced, Separated, 7. Significant Other/Partner, Widowed, Vowed religious)
8. Highest educational level:
9. Degrees earned, if any:
10. Current occupation, if any:
11. Race/Ethnicity:
12. Religious tradition(s) or spiritual practice(s) that you were raised with. Please include the denominations/sects/subgroups. If none, please state if you were raised as either an Agnostic or Atheist:
13. Current religious tradition(s) or spiritual practice(s). Please include the denominations/sects/subgroups. If none, please state if you are either an Agnostic or Atheist:
14. Please describe your meditation experience, if any (please include types, years of practice, total estimated number of hours, etc.):

15. Please describe your contemplative or centering prayer experience, if any  
(please include years of practice, total estimated number of hours, etc.):
16. Have you ever used hallucinogenic drugs? (Yes/No/Prefer not to answer)

## Appendix G: Washington University Sentence Completion Test (WUSCT)

### Data

Table 14

#### *Participant Ego Development Stages*

Participant	E Score	I Score	Stage
F1	5	3/4	Self Aware
F2	7	4/5	Individualistic
F3	6	4	Conscientious
F4	5	3/4	Self Aware
F5	7	4/5	Individualistic
F6	7	4/5	Individualistic
F7	9	5/6	Construct Aware
F8	5	3/4	Self Aware
F9	8	5	Autonomous
M1	5	3/4	Self Aware
M2	6	4	Conscientious
M3	8	5	Autonomous
M4	7	4/5	Individualistic
M5	7	4/5	Individualistic
M6	6	4	Conscientious

(continued)

Table 14 (continued)

Participant	E Score	I Score	Stage
M7	9	5/6	Construct Aware
M8	10	6	Unitive
M9	7	4/5	Individualistic
M10	6	4	Conscientious
M11	6	4	Conscientious
M12	9	5/6	Construct Aware
M13	9	5/6	Construct Aware
M14	7	4/5	Individualistic
M15	6	4	Conscientious
M16	8	5	Autonomous
M17	6	4	Conscientious
M18	6	4	Conscientious
M19	7	4/5	Individualistic
M20	9	5/6	Construct Aware
M21	7	4/5	Individualistic
M22	9	5/6	Construct Aware
M23	8	5	Autonomous
M24	7	4/5	Individualistic
M25	8	5	Autonomous

(continued)



Table 14 (continued)

Participant	E Score	I Score	Stage
M26	8	5	Autonomous
M27	7	4/5	Individualistic

Author's table.

## Appendix H: Mysticism Scale (M Scale) Data Tables

Table 15

*Statistical Summary for Each Mysticism Scale Item's Traditional Score*

Item Number	Mean	SD	Median	Minimum	Maximum
1	4.94	0.23	5	4	5
2	4.31	1.51	5	1	5
3	4.97	0.17	5	4	5
4	4.69	0.86	5	1	5
5	4.97	0.17	5	4	5
6	4.83	0.70	5	1	5
7	4.89	0.67	5	1	5
8	4.72	0.94	5	1	5
9	4.67	1.04	5	1	5
10	4.56	1.21	5	1	5
11	4.86	0.68	5	1	5
12	4.97	0.17	5	4	5
13	4.86	0.68	5	1	5
14	4.61	1.13	5	1	5
15	5.00	0.00	5	5	5
16	4.61	1.08	5	1	5
17	4.25	1.44	5	1	5

(continued)

Table 15 (continued)

Item Number	Mean	SD	Median	Minimum	Maximum
18	4.89	0.67	5	1	5
19	4.89	0.67	5	1	5
20	4.58	1.05	5	1	5
21	4.78	0.93	5	1	5
22	5.00	0.00	5	5	5
23	4.92	0.28	5	4	5
24	4.33	1.45	5	1	5
25	4.89	0.67	5	1	5
26	4.86	0.68	5	1	5
27	4.97	0.17	5	4	5
28	4.97	0.17	5	4	5
29	4.67	1.04	5	1	5
30	4.75	0.94	5	1	5
31	4.33	1.39	5	1	5
32	4.86	0.68	5	1	5

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Author's table.

(continued)

Table 16

*Statistical Summary for Each Positive Mysticism Scale Item's Persistent Score,  
Largest to Smallest*

Item Number	Mean	SD	Median	Minimum	Maximum
19	70.00	35.86	90	0	100
18	68.89	33.79	75	0	100
12	68.61	34.82	80	10	100
31	68.06	34.54	85	0	100
20	65.00	37.76	70	0	100
29	64.72	35.41	80	0	100
32	63.61	34.82	65	10	100
13	62.50	36.05	70	0	100
3	62.22	35.38	70	0	100
1	58.61	35.87	60	10	100
22	58.06	34.71	60	10	100
23	56.67	35.70	55	10	100
17	51.14	40.93	50	0	100
5	49.44	29.95	50	10	100
11	47.50	34.17	40	0	100
4	39.72	32.20	30	0	100

Author's table.

