

Chapter 7

MYSTICISM



“Since we cannot change reality, let us change the eyes which see reality,” says one of my favorite Byzantine mystics.¹

Confirmation of the genuineness of mystical experience is to be found in the high degree of unanimity observable in the attempts to describe its nature.²

This problem of the secularized interpretation of amorphous mystical experiences has been raised repeatedly since the Enlightenment.³

Out of my experience . . . one fixed conclusion dogmatically emerges . . . there is a continuum of cosmic consciousness, against which our individuality builds but accidental fences, and into which our several minds plunge as into a mother-sea or reservoir.⁴

Nowhere are religions closer than in mysticism, where experience takes over from formal statement and communal organization.⁵

The focus upon mysticism in this chapter highlights the central role that mystical experience has occupied in conceptual discussions of religion in the 20th century. The claims of mystics dominate contemporary discussions concerned with the evidential value of religious experience. “Evidential force” and “evidential value” are the phrases most often linked to debates as to whether or not religious experiences such as mysticism provide sufficient grounds for asserting the truth of various religious beliefs.⁶ For some, mysticism is simply a delusional belief that a person has united with God or has experienced ultimate reality. For others, mysticism is an experience that provides sufficient warrant for belief in God or ultimate reality. As Katz notes, those who assert the evidential force of mystical experience provide an ecumenical umbrella under which diverse religious claims can be sheltered as but different expressions of one fundamental truth.⁷ This avoids the embarrassing particulars of religious experiences that, like the particulars of religious belief expressed in dogmatic terms, tend to separate one faith from another.⁸ Although as social scientists we need not address theological or philosophical debates directly, our methods and analyses will inevitably have philosophical and religious implications. As Jones has noted, though science and religion are not identical, neither can they be categorically separated or viewed as mutually exclusive orientations.⁹ Our confrontation with the conceptual issues debated by both philosophers and theologians will give us a framework to organize and guide our review of the empirical research.

CONCEPTUAL ISSUES IN THE STUDY OF MYSTICISM

The theological and philosophical literature on mysticism is extensive.¹⁰ Our concern as social scientists is restricted to the aspects of these literatures that have direct relevance for empirical research. Of immediate concern is the clarification of the nature of mystical experience, as well as of its relationships to other forms of religious experience.

Thorner,¹¹ following the work of the philosopher Kaufman,¹² contrasts mystical and prophetic experiences. He first notes that persons having any religious experience believe three things: (1) Their experience is different from everyday, normal experience; (2) the experience is more important than everyday experiences; and (3) the perceptual referents are not simply to be found in the discrete aspects of the empirical world.¹³ These claims are consistent with our analysis of the wide variety of religious experiences discussed in Chapter 6. However, the third point raises serious problems. How are social scientists to respond to a claim that refuses to locate the perceptual referents of experience within discrete aspects of the empirical world? Within the conceptual literature on religion, scholars have focused upon numinous and mystical experiences as the most likely candidates for revealing a transcendent dimension to human experience. Social scientists have concurred, noting that the numinous and the mystical are empirically the most common claims of those who assert that they have experienced a transcendent reality, however conceived. Social scientists differ widely in their own claims to have identified the true perceptual referents in such experiences. However, most also share the belief that the true perceptual referents need not include reference to God or an ultimate reality, and hence attempt to explain the transcendent in purely scientific terms.

Thorner notes that the claim of the mystic is that the perceptual referent in religious experience is a unity within the world. This unity is not linked to any one perceptual object; instead, all objects are unified into a perception of totality or oneness. However, the mystical experience of a unity within the world as emphasized by Thorner is but one form of mysticism. Following Stace,¹⁴ we refer to this as "extrovertive mysticism." We contrast extrovertive mysticism with another form, "introvertive mysticism." This is an experience of unity devoid of perceptual objects. It is literally an experience of "no-thing-ness." Perceptual objects disappear, and a pure consciousness devoid of content is reported. Forman has referred to this as "pure conscious experience."¹⁵ What is important for now is that only extrovertive mysticism has as its perceptual referent a unity that transcends individual, discrete objects of perception. There are discrete objects of perception, but they are all seen unified in their particularity as nevertheless one. The unity in extrovertive mysticism is with the totality of objects of perception; the unity in introvertive mysticism is with a pure consciousness devoid of objects of perception. Stace has suggested that the extrovertive form is a less developed mysticism, perhaps preparatory to introvertive mysticism.¹⁶ Forman argues that extrovertive mysticism is a higher form of mysticism, for which introvertive mysticism is only preparatory.¹⁷ Hood has argued that extrovertive mysticism is likely to follow upon introvertive mystical experience, but does not claim it to be a "higher" experience.¹⁸ The conceptual arguments as to whether they are two separate mysticisms has important consequences for empirical research. As we shall see, if introvertive and extrovertive mysticism can be measured, the relationship between the two can be studied as an empirical issue. Yet whether the experience of unity is introvertive or extrovertive, it is this experience that, by scholarly consensus, uniquely characterizes mysticism.¹⁹

Many scholars have contrasted prophetic or numinous experience with mystical experience. A numinous experience is an awareness of a "holy other" beyond nature, with which

or whom one is felt to be in communion. More typically, this experience is identified with the classic work of Otto, whose phenomenological analysis illuminates the human response to the transcendent.²⁰ For Otto, the essential fact of religious experience includes a non-rational component that is psychologically characterized by a numinous consciousness. The term “numinous” is based upon the Latin word *numen*, denoting a power implicit in a sacred object. It is the object that elicits a response from the subject. Thus religion, as Hick has also argued,²¹ is a response to the transcendent. Social scientists can study this response, noting that from the believer’s perspective it is a response to a transcendent object experienced as real. Numinous experiences identify a personal transcendent object, often referred to as God or Allah or Yahweh. Obviously, religious traditions assert the reality of this object, refusing to identify it merely with empirical realities described by the scientist. Hood refers to the transcendent object as the “foundational reality” of a faith tradition.²²

The numinous consciousness is both compelled to seek out and explore this transcendent object (*mysterium fascinans*), and to be repelled in the face of the majesty and awfulness of this object, in whose presence one’s own “creatureness” is accentuated (*mysterium tremendum*). Efforts to rationally confront the feelings of *tremendum* are articulated in personal conceptualizations of a holy other such as God or Allah or Yahweh. The *fascinans* is explicated in rational concepts such as grace, in which the inadequacy of personal analogies to conceptualize the holy other is revealed. The *fascinans* thus has a mystical element, insofar as the personal analogue revealed in the *tremendum* is found to be inadequate and an impersonal language is sought to describe it. Not surprisingly, Stace’s categories of “introvertive mysticism” and “extrovertive mysticism” are derived from Otto’s “mysticism of introspection” and “unifying vision,” respectively.²³ Thus, although it is possible to separate the numinous and the mystical as two poles of religious experience, they are ultimately united. Mystical experiences of unity (variously expressed) can be numinous as well, eliciting the *mysterium fascinans* when the object is experienced in impersonal terms and the *mysterium tremendum* when the object is experienced in personal terms. Hick has articulated this duality as the *personae* and *impersonae* of “the Real.”²⁴ Hood has emphasized that William James accepted both impersonal (the absolute) and personal (God) interpretations as compatible with the facts of mystical experience.²⁵ Hood has also emphasized the numinous and the mystical as two interrelated ways of experiencing foundational reality.²⁶ As we shall see, empirical studies use measurements that tend to emphasize experiences of either a sense of presence (favoring numinous experiences) or a sense of unity (favoring mystical experiences).