Table 17

*Average Scores for the Hood and Stace Mysticism Scale Factors*

	Both Extrovertive	Hood Introvertive	Hood Interpretive	Stace Introvertive	Stace Interpretive
Mean (SD)	37.86 (3.80)	57.47 (3.35)	57.08 (4.14)	38.61 (2.49)	75.94 (4.90)
Median	40	59.5	60	40	77
Range	24-40	49-60	43-60	31-40	59-80
Possible Range	8-40	12-60	12-60	8-40	16-80
Author's table.					

Table 18

*Individual Mysticism Scale Scores with Means and Averages*

Participant	Ext	HIntro	HInter	SIntro	SInter	Traditional Total	Persistent Total
F1	36	60	60	40	80	156	70.00
F2	36	50	52	31	71	138	24.38
F3	40	52	60	40	72	152	73.75
F4	40	60	60	40	80	160	39.38
F5	40	60	56	40	76	156	91.88
F6	40	60	59	40	79	159	93.13
F7	40	60	60	40	80	160	89.38
F8	40	51	60	35	76	151	58.13
F9	40	58	57	38	77	155	60.63
M1	40	56	54	40	70	150	46.88
M2	32	56	56	36	76	144	76.25
M3	36	56	60	40	76	152	78.75
M4	40	56	52	40	68	148	46.88
M5	37	60	55	40	75	152	39.33
M6	24	60	48	40	68	132	11.25
M7	40	59	60	40	79	159	65.63

(continued)

Table 18 (continued)

Participant	Ext	HIntro	HInter	SIntro	SInter	Traditional Total	Persistent Total
M8	40	60	60	40	80	160	89.38
M9	40	60	60	40	80	160	23.75
M10	35	60	57	40	77	152	15.00
M11	40	60	60	40	80	160	100.00
M12	40	60	60	40	80	160	56.25
M13	40	59	56	40	75	155	84.38
M14	39	49	43	33	59	131	78.13
M15	40	57	55	37	75	152	30.00
M16	40	55	52	35	72	147	63.13
M17	40	60	60	40	80	160	38.13
M18	37	58	59	40	77	154	11.88
M19	36	60	60	40	80	156	88.75
M20	40	60	60	40	80	160	93.75
M21	40	56	60	36	80	156	67.50
M22	28	56	52	40	68	136	61.25
M23	36	60	60	40	80	156	15.63
M24	40	60	52	40	72	152	46.25

(continued)

Table 18 (continued)

Participant	Ext	HIntro	HInter	SIntro	SInter	Traditional Total	Persistent Total
M25	40	51	60	35	76	151	58.13
M26	40	60	60	40	80	160	88.75
M27	31	54	60	34	80	145	71.88
Averages	37.86	57.47	57.08	38.61	75.94	152.42	59.65
Medians	40.00	59.50	60.00	40.00	77.00	154.50	62.19

Author's table.

*Note.* Ext=Both Extrovertive, HIntro=Hood Introvertive, HInter=Hood Interpretive, SIntro=Stace Introvertive, SInter=Stace Interpretive.



## Appendix I: Mysticism Scale (M Scale) Comparison Studies

Table 19

### *Mysticism Scale Comparison Studies*

Study	Population Type	# Participants	Median Age (SD)	NS Claim	Study Code
Hood et al. (2001)	Mostly Christian college students at a medium sized university in the SE United States.	F=110 M=78	20 (3.93)	No	1a
Hood et al. (2001)	Persian Muslim college students at the University of Tehran	F=110 M=81 N/A=1	22.6 (5.41)	No	1b
Byrom (2009)	Undergraduate students in Into to Psychology class at a medium sized university in the SE United States	211	N/A	No	2
Hood et al. (1993)	University Students	740	N/A	No	3
Hood (1975)	Undergraduate students at a private fundamentalist protestant college and the University of Tennessee at Chattanooga	300	N/A	No	4

(continued)

Table 19 (continued)

Study	Population Type	# Participants	Median Age (SD)	NS Claim	Study Code
Reinart & Stifler (1993)	Contemplatives (C), Psychotics (P), Normals (N)	C=30 P=27 N=30	"Adults"	C=Partial P, N=No	5
Caird (1988)	College students	115		No	6
Travis & Wallace (1999)	Adults reporting less than one NS experience per year (RNS), Adults reporting 1 to 10 NS experiences per year (ONS), Adults reporting persistent NS (PNS)	F=8 M=9 In each of the three groups	RNS=39.7+-11.5 ONS=46.5 +-11.5 PNS=46.5+-7	RNS, ONS=N PNS=Y	7
Smith (2007)	Diverse sample of adults in the San Francisco, CA area			At least temporary NS	8
Wilter (2009)	Diverse sample of adults	F=81 M=46	42	No	9
Jagel (2007)	Diverse sample of adults reporting psychedelic use and mystical experiences	F=10 M=30	35	At least temporary NS	10

Author's table.