The focus upon the numinous and the mystical as two poles of religion is important, in that it links the empirical studies of mysticism to current theological and philosophical considerations of mysticism. Much as modern physics employs both wave and particle conceptualizations of light, Hick argues that what he simply refers to as “the Real” can be either personal or impersonal.²⁷ Similarly, Smart has argued that although the numinous and the mystical must be carefully conceptually distinguished, they are incorporated into a single unifying doctrine in some religions traditions.²⁸ Elsewhere, Smart has noted that “nature mysticism,” the extrovertive experience of unity in nature, is in fact a numinous experience.²⁹ This parallels Stace’s view that extrovertive mystical experiences incorporate an awareness of an inner subjectivity to all that is perceived.³⁰ Likewise, Stace has emphasized that the category of “the holy” applies to both introvertive and extrovertive mystical experiences, and most probably accounts for their religious quality.³¹ Thus, for conceptual purposes we can separate the numinous and the mystical according to whether the personal or impersonal aspects of foundational reality are emphasized. Mysticism tends toward the impersonal; the

numinous tends toward the personal. As we shall soon note, measurement studies can identify both numinous and mystical experiences on the basis of whether one experiences a sense of presence (numinous experience) or a sense of unity (mystical experience).

For purposes of this chapter, we refer to mystical experiences either as “mystical experiences proper” when experiences of unity are emphasized, or as “numinous experiences” when a sense of a holy other’s presence is emphasized. That both components are properly mystical has been briefly noted above and extensively argued by Hood.³² Their importance is that from a social-psychological perspective, they are part of what religions defend as the experience of the sacred. Hood has argued that the human response to the transcendent is most effectively analyzed in light of the possibility that the response is at least potentially a response to that which is real.³³ Empirically, reports of transcendent experiences include the belief in the reality of transcendent objects. It may also be true that the belief in their reality is necessary for the experience to occur. Thus, although social scientists cannot confirm any transcendent realities, they can construct theories compatible with claims of the existence of such realities. Hodges has argued that the scientific taboo against the supernatural can be broken as long as hypotheses about the supernatural can be shown to have empirical consequences.³⁴ In Garrett’s phrase, the “troublesome transcendent” must be confronted by social scientists as much as by theologians and philosophers.³⁵

There is no reason why scientists cannot include specific hypotheses derived from views about the nature of transcendent reality in empirical studies of religious experience, as long as specific empirical predictions can be made. The source of the predictions may reference even the unobservable and the intangible. All that is required is that there be identifiable empirical consequences. As Jones has stated the case, “Invoking Occam’s Razor to disallow reference to factors other than sensory observable ones is question begging in favor of one metaphysics building up an ontology with material objects as basic.”³⁶ Jones echoes the classic claim of William James³⁷ that mystics base their experience upon the same sort of processes that all empiricists do—direct experience. Although James would restrict the authoritative value of mystical experience to the person who had the experience, foundational realities are the shared basis of faith; this suggests that many share such experiences or that some are united in the belief that such experiences are real, even if they personally have not had them. Thus, as Swinburne argues, mystical experience is also authoritative for others:

... if it seems to me I have a glimpse of Nirvana, or a vision of God, that is good grounds for me to suppose that I do. And, more generally, the occurrence of religious experience is *prima facie* reason for all to believe in that of which the experience was purportedly an experience.³⁸

What makes numinous and mystical experiences so important to study is that they are the strongest claims that people can experience foundational realities. Social scientists are often too quick to boast that their own limited empirical data undermine ontological claims. Whether we use Hick’s term “the Real” or Hood’s phrase “foundational reality,” the point is that religious traditions cannot be adequately understood without the assumption that transcendent objects of experience are believed to be real by those who experience them. It is also possible that not only are they believed to be real, but also that they are in fact real. Presupposing a totally reductionistic interpretation of the objects of religious experience is less persuasive than was once thought. Bowker, after critically reviewing social-scientific theories of the sense of God, has noted that it is an empirical option to conclude that at least part of the sense of God may come from God.³⁹ In our terms, religious views of the nature of the Real

suggest ways in which it can be expressed in human experience. This can work in two directions, both deductively and inductively. Deductively, we can note that if the Real is conceived to be a particular way, then certain experiences of the Real can be expected to follow. Thus we anticipate that expectations play a significant role in religious experience, often confirming the foundational realities of one's faith tradition. Inductively, we can infer that if particular experiences occur, then the possibility that the Real exists is a reasonable inference—a position forcefully argued by Berger.⁴⁰ Thus we can anticipate that experiences, some of which are unanticipated, may lead some to seek religions for their illumination. O'Brien has gone so far as to include in his criteria for a mystical experience that it must be unexpected.⁴¹ Religious traditions adopt both options in confronting mystical and numinous experiences.

Not surprisingly, then, these experiences have long been the focus of empirical research and provocative theorizing among both sociologists and psychologists. We first explore classic efforts to confront these experiences. These classic views are of more than historical interest, as they set forth the various conceptual issues that continue to plague the contemporary empirical study of mysticism. Our focus upon classic views is not exhaustive; we focus upon representatives of three major social-scientific views regarding mystical experience. These are as follows:

1. *Mysticism as erroneous attribution.* Mystics attribute to transcendence objects and processes that can in fact be explained in social-scientific terms. These processes have been variously identified as physiological, psychological, or sociological. The misattribution is to assume that something more is involved in such experiences. Most commonly the "more" is believed to be something transcendent, including, in cases of personal mysticism, God, Allah, or Yahweh.

2. *Mysticism as heightened awareness.* Mysticism is an awareness of ultimate reality that occurs with heightened or altered awareness. This awareness may be cultivated or may occur spontaneously. The awareness may be variously interpreted, or the interpretations may reflect different reality claims. Although social-scientific processes can be identified that permit the experience of transcendence to occur, they need not deny genuine ontological status to the object of transcendence. In simple terms, both the mystical experience and its object are real in the terms of which they are experienced.

3. *Mysticism as evolved consciousness.* Mysticism is the most evolved form of consciousness. It is variously interpreted to be potentially common to all humans or to currently characterize only some humans (a few advanced or "evolved" persons). Typically, this form of consciousness is interpreted in purely natural scientific terms. The transcendent is merely the naturally evolved form of consciousness.

REPRESENTATIVE CLASSIC VIEWS OF MYSTICISM

Mysticism as Erroneous Attribution

Preus has emphasized that the classic social-scientific theorists of religion, with only a few exceptions, had little doubt that they could provide genuine explanations of religion.⁴² Such explanations purported to replace religious attributions with purely secular claims to processes involved in mystical experience as illuminated by science. Furthermore, it was commonly assumed that once the social sciences illuminated the true nature of religious experi-

ence, then religious claims based upon such experiences would lose much of their persuasive force.

The early psychologists of religion could not help confronting mysticism in light of this assumption. The mystical claim to have experienced God could not be uncritically accepted by psychologists. Much of the scientific validity of psychology was seen to rest upon its ability to provide scientific explanations for spiritual and religious claims. Thus, despite the fact that in the popular mind psychology was seen as a spiritual discipline, most psychologists saw the public interest in spiritual matters as a way to help develop the science of psychology, if psychology could explain the spiritual in natural scientific terms.⁴³ In *The Psychology of Religious Mysticism*, Leuba provided one of the earliest physiological theories of mysticism.⁴⁴ Considerably less sympathetic to religion than James, Leuba insisted that mystical experience can be explained in physiological terms. He also insisted that no transcendental object is necessary for mystical or numinous experience, and that only physiological processes and a natural-scientific framework can illuminate these experiences. He was one of the first psychologists to argue forcefully that mystical experience provides no evidential force for religious beliefs. Mystics do not encounter God in their experience, Leuba claimed; instead, mystics use their beliefs to interpret their experience, ultimately erroneously. His now-classic study of mysticism was echoed in the general French tradition of the emerging discipline of psychiatry, in which mental states—including many religious ones interpreted by those who experienced them—were understood in terms of their origins in physiological and psychological processes often deemed pathological. Charcot, who was part of this French tradition, heavily influenced Freud, whose attitude toward religion was complex but ultimately unsympathetic.

In *The Future of an Illusion*, Freud argued that religious *beliefs* are illusory—the products of wishes rather than responses to the reality of the world.⁴⁵ Later, he responded to a criticism of the Nobel laureate Romain Rolland that he had focused only upon religious beliefs and had underestimated the value of religious *experience*. Rolland found the essence of religion in what he termed the “oceanic feeling,” a state of unity with the world (mysticism); Rolland claimed validity for this feeling, independent of Freud’s devastating challenge to religious beliefs. Freud’s response, in *Civilization and Its Discontents*, was that this feeling is not originally religious but only later becomes attached to religious beliefs.⁴⁶ The actual “oceanic feeling” is but a recollection of an infantile state, perhaps of unity with the mother. Mysticism is thus a regression to an earlier infantile state. Thus, mystical experience does not provide evidence for unity with the world or even of God; it is simply a feeling attached to religious beliefs that God exists and can be experienced. The religious beliefs themselves are not simply illusional but delusional as well. Religion is thus a double error: an erroneous belief in the existence of a God, and the erroneous interpretation of regressive experiences as evidence of union with God. Thus, Freud was one of the first theorists to argue that there is no essential relationship between mystical experience and religious beliefs.⁴⁷

Leuba and Freud represent examples of genuine explanations of mysticism, if one assumes that the experience is capable of being reductively explained by either physiological processes (Leuba) or psychological processes (Freud). Basic to both views is that persons who believe they have confronted or merged with transcendent objects are wrong. Similar arguments have been made by sociologists. For instance, Durkheim argued for mystical experience as the apprehension of the dependence of individuals upon a transcendent object; however, that object is society, not a divine being or reality.⁴⁸ The genuine experience of being part of a larger unity is correct, but a misattribution applies this to God instead of its real

origin, society. Thus, any theory that claims to explain experiences of union with the Real by processes identified at the physiological, psychological, or social level must claim to explain mysticism by misattribution. A corollary is that when individuals realize the true source of their experience of union, the religious quality (in terms of transcendent claims) will disappear.

These classic theories set the tone for modern studies of mysticism. Inherent in their views is that mystical experiences offer no ontological proof for religious belief, and assuredly no proof that one has experienced union with God. Although they may be acted upon as authoritative by those who have them, insofar as they are misattributions, the individual who so acts risks being defined as delusional or pathological. The authoritative basis of the experience for the individual who has it may be susceptible to destructive analyses by experts, in which the experience itself is demonstrated to be attributable to processes more appropriately identified by social scientists, whether they are physiologists, psychologists, or sociologists.

Mysticism as Heightened Awareness

Although most early social scientists reveled in the apparent power of psychology to explain religion in general and mystical experiences in particular, William James best represented the paradoxical position of the emerging science of psychology. Hood has traced the efforts of James to avoid religious concepts, such as the soul, in developing psychology as a natural science.⁴⁹ In *The Principles of Psychology*, James saw no need for the concept of a soul or for any transcendent dimension to human consciousness; however, in *The Varieties of Religious Experience*, James noted that the facts of mystical experience require a wider dimension to human consciousness.⁵⁰ He favored Myers's notion of a subconscious,⁵¹ in which, James argued, a wider self may emerge. Furthermore, he argued that this natural process may be one in which the human self merges with God. Thus, although the empirical facts cannot prove the existence of a God, mystical experience provides the basic experiential fact from which God as a genuine "overbelief" to explain the process is a viable hypothesis. Mystical experiences thus have reasonable evidential force, in James's view.

James's views created much controversy among early psychologists, who were anxious to separate psychology from religious views associated with the science in the popular mind. But, as Hood has shown, James's insistence that mystical experiences are valid forms of human experience—incapable of being reductionistically explained by either physiological or psychological processes—provided a counter to the emerging natural-scientific and psychoanalytic psychologies, which denied the possibility that religious experiences may have a truly transcendent dimension.⁵² James's view was simply that in numinous and mystical experiences one may encounter God, regardless of the processes identified by the scientists as operating during the experience. In the terms used previously, science cannot rule out that a mystical or numinous experience is an experience of the Real or of a foundational reality that may be necessary for the experience to occur. At a minimum, the *belief* in the reality must be there. As James stated in his notes for his lectures on mysticism in *The Varieties*, "Remember, the whole point lies in really *believing* that through a certain point or part in you you coalesce and are identical with the Eternal."⁵³

Mysticism as Evolved Consciousness

Evolutionary theory has been a continuing influence on psychology since its inception. Mysticism has been proposed by some as a form of consciousness that is evolving, much as

consciousness has evolved from the nonreflective consciousness that characterizes animals to the reflective consciousness that characterizes people. Not only are persons aware, but they are also aware that they are aware. They can reflect upon their awareness. Bucke is most closely identified with the theory that following upon reflexive awareness in the evolution of consciousness is a cosmic consciousness or mystical state of awareness of unity with the world.⁵⁴ He documented the increased presence of individuals over time whom he saw as examples of persons expressing this cosmic consciousness. Basic to his theory is the notion that cosmic consciousness is evolving in the human species and becoming more frequent (although by citing as exemplars of mystics such persons as Buddha and Christ, Bucke made the absolute frequency of mystical experience quite rare in any population). Nevertheless, as opposed to theorists who described mysticism as pathological or as a union with a religiously defined transcendent object, Bucke saw cosmic consciousness as the natural, advanced form of consciousness toward which the human species is moving. As consciousness evolves, it evolves into a mystical consciousness. The philosopher Bergson gave the major impetus to evolutionary theories of mysticism by identifying mystical experience with the direct awareness of the evolutionary process itself (*élan vital*), which he saw as the basis of all life. Kolakowski has argued that sociological studies of mysticism both support and are compatible with Bergson's linking of mystical experience and his *élan vital*.⁵⁵

Alister Hardy proposed a similar theory of evolution, in which a cosmic consciousness is gradually emerging within the human species as a whole and is providing a thoroughly naturalistic basis for mystical experiences that were previously interpreted in religious terms.⁵⁶ Unlike Bucke, Hardy assumed that mystical states are common. Late in his life, after his retirement from a career in zoology, Hardy began soliciting reports of religious experiences and initiated efforts to provide a classification system of them. We have discussed his empirical work in Chapter 6, and discuss it further in the section on survey research below.

Jung, who was perhaps the most mystical of the dynamic theorists, offered a different twist to evolutionary theories of mysticism.⁵⁷ Indeed, many have claimed that Jung's entire psychology is inherently mystical. For our purposes, it is sufficient to note that in terms of evolution, Jung's theory assumes that archetypes are evolutionarily based tendencies to experience the world in particular ways. When imagined, experience is archetypal and has a numinous sense.⁵⁸ The archetypes are collectively shared as profound religious symbols, inherent in the human psyche. Thus, followers of Jung expect numinous experiences to occur in everyone, whether or not these are expressed in religious language. In Catholicism the symbols are objectively protected and identified; in Protestantism the symbols are allowed to emerge outside of institutional controls.⁵⁹ Yet, even when these experiences occur in dreams outside of religious interpretations, as normal processes inherent in the human psyche, only the absence of their report is problematic. Jung had these words carved in the arch to his home: *Vocatus atque non vocatus deus aderit*. The phrase has been variously translated, but a good English rendering is "Whether called or not, God will be present."

From our brief consideration of the conceptual issues involved in the study of mysticism, as well as the three classic theories of mysticism, four key issues can be identified that have significant empirical consequences:

1. How is mysticism to be operationalized and measured? Clearly, the way in which mysticism is measured brings with it the conceptual consequences that have been well dis-

cussed in the scholarly literature. It is unlikely that any empirical measure can avoid serious conceptual criticism, given the controversies that dominate this literature.