*Note.* NS=Non-symbolic experience, NS Claim=Claim that the population self-reports a persistent non-symbolic experience, N/A=Not Available.

Table 20

*Comparison Data for the Hood and Stace Factors and Traditional Score*

Study Code	BExt (SD)	HIIntro (SD)	HIInter (SD)	SIntro (SD)	SInter (SD)	Trad M Scale (SD)
1a	15.85 (5.85)	24.64 (8.9)	31.14 (7.49)	-	-	73.14 (15.99)
1b	18.98 (5.56)	26.16 (6.89)	30.01 (7.37)	-	-	71.63 (18.56)
2	21.91 (7.81)	34.34 (11.21)	42.74 (9.94)	-	-	99 (24.81)
3	37.80 (8.5)	46.60 (8)	26.7 (6.5)	-	-	-
4	-	-	-	-	-	F=119.4 (18.8) M=109.3 (22.6)
5	-	-	-	-	-	C=142.80 P=141.90 N=124.9 All=136.18 (14.61)
6	-	-	-	-	-	120.67
7	-	-	-	-	-	RNS=18.1+-6.47 <sup>a</sup> ONS=39.5+-3/15 <sup>a</sup> PNS=60.7+-0.61 <sup>a</sup>
8	4.83 <sup>a</sup> (7.77)	8.82 <sup>a</sup> (10.25)	12.06 <sup>a</sup> (8.18)	-	-	25.71 <sup>a</sup> (22.57)
9	37.08 (6.91)	28.73 (10.24)	-	-	-	105.85 (20.91)
10	-	-	-	-	-	150.10 (8.90)

Author's table.

(continued)

Table 20 (continued)

*Note.* BE=Both Extrovertive, HIntro=Hood Introvertive, HIntro=Hood

Interpretive, SIntro=Stace Introvertive, SInter=Stace Interpretive, Trad M

Scale=Average Traditional Mysticism Scale, C=Contemplatives, P=Psychotics,

N=Normals.

<sup>a</sup> Study used a non-standard scale for which the range is unknown.

## Appendix J: Top Mysticism Scale (M Scale) Scores by Gender

Table 21

### *Top Traditional Female Mysticism Scale Scores*

Item
I have had an experience in which I felt everything in the world to be part of the same whole.
I have had an experience in which I felt that all was perfection at that time.
I have had an experience in which I felt nothing is ever really dead.
I have had an experience which I knew to be sacred.
I have had an experience in which all things seemed to be conscious.
I have had an experience in which a new view of reality was revealed to me.
I have had an experience in which something greater than myself seemed to absorb me.
I have had an experience which left me with a feeling of awe.
I have experienced profound joy.
I have had an experience in which I had no sense of time or space.
Author's table.

Table 22

*Top Persistent Female Mysticism Scale Scores*

Item
I have had an experience in which I felt that all was perfection at that time.
I have had an experience in which I felt everything in the world to be part of the same whole.
I have had an experience in which I felt nothing is ever really dead.
I have had an experience in which all things seemed to be conscious.
I have had an experience in which I realized the oneness of myself with all things.
I have had an experience which I knew to be sacred.
I have had an experience in which a new view of reality was revealed to me.
I have had an experience which left me with a feeling of awe.
I have had an experience in which something greater than myself seemed to absorb me.
I have had an experience in which ultimate reality was revealed to me.
Author's table.

Table 23

*Top Traditional Male Mysticism Scale Scores*

Item
I have never had an experience in which time and space were nonexistent.
I have had an experience which left me with a feeling of awe.
I have had an experience in which I realized the oneness of myself with all things.
I have never had an experience in which time, place, and distance were meaningless.
I have never had an experience in which I became aware of the unity of all things.
I have had an experience which was both timeless and spaceless.
I have had an experience in which something greater than myself seemed to absorb me.
I have experienced profound joy.
I have had an experience that cannot be expressed in words.
I have had an experience that is impossible to communicate.
Author's table.

Table 24

*Top Persistent Male Mysticism Scale Scores*

Item
I have had an experience that cannot be expressed in words.
I have had an experience in which I realized the oneness of myself with all things.
I have had an experience in which I felt everything in the world to be part of the same whole.
I have had an experience in which I felt nothing is ever really dead.
I have had an experience in which I felt that all was perfection at that time.
I have had an experience which I knew to be sacred.
I have had an experience in which something greater than myself seemed to absorb me.
I have had an experience in which all things seemed to be conscious.
I have had an experience in which a new view of reality was revealed to me.
I have had an experience which was both timeless and spaceless
Author's table.