2. What empirical relationships exist between mystical experience and its interpretation? How does language affect experience? The conceptual literature ranges from the claim that mystical experiences are identical despite different interpretations (the unity thesis) to the claim that differences in descriptions of experience constitute different experiences (the plurality thesis).

3. What kind of persons report mystical experiences? Do such experiences occur across the developmental spectrum? Are they characteristic of the healthy or of the sick? Do they occur only among the religiously committed?

4. What triggers such experiences? Can they be facilitated, or do they occur only spontaneously? Is an experience affected by how it is produced? For instance, are experiences reported under drugs possibly the same as those reported during prayer?

These four issues are central to the conceptual literature on mysticism and have generated extensive discussion. Much of this discussion is quite philosophically and theologically sophisticated. However, our task in the remainder of this chapter is to focus on the empirical literature. As we shall see, many of the issues raised in the conceptual literature are paralleled in the empirical literature. By interrelating these two, we hope to contribute to what McGinn has termed the “unrealized conversation” between social-scientific investigators and those involved in the history and theory of mystical traditions.⁶⁰

THE EMPIRICAL STUDY OF MYSTICISM

Central to any empirical study of mysticism is measurement based upon operationalized terms. There are almost as many definitions of “mysticism” as there are theorists. At the end of the 19th century, Inge evaluated at least 26 definitions of it and concluded that no word in the English language had been employed more loosely.⁶¹ Not surprisingly, much of the current conceptual literature on mysticism debates various definitions and classifications of mysticism—often, obviously, on the basis of prior theological or religious commitments. For instance, Zaehner has argued for a clear distinction between “theistic mysticism” and other forms of mysticism, primarily on theological grounds.⁶² Likewise, in an often-cited example, the renowned Jewish scholar Buber referred to his own experience of an “undivided unity,” which he had thought to be union with God but later felt to be an inappropriate interpretation.⁶³ In a similar vein, James refused to give serious consideration to the considerably refined classification systems of mystical states associated with the Catholic mystical tradition, believing them to be primarily driven by theological considerations unrelated to actual experience.⁶⁴ Finally, the Protestant theologian Ritschl claimed that neo-Platonism had so influenced the history of mysticism that it had become the theoretical norm for mystical experience, and that the universal being viewed as God by mystics is a “cheat.”⁶⁵

From this sampling of views, it is clear that any definition of mysticism is likely to encounter conceptual criticism. However, at the empirical level it is clear that the distinction between experience and its interpretation and/or evaluation carries some weight. Thus, even in the case of Buber cited above, an experience of unity can be identified, regardless of how it is interpreted. The measurement of mysticism is possible once some operational indicator is identified. There is considerable agreement that an experience of unity is central to

mystical experience. Indeed, debates on mysticism often center on precisely how this unity is to be interpreted. Accordingly, measurements of mysticism identifying an experience of unity that is variously interpreted are quite congruent with the conceptual literature. As we note later in this chapter, Hood has developed just such a measure.⁶⁶

Whereas unity is agreed to characterize mysticism proper, we have noted above that numinous experiences focus more upon a fascinating and awe-inspiring sense of presence. Again, theological traditions determine how this presence is identified. In social-psychological terms, expectations determine interpretations of experiences (and, as we shall see, perhaps the nature of the experience itself). The measurement of a sense of presence is another indicator of mystical states, one that has been operationalized in a measure derived from the work of William James—the Religious Experience Episodes Measure (REEM).⁶⁷ We also discuss this measure later in this chapter. However, more sociologically oriented social psychologists utilize survey data; this necessitates limited numbers of questions, which can be answered via phone surveys or interviews. Thus, on the sociological side, both numinous and mystical experiences have been measured by a limited number of questions that have been repeatedly used across a variety of survey studies. These too must be noted. Finally, several investigators have simply asked respondents to reply to a single item they believe to tap mystical experiences.

In summary, there are three major ways in which mysticism has been operationalized and measured in empirical research:

1. Open-ended responses to specific questions intuitively assumed to tap mystical or numinous experiences. These responses may then be variously coded or categorized.
2. Questions devised for use in survey research. Of necessity, these questions are brief, limited in number, and worded in language easily understandable for use in random surveys of the general population.
3. Specific scales to measure mysticism, including (a) a numinous sense of presence, and (b) a mystical experience of unity.

As we shall see, how mysticism is operationalized and measured is related to the kinds of data provided to answer the various key issues in mysticism noted above. Accordingly, we discuss empirical studies in terms of the predominant operational and measurement strategies employed.

Studies Using Open-Ended Responses to Assess Mystical Experiences

Laski's Research

One of the more curious mainstream references in the empirical study of mysticism is Laski's research on ecstasy⁶⁸—curious because of its severe methodological inadequacies. Laski, a novelist untrained in the social sciences, became interested in whether or not the experience of ecstasy she had written about in a novel was experienced in modern life. Initially using a convenience sample of friends and acquaintances sampled over a period of 3 years, Laski essentially asked persons to respond in an interview to the primary question: "Do you know a sensation of transcendent ecstasy?"⁶⁹ If she was asked to explain what was meant by "transcendent ecstasy," Laski told her respondents to "Take it to mean what you think it means."⁷⁰ It took only 63 persons to produce 60 affirmative responses, perhaps because of the highly

educated and literary nature of Laski's friends (20 of the 63 identified themselves as writers). Laski's own belief was that transcendent ecstasy is most likely to be related to a family of terms that includes "mysticism," "oceanic feeling," and "cosmic consciousness."⁷¹ However, an attempt to replicate her interview results with a sample distributed through mailboxes to 100 homes in a working-class area of London resulted in only 11 returns, with only 1 of these responses answering affirmatively the reworded question: "Have you ever had a feeling of unearthly ecstasy?"⁷² We need only note here that different methods with different samples radically alter the nature of data one may collect!

Thus Laski's text primarily analyzed responses obtained from her original 60 interviews and from comparisons to 27 literary and 24 religious excerpts from published texts (selected for their intuitive demonstration of ecstatic experiences similar to those reported by the interview group). Her work consisted of an extensive discussion of various means of classifying and identifying the nature of these experiences, primarily in terms of the language used to describe them. Laski's own limited data-analyzing skills were balanced by her perceptive analysis of language. The citations of the primary texts and interviews make it easy for the reader to judge the value of Laski's own analyses. Her conclusions raise several issues that have been the focus of additional more rigorous studies, to be discussed below.

Among Laski's conclusions is that transcendent ecstasy is a subset of mystical experience, defined and demarcated by the language used to describe it. It can be of three subtypes: experience of knowledge, of union, or of purification and renewal. It is transient, and is triggered or elicited by a wide variety of circumstances and contexts. Generally, it is pleasurable and has beneficial consequences; however, it need not have unique religious value or provide evidential force for the validity of religious beliefs. Laski herself preferred to interpret transcendent ecstasy as a purely human capacity to experience joy in one's own creativity; she believed that in both the past and the present, those who believe they have experienced God are indeed mistaken.⁷³

Social scientists continue to cite Laski's work less for its methodological rigor than for its powerful description and analysis of instances of mystical experience. The assumption of many that mysticism is a rare phenomenon, characteristic of only a few, is belied by Laski's work. Her examples ring true to many persons' experiences, as we shall see. Furthermore, her interview procedures and willingness to use the participants' own terms and language to analyze experiences have parallels in modern phenomenological research.⁷⁴

Pafford's Research

One of Laski's contributions was to identify mystical experiences among adolescents. In her interview sample, there were two girls aged 14 and 16, and one boy aged 10. This unwittingly opened the door to a series of studies identifying mystical experiences among children and youths. Especially among those influenced by literary works, the poet Wordsworth has given an implicit model of mystical experience relevant to children and adolescents. Laski used two excerpts from Wordsworth's poetry in the literary texts she analyzed.⁷⁵ In his autobiography, *Surprised by Joy*, C. S. Lewis extensively analyzed three boyhood experiences central to his religious development, noting that such descriptions had also been furnished by such poets as Wordsworth and could be "suffocatingly subjective."⁷⁶ However, they gained ontological validity as they pointed to something "outer" and "other."⁷⁷ The work described by Pafford in his book *Inglorious Wordsworths* was partly based upon questionnaire responses from both grammar and university students.⁷⁸ Implicit in all these is a model purporting that

children have an intense longing for transcendent experiences, which often are realized. Much of adult life is assumed to involve a longing for such experiences once again. Such a model can be contrasted with psychoanalytic and object relations theories, which assume mystical experiences to be regressive in a pathological sense. “Inglorious Wordsworths” have transcendent experiences that are valuable and healthy, and are capable of being recovered once again in adulthood.

As part of a questionnaire study, Pafford had both university and grammar school students respond to a literary description of an experience typical of Wordsworth’s poetry—an experience that was specified as occurring in childhood, and one that was conscious of something more than a mere child’s delight in nature.⁷⁹ Participants were to describe in writing any experience of their own that they felt was in any way similar to the description provided. Pafford analyzed responses from 400 participants, half each from the university and grammar school samples; there were equal numbers of males and females in each sample.⁸⁰ He found that 40% of the grammar school boys and 61% of the grammar school girls had had such experiences. In the university sample, the percentages were 56% for the men and 65% for the women.⁸¹

Although Pafford’s samples can be classified and analyzed in as many intuitive ways as Laski’s, he did at least attempt some crude quantitative and statistical analyses. One quantitative effort was to have respondents check off, on a list of 15 words, those that applied to their experience. These results are presented in Table 7.1. It is interesting to note that whereas Pafford claimed, partly from his own transcendental experiences, that such experiences are part of the essence of what he termed “real” religion,⁸² his own respondents checked the two words most closely related to religion (“holy” and “sacred”) quite infrequently. It is unlikely that the most frequently checked word (“awesome”) was interpreted by the respondents in a religious sense.

Pafford found that transcendental experiences were most typical in the middle teens, under conditions of solitude. The experiences were positive, and most respondents wished

TABLE 7.1. Endorsement of Words Characterizing Transcendental Experiences

Word	Frequency of endorsement	Percentage of subjects endorsing
Awesome	119	54
Serene	87	39
Lonely	81	37
Frightening	77	35
Mysterious	65	29
Exciting	64	29
Ecstatic	47	21
Melancholy	45	20
Sacred	39	18
Sad	33	15
Holy	28	13
Sensual	21	10
Irritating	7	3
Erotic	5	2

Note. Number of respondents = 222. Adapted from Pafford (1973, p. 262). Copyright 1973 by Hodder and Stoughton. Adapted by permission.

to have such experiences again. However, they were less frequent in adulthood. One of the most common outcomes of the experience was some effort at creativity, although Pafford (influenced by Laski) specifically asked about creative acts following the experience, perhaps setting an expectation among respondents to list such activities.

Other Research on Children and Adolescents

Both Laski and Pafford found most mystical-type experiences to be uncommon in childhood—Laski because she sampled so few children, and Pafford because his samples reported most such experiences in middle adolescence, even though the literary example he used stated 8 years of age as the beginning of such experiences. Since in Pafford's British sample sixth-form grammar students would have tended to be 18 and university students 19 or above, his respondents may simply have reported their most recent experience; thus reports of possible experiences in childhood may have been minimized. Some have argued that the frequency of religious experience reported in adolescence reflects a North American Protestant bias, linked to the early focus on conversion experiences discussed in Chapter 8.

One such critic, Klingberg, sought to focus upon the study of religious experience in children, sampling only the age ranges from 9 to 13.⁸³ Klingberg's study was done in Sweden in the mid-1940s, but was not published in English until 1959. Two sets of data were collected, intended to be "mutually supplementary"; one of these consisted of adults' religious memories from childhood.⁸⁴ Our concern is with the compositions collected from 630 children (273 boys and 357 girls) in Sweden from 1944 to 1945. Most were 10 to 12 years of age. All children responded in writing to the statement "Once when I thought about God. . . ." Of the 630 compositions received, 566 contained accounts of personal religious experiences (244 from boys and 322 from girls).⁸⁵ Assessing the experiences for depth indicated "phenomena which call to mind the experiences of the mystic."⁸⁶ These primarily included apparitions of objects of religious faith, such as Jesus, God, and angels; more importantly for our interests, however, they also included a felt sense of an invisible presence. Although Klingberg recognized the facilitating role of a religious culture, school, and home in encouraging such reports among children, he claimed that the value of the study is that it shows that mystical experiences *can* take place during childhood.⁸⁷ Klingberg further argued that maturational mechanisms cannot eliminate mystical experiences in children, and suggested their universality.⁸⁸ Fahs has persuasively argued for the awakening of mystical awareness in children by avoiding a narrow religious indoctrination that might preclude a sense of wonder, curiosity, and awe.⁸⁹

David and Sally Elkind studied the compositions of 149 ninth-grade U.S. students who were asked to respond to the questions "When do you feel closest to God?" and "Have you ever had a particular experience of feeling especially close to God?"⁹⁰ The former question was assumed to tap recurrent religious experiences, and the latter acute religious experiences.⁹¹ The researchers concluded that the majority of respondents regarded personal religious experiences as a significant part of their lives, even though many resisted formal religious activities and participation. Across all respondents, 92% wrote compositions indicating recurrent experiences, and 76% wrote compositions indicating acute experiences.⁹² Again, asking people in friendly or institutional contexts to write or talk about religious and mystical experiences readily yields responses from most participants.

Hood's Research

Open-ended responses to specific questions such as the ones we have been discussing can yield massive material, difficult to summarize. Statistical rigor and classification often yield to a rich descriptive presentation. However, such studies can be used to test empirical hypotheses as well. Hood selected two extreme groups from a sample of 123 college students who responded to Allport's Religious Orientation Scale.⁹³ The 25 highest-scoring intrinsic (mean = 41.8, *SD* = 2.9) and highest-scoring extrinsic (mean = 49.2, *SD* = 3.7) subjects were invited to participate in interviews regarding their "most significant personal experience." The 41 participants (20 intrinsic and 21 extrinsic) described a wide variety of experiences, few of which were explicitly identified as religious. However, coding experiences for their mystical quality on five criteria revealed that, as predicted, the most significant personal experiences of intrinsic subjects were reliably coded as mystical more frequently than were those of extrinsic subjects (see Table 7.2). This finding held not only for the total, global assess-

TABLE 7.2. Most Significant Personal Experiences Coded for Mystical Criteria in Intrinsic and Extrinsic Persons

Mystical criteria	Intrinsic (<i>n</i> = 20)	Extrinsic (<i>n</i> = 21)	Chi-square	Contingency coefficient ^a
		<u>Total</u>		
Mystical	15	3		
Nonmystical	5	18	13.0***	.49
		<u>Loss of self</u>		
Yes	14	3		
No	6	18	10.9***	.46
		<u>Noetic</u>		
Yes	17	3		
No	3	13	7.6**	.39
		<u>Ineffable</u>		
Yes	19	4		
No	1	17	21.0**	.58
		<u>Positive</u>		
Yes	19	12		
No	1	9	6.0*	.36
		<u>Sacred</u>		
Yes	18	6		
No	2	15	13.8***	.56

Note. Adapted from Hood (1973b, p. 446). Copyright 1973 by the Society for the Scientific Study of Religion. Adapted by permission.