**Appendix K: Participant Comments on the Mysticism Scale and Washington  
University Sentence Completion Test (WUSCT) Questions**

Table 25

*Participant Comments on the Mysticism Scale Questions*

Participant	Comment
M1	We are talking here about experiences, which are always transitory. But what you are pointing to in the questions is the underlying magic of consciousness which is not an experience
M2	Got confused about the 0 to 100% Most questions are relative and answered but arnt really meaningful to me
M4	I find it difficult to to put into words that which can not be made into your language
M7	ahh so a duality provoking question format...not sure why other than seeing if one can manipulate a mouse and understand double negatives! but you made this test!
M15	The double negatives were difficult for me, so I just clicked "never" in the "How often?" field. Sorry about that.
M21	The questions make me desire to quit this survey and go meditate then sleep
M22	Hope I answered them all accurately with all the positive/negative questions... :)
M23	I have had numerous satoris, ecstatic experiences of joy and oneness. Some lasted minutes, some for days. However, I do not remain in that exalted state. I would not be able to function.

(continued)

Table 25 (continued)

Participant	Comment
M24	<p>17. "I have had an experience in which ultimate reality was revealed to me."</p> <p>I am not sure what that would look like or how one would know that what one was seeing is the ultimate reality...? Even the knowings that come from this unknowing, I never got the sense that it knows itself to be an ultimate reality. What is seen here is that there are infinite realities or expressions of one beingness (or whatever word). All infinite realities are equal to every other reality in existence and therefore not one of them is ultimately true.</p>
M25	<p>The time and space one is interesting, how 'often' can I experience a 'timeless' state? Not the easiest to answer, these experiences simply can't be measured.</p>
M26	<p>A few of the questions it was awkward to give a % to because they are specific experiences rather than ongoing, for example Awe usually arises with something new. A void was a transitory experience, becoming fullness.</p> <p>I also found the negative questions to be 100% not true while the positive ones may be sometimes true.</p>
M27	<p>Some are hard to answer accurately this way, feels like further explanation of the response would be needed.</p>
F7	<p>I don't analyze myself on a minute to minute basis. I have had some remarkable experiences, and I guess the percentages I have given are more percentages of these big moments. They may refer to minute to minute also, but most of the time I am too busy to notice.</p>
F9	<p>Some of these questions are difficult to answer from my perspective of 'non-duality'. I will try to address this more in an email later to Jeffery.</p>
Author's table.	

Table 26

*Participant Comments on the Washington University Sentence Completion Test  
(WUSCT)*

Participant	Comment
M4	This is the most mundane set of questions. To really answer them I would have to go back to a unenlightened conditional mind. They really make not sense to me
M5	These questions are VERY hard to answer, in that it's a matter of "which side of the fence" do I speak from?--as Awareness, or as the apparent [M5]-self. Really don't want to speak as [M5]--even though some questions made that seem necessary. The answers are spontaneous--I was not concerned with giving an answer that sounded most "spiritually correct."
M6	The gender specific questions just don't relate to how I see the world.
M7	Not sure why all the duality filled gender questions and those sex. Gender only has relativity if one allows it. Sex is either obsessed with or about or put down--perhaps just let it be sex! :)
M10	I'm very interested in the results of this survey and hope to be able to see them at some future date.
M12	I was unable to answer the questions that referred to "he" since I simply have no idea who is referred to.
M14	How is it so certain that you ARE HERE? Was there ever a time when your BEING was not? How are you so certain of this? All other questions are irrelevant. Have a hard look at this.
M15	There is no place to plant your feet. Thoughts, opinions, and mind states come and go according to conditions. They don't refer back to anyone.

(continued)

Table 26 (continued)

Participant	Comment
M20	Some of these sentence completions were difficult to answer since it's not clear who is being referenced (ie. usually, he felt that sex...). Also, some of the sentences are quite leading.
M21	Good questions
M24	I love talking about stories as equally as I love talking about the witness of all stories, but in the story of [M24] there is much conditional influence to do with strict spiritual concepts and personal development, therefore the stories don't seem to unfold with much juice behind them.
M25	Really great, simple, thought provoking questions. I found myself answering most of them from my gut, so to speak. Well done!
M26	Talk about leading and stereotypical questions. (laughs)
F1	most of these questions don't make any sense to me.
F2	Most of these questions are designed to draw out opinions, conditioning, and other egoic perceptions, which I'm no longer interested in or engaged in for the most part.
F3	I find them tricky and would rather answer questions that don't pose a should or lucky because or she wished and so on
F5	lead to interesting visceral responses
F7	I am not sure what you are trying to find out here. Many of these questions are a bit stereotypical. But I guess you are trying to see how spirituality affects gender relationships. To my mind, this applies only to early stages of spirituality. But that is only my opinion.
Author's table.	