^aUpper limit of contingency coefficient = .71.

p* < .02. *p* < .01. ****p* < .001.

ment of mysticism, but for each of the five individual criteria used to identify mysticism. Despite the wide diversity of actual experiences (from childbirth to drug experiences), these could be coded as mystical more often for the intrinsic subjects than for the extrinsic subjects. It is important to note that few participants spontaneously described any experience as mystical; coders using theory-derived criteria categorized experiences as mystical or not. The role of language in defining experience from both first-person and third-person perspectives is complex and has become a focus of intense conceptual debate.⁹⁴ At the purely empirical level, Hood's study indicates that experiences can be judged to be mystical by trained raters using theory-based criteria, even if the respondents do not spontaneously define their experiences as either "religious" or "mystical."

In a methodologically similar study, Hood selected a sample of 54 persons equated for degree of religious commitment.⁹⁵ However, they were divided into three groups based upon the *nature* of their religious commitment: primarily personally religiously committed ($n = 25$), primarily institutionally religiously committed ($n = 14$), and an equally personally and institutionally committed group ($n = 15$). Once again, interviewing these persons regarding their most significant personal experiences and rating their responses for Stace's specific criteria of mysticism revealed that all the groups differed significantly. The personally religiously committed group had the most mystical experiences, and the primarily institutionally committed had the fewest. Again, few participants spontaneously defined their experiences as mystical; rather, they were coded as mystical by raters trained to use a particular theory-based rating system.

Research by Thomas and Cooper and by the Alister Hardy Centre

However, if individuals respond affirmatively to an item measuring mysticism, does it mean that their experience was mystical as judged by others? Thomas and Cooper suggest that it may not be so.⁹⁶ In two studies, these researchers had persons from colleges, religious groups, and civic organizations respond to one of the items most frequently used in survey research (to be discussed later) to assess mystical experience. The item was "Have you ever had the feeling of being close to a powerful spiritual force that seemed to lift you out of yourself?"⁹⁷ Research Box 7.1 describes these two studies in greater detail.

The findings of Thomas and Cooper are supported by classifications of the religious experiences solicited from and sent in to the Alister Hardy Research Centre, as described in Chapter 6. Much as samples of plankton were collected and classified by Alister Hardy during his career as a zoologist, numerous samplings from over 5,000 reports of religious experience at the Alister Hardy Centre have been collected and variously classified. The most extensive classification is based upon the initial 3,000 cases Hardy collected.⁹⁸ Variations occurred in the wording of the appeal for reports of such experiences, depending on the source of publication. In some cases, brief descriptions from literature illustrating the type of experience of interest were given.⁹⁹ Most common was this one in a pamphlet widely circulated in the United Kingdom:

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.¹⁰⁰

Not surprisingly, Hardy and his colleagues found that the reports of the materials submitted defied easy classification: "So many of them were a mixture of widely different

Research Box 7.1. Measurement and Incidence of Mystical Experiences
(Thomas & Cooper, 1978 [Study 1], 1980 [Study 2])

In Thomas and Cooper's first study, only young adults aged 17 to 29 were used (44 males, 258 females). In the second study, 305 persons representing three different age groups—17 to 29 years ($n = 120$), 30 to 59 years ($n = 110$), and 60 years and older ($n = 75$)—responded to the same survey question. In each study, those who answered "yes" went on to describe their experience in open-ended fashion, and raters coded the responses to place them in one of the categories described below. The percentage who answered "yes" was identical in both studies and is typical for survey research (34%). However, when the open-ended descriptions were analyzed for frequency and type of experience reported, all experiences were reliably placed into one of four response categories derived from a portion of the initial sample.

The frequencies and types of experiences reported, based upon open-ended descriptions to "yes" responses to the question "Have you ever had the feeling of being close to a powerful spiritual force that seemed to lift you out of yourself?", were as follows. (Note that these percentages are based on n 's of 302 for Study 1 and 304 for Study 2; coder agreement was 94% overall for both studies.)

Type 0: No experience (Study 1, 66%; Study 2, 66%). Respondents answered "no" to question.

Type 1: Uncodable (Study 1, 8%; Study 2, 10%). Respondents answered "yes," but responses were irrelevant or could not be reliably coded.

Type 2: Mystical (Study 1, 2%; Study 2, 1%). Responses included expressions of such things as awesome emotions; a sense of the ineffable; or a feeling of oneness with God, nature, or the universe.

Type 3: Psychic (Study 1, 12%; Study 2, 8%). Responses included expressions of extraordinary or supernatural phenomena, including extrasensory perception, telepathy, out-of-body experiences, or contact with spiritual beings.

Type 4: Faith and consolation (Study 1, 2%; Study 2, 16%). Responses included religious or spiritual phenomena, but without indications of either extraordinary or supernatural elements.

Despite minor variations in frequencies of experience categories between these two studies (perhaps because of the larger age range in Study 2), there is remarkable agreement not only in the identical percentage of affirmative responses in both studies, but also in the fact that the *least* frequent content category for the open-ended responses was mystical.

The importance of these two studies is that if affirmative responses to a single-item survey question are accepted at face value, many diverse experiences may be clustered together. In terms of our specific concern with mystical experiences, no more than 2% of the 34% who responded to the survey question presumed to be a measure of mysticism actually described mystical experiences in open-ended descriptions. The criteria for mysticism compatible with those typically cited in the conceptual literature—such as an ineffable sense of union with God (personal) or the universe (impersonal)—were not evident. Thus, survey items to assess mysticism may do so poorly according to more rigorous criteria, and may overestimate the actual incidence of reported mystical experience in samples.

items."¹⁰¹ Hardy's own elaborate classification system, composed of 12 major categories (most with numerous subclassifications), yielded a total of 92 classifications (see Chapter 6, Table 6.1). Some of these refer to the development and consequences of the experience and do not describe the experience proper. Each experience was rated for the presence or absence of any classification category. Most relevant to our concerns in this chapter are those experiences that were coded in terms of mystical or numinous criteria, and few were thus coded. The most specific mystical category, "Feeling of unity with surroundings and/or other people,"¹⁰² characterized only 168 of the initial 3,000 experiences, or 5.6%. The most numinous classification, "Sense of presence (not human),"¹⁰³ characterized 369 of these 3,000 reports, or 12.3%. Thus, despite the fact that Hardy felt his appeal would yield reports of evidential value, akin to spiritual reports in the Bible and of the mystics,¹⁰⁴ only a small minority of the experiences were either mystical or numinous when coded for relevant criteria by independent raters.

However, a cautionary note must be sounded in regard to materials from the Alister Hardy Research Centre. Access to these materials by various scholars has led to numerous classification systems, few of which have been rigorously established by methodological or statistical means. Hence, widely varying reports of the content of these materials persist. For instance, Hay has identified six major types of religious experiences in the Hardy archives,¹⁰⁵ one of which is "an awareness of the presence of God,"¹⁰⁶ and the other "experiencing in an extraordinary way that all things are 'One.'"¹⁰⁷ Although these correspond to numinous and mystical experiences, respectively, why Hay's results differ dramatically from Hardy's own analysis as described above is unclear. Current efforts to place the Hardy material on computer files that will be readily available to scholars may solve radical discrepancies in classification of these reports.¹⁰⁸

Hay's Research

Hay and Morisy conducted a random sample of 266 residents of Nottingham, England.¹⁰⁹ They asked their respondents a version of the Hardy appeal: "Have you ever been aware or influenced by a presence or power, whether you call it God or not, which is different from your everyday self?"¹¹⁰ Of the 172 who consented to be interviewed, 72% (124) answered "yes." Eliminating 17 of these (who appeared to have misunderstood the question or who could not describe the experience) left 107 persons who were able to describe the experience in detail (or the most important experience, if they had had more than one). Using the respondents' own language, the researchers classified the experiences into one of seven categories as follows: presence of or help from God (28%), assistance via prayer (9%), intervention by presence not identified as God (13%), presence or help from deceased (22%), premonitions (10%), meaningful patterning of events (10%), or miscellaneous (8%).¹¹¹ Although these categories were purely provisional, once again it is evident that persons who were responding to a particular question were in fact reporting many different types of experiences. This was true even though the specific wording of the Hardy question used in this study was field-tested and assumed to draw out both the mystical and numinous qualities of religious experience.¹¹² Yet no mystical experiences could be coded (except perhaps if included under "miscellaneous"), and only 28% were explicitly numinous in terms of a sense of presence identified with the holy (God).

In a similar study, Hay surveyed 100 randomly selected students in a postgraduate teacher certificate course at Nottingham University, England.¹¹³ Hay found a high (65%) affirmative response rate to whether an individual could ever remember being "aware of or

influenced by a presence or a power, whether you call it God or not, which is different from your everyday self.”¹¹⁴ Despite the fact that the question was worded to cover mystical or numinous experiences—by focusing upon whether the experiences could be classified as personal (“presence”) or impersonal (“power”)—it yielded only 32 of 109 (29.4%) experiences described that were clearly either mystical or numinous.¹¹⁵ These were 10 (9.2%) experiences of unity (mystical experiences) and 22 (20.2%) experiences of an awareness of God (numinous experiences).

Further Research by Hood

Open-ended questionnaire studies have been also used to identify “triggers,” or the conditions that facilitate the report of mystical experience. The more deeply a person is committed to a particular religious ideology and view of mysticism, the more the person’s religious beliefs should be used both to interpret the experience and to identify relevant triggers for the experience. Among those researchers influenced by Maslow’s humanistic psychology, persons seen as self-actualized are hypothesized to have “peak experiences”—a concept loosely related to, but perhaps broader than, mystical experience, as we have discussed in Chapter 6. Humanistic and transpersonal psychologists have carefully tried to develop spiritual rather than religious measures avoiding religious language, especially language associated with particular faith traditions, such as Christianity.¹¹⁶

A widely used scale to measure self-actualization, the Personal Orientation Inventory (POI),¹¹⁷ was found by Hood to relate significantly to Factor I but not Factor II of the Mysticism Scale (the M Scale, discussed later in this chapter) in a sample of 87 psychology students.¹¹⁸ This is consistent with the idea that measures of self-actualization should relate to nonreligiously interpreted mystical experiences, insofar as such experiences overlap with peak experiences. However, in a sample of 400 students, the 50 persons scoring lowest and the 50 persons scoring highest on the POI who also scored high on the M Scale created two groups reporting equally intense mystical experiences but differing on a measure of self-actualization.¹¹⁹ Hood predicted that, given the antireligious bias of the POI, triggers cited for the elicitation of mystical experience among those scoring highest on the POI should be less traditional. On the other hand, given that the lowest scorers on the POI should be more traditional, the triggers of their mystical experiences should be from the more traditional sources. Independent raters’ categorizations of open-ended questionnaire responses to the conditions that facilitated each respondent’s mystical experience supported this hypothesis. Six categories of triggers were reliably identified. When the miscellaneous category was ignored as not meaningful, only introspection was a commonly shared trigger for both low and high scorers on the POI. Low-POI persons had their experiences more frequently triggered by the traditional triggers of religion and nature. High-POI persons had their experiences most frequently triggered by the nontraditional triggers of sex and drugs. Thus, persons differing on a measure of self-actualization differed not so much in the report of mystical experiences as in the triggers that facilitated the experiences. Obviously, nontraditional triggers as such can be used by some to doubt the legitimacy of an experience.

Personal and cultural factors that affect what might be appropriate triggers for mystical experiences have been studied. Survey research has long established that many different triggers can elicit mystical experiences. Although some triggers are consistently reported—prayer; church attendance; significant life events, such as births and deaths; and experiences associated with music, sex, and drugs—one seeks in vain for a common characteristic shared

Research Box 7.2. Social Legitimacy, Dogmatism, and the Evaluation of Intense Experiences (Hood, 1980)

Hood was interested in how the evaluation of intense experiences would vary as a function of the identification of triggers among open- and closed-minded persons. From published sources, he selected one true report each of an aesthetic, a mystical, and a religious experience, independently operationalized for equal intensity. These unlabeled experiences were then presented in a booklet along with Rokeach's Dogmatism scale, claimed to be a measure of "open-mindedness." Three versions of the booklet were constructed, so that the experiences described could be described as a result of drugs, prayer, or unspecified factors. The experiences were rated on an evaluative semantic differential scale, with higher scores indicating a more positive evaluation. This part of the study clearly showed that the more normative the experience, the more positively it was viewed, so that religious experiences were evaluated more positively overall. Aesthetic and mystical experiences were evaluated less positively overall than religious ones, but did not differ from each other in valence of evaluation. In addition, as predicted, the more normative the trigger, the more positively it affected the evaluation of the experience. Experiences triggered by prayer were more positively evaluated than those with unspecified triggers. Drug triggers lowered the evaluation of all experiences. These effects were most pronounced for the high-dogmatism persons. The actual mean evaluations for each experience coded by trigger for high- and low-dogmatism groups were as follows. (This table is based upon 93 low- and 93 high-dogmatism subjects; 31 subjects in each group rated the three experiences as triggered by drugs, 31 as triggered by prayer, and 31 as triggered by unspecified factors [none].)

Subjects		Aesthetic experience triggered by			Religious experience triggered by			Mystical experience triggered by		
		Drugs	Prayer	None	Drugs	Prayer	None	Drugs	Prayer	None
High-dogmatism	Mean	53.16	62.65	59.94	55.97	66.68	60.03	47.87	59.87	54.00
	SD	9.4	4.1	8.3	9.6	8.9	9.3	12.3	9.5	10.7
Low-dogmatism	Mean	51.988	61.32	57.86	54.50	62.10	59.61	48.02	57.45	53.65
	SD	9.9	7.3	9.0	8.7	8.1	8.6	11.4	9.7	10.7

Note. From Hood (1980). Copyright 1977 by the Religious Research Association. Adapted by permission.

by such diverse triggers. Empirically, it is more useful to focus upon what triggers function to elicit mystical experience in different persons. Research Box 7.2 presents the results of a study in which the evaluation of experience was shown to be a function (1) of the normative legitimacy of the trigger, (2) of the experience, and (3) of the alleged open-mindedness of respondents.

Sex and eroticism are often cited as triggers of mystical experience. Noting the vast conceptual literature relating mysticism and eroticism, Hood and Hall hypothesized that individuals would use similar gender-based descriptions to describe both mystical and erotic experiences.¹²⁰ Results indicated only partial support for this hypothesis. Open-ended descriptions of mystical and erotic experiences by both males and females were coded for the use of active, agentive language or receptive language. As predicted, females used receptive terms

to describe both their erotic and mystical experiences. However, whereas males used agentive language to describe their sexual experiences, they did not describe their mystical experiences in agentive terms. Rating subjects' expressions of mystical and erotic experiences in words independently established to be either agentive or receptive also showed that females described both erotic and mystical experiences in receptive terms, but that males described only their sexual experiences in agentive terms. The researchers have suggested that the compatibility of erotic and mystical experiences for females is aided by the masculine imagery common in the Christian tradition, which facilitates a congruent expression of eroticism and mysticism for females but inhibits it for males.

Summary

Overall, we can conclude that open-ended responses to specific questions presumed to elicit reports of either mystical or numinous experiences reveal little of scientific value beyond the facts that individuals from children through seniors readily report such experiences. The richness of their reports varies with their linguistic capacities. Such reports cannot be taken as uncritical evidential values for the realities they describe, and they may be highly influenced by the personal concerns of those making the reports. Finally, depending on investigators' own classification interests, such reports can be almost interminably classified and cross-referenced. This means that first-person descriptions of experience are unlikely to correspond closely to third-person classifications of these same experiences. Perhaps the very richness of these descriptions means that they are best approached through techniques of literary criticism. However, this research tradition does remind us that responses to such questions, even if reliably quantified, mask a rich subjective variation of immense importance to those whose experiences are studied.

Survey Research

Emerging simultaneously with and influenced by open-ended reports of mystical and numinous experiences are survey studies. As noted earlier, such studies use a few specific questions, often answered simply "yes" or "no." What survey studies lose in terms of the range and depth of description of experiences, they gain in terms of identifying the frequency and reporting of such experiences in the general population. Their results are also easily quantified and allow correlations with a wide variety of demographic and other variables to provide a distinctive empirical base that complements merely conceptual discussions of these experiences. We focus here on the body of survey research that has asked questions intended by the researchers to be direct measures of mystical and numinous experiences. Fortunately, several surveys have used identical questions over several years and even within different cultures, so some comparisons over time and cultures can also be made, at least at the descriptive level.

One caution must be noted before we begin. Intercorrelations among different items to measure mystical experiences across different surveys are not available. Although we can anticipate positive correlations, it is not clear that this will always be the case, nor can we be certain of the magnitude of such correlations. Hence, each item must be judged in itself as an operational measure of the experience in question. Four major questions have dominated the majority of surveys covering a span of a quarter of a century. Accordingly, we summa-

rise these data in terms of the survey questions used; each of these is identified by the name most closely associated with the formulation of the initial question. Therefore, we have the Stark, Bourque, Greeley, and Hardy questions.

The Stark Question

As part of an early multidimensional model of religion, Glock and Stark proposed five dimensions to religion, one of which is the experiential dimension.¹²¹ This dimension includes religious emotions as well as claims to direct experiential awareness of ultimate reality. The survey question used in their initial sampling of churches in the greater San Francisco area in 1963 was this: "Have you ever as an adult had the feeling that you were somehow in the presence of God?"¹²² With a sample size just under 3,000 respondents (2,871), 72% answered "yes."¹²³ Although we might expect the various dimensions of the Glock and Stark model of religion (ritual, belief, consequences, experience, belief) to intercorrelate simply because they are all religious items, the model attempts to assess experience independently; hence the question refers to a *feeling* of God's presence, which is presumed to tap religious experience rather than belief. Not surprisingly, the majority of religiously committed, institutionally involved persons answered "yes." Only 20% of all Protestants sampled ($n = 2,326$) and 25% of all Catholics sampled ($n = 545$) answered "no."¹²⁴

Vernon isolated a small sample of 85 persons who indicated "none" when asked about religious commitment.¹²⁵ In this same sample of "religious nones," 25% nevertheless answered the Stark question affirmatively. Thus, even among those with no institutional religious commitment, a significant minority of adults reported experiencing a sense of God's presence.

More recently, Tamminen used the five religious dimensions of Glock and Stark to organize his longitudinal study of religious development in Scandinavian youths.¹²⁶ Modifying the Stark question slightly by omitting the phrase "as an adult," he asked, "Have you at times felt that God is particularly close to you?"¹²⁷ Percentages of responses by grade level for the 1974 sampling are presented in Table 7.3.

The steady decline in the percentage of students reporting experiences of nearness to God by grade level (and hence age) is obvious. This decline is further evident in Table 7.4, which presents responses to the same question in 1986 from this longitudinal study. Tamminen's study is thus the only major longitudinal study to document the steady

TABLE 7.3. Scandinavian Students' Reports of Experiencing Nearness to God (1974)

Response	Percentage responding by grade level					
	I	III	V	VII	IX	XI
Yes	84	—	—	—	—	—
Very often	—	42	17	10	10	8
A few times	—	30	40	33	31	27
Maybe once	—	18	12	15	14	13
No	16	10	31	43	44	53

Note. $n = 1,336$. Level I answered only "yes" or "no." Adapted from Tamminen (1991, p. 42). Copyright 1991 by Soumalainen Tiedeaktemia. Adapted by permission.

TABLE 7.4. Scandinavian Students' Reports of Experiencing Nearness to God (1936)

Response	Percentage responding by grade level						
	III	IV	V	VI	VII	VIII	IX
Very often	19	19	13	10	5	1	4
A few times	31	33	44	29	20	13	15
Maybe once	18	20	19	27	24	18	22
No	32	28	24	34	52	68	59

Note. $n = 971$. Adapted from Tamminen (1991, p. 43). Copyright 1991 by Soumalainen Tiedeaktemia. Adapted by permission.

decline in the report of religious experience from childhood through adolescence. It suggests that such experiences (or their report) are quite common in childhood, and therefore supports the claims of Pafford and others discussed above.

The Bourque Question

In a series of surveys, Bourque and her colleagues utilized the following question to assess religious experience: "Would you say that you have ever had a 'religious or mystical experience'—that is, a moment of sudden religious awakening or insight?"¹²⁸ They also cited results from three Associated Press surveys using this question. These surveys were conducted in 1962, 1966, and 1967 in the United States. Over time the percentage of persons answering "yes" increased from 21% in 1962 ($n = 3,232$) to 32% in 1966 ($n = 3,518$) to 41% in 1967 ($n = 3,168$).¹²⁹ In 1966 Bourque administered this question, along with the Stark question above and another question, to a sample of 3,168 and found that 32% answered "yes."¹³⁰ Gallup used this item in a national survey in the United States in 1976 and found that 31% answered affirmatively in a sample of 1,500.¹³¹ More recently, Yamane and Polzer¹³² reported the results of two Gallup surveys in 1990—one in June¹³³ and one in September,¹³⁴ each using a sample of 1,236—and found a stable affirmative response frequency of 53%.

Thus, over a period exceeding a quarter of a century, representative samples of persons in the United States have reported having a religious or mystical experience, defined as a moment of sudden religious awakening or insight. The range of affirmative responses is large (from 21% to 53%), but lower than the typical affirmative response to the Stark question, which asks active, institutionally affiliated religious persons whether they have ever have a sense of God's presence.

The Greeley Question

Another question widely used in survey research and accepted as an operational measure of reported mystical question is associated with the work of Greeley.¹³⁵ The question most typically used is "Have you ever felt as though you were close to a powerful spiritual force that seemed to lift you out of yourself?"¹³⁶ It has been administered as part of the annual General Social Surveys of the National Opinion Research Center. The General Social Surveys are independent cross-sectional probability samples of persons in the continental United States living in noninstitutional homes who are 18 years of age and English-speaking.¹³⁷ It was found that overall, in a General Social Survey sample of 1,468, 35% of the respondents answered "yes" to this question.¹³⁸

Hay and Morisy administered the same question to a sample of 1,865 in Great Britain and found that 30% answered in the affirmative.¹³⁹ In the studies by Thomas and Cooper discussed above, the 34% affirmative responses included few responses that were truly mystical when independently coded for criteria of mysticism.¹⁴⁰ On the other hand, Greeley found that a very high percentage (29%) of those who positively answered his question agreed with “a sense of unity and my own part in it” as a descriptor of their experience.¹⁴¹ Thus, most of the 34% answering “yes” to the Greeley question also appeared to accept a mystical description of unity as applying to the experience. It may be that methodologically checking descriptors of experience increases the positive rate of mystical experiences over spontaneous descriptions of the experiences in open-ended interviews.

McClenon, in a survey of 339, found the lowest affirmative response rate to the Greeley question (20%).¹⁴² Most recently, Yamane and Polzer have analyzed all affirmative responses from the General Social Surveys of the National Research Opinion Center to the Greeley question in the years 1983, 1984, 1988, and 1989.¹⁴³ A total of 5,420 individuals were included in their review. Using an ordinal scale where respondents who answered affirmatively could select from three options—“once or twice,” “several times,” or “often”—yielded a 4-point range from 0 (negative response) to 3 (often). Using this 4-point range across all individuals who responded to the Greeley question yielded a mean score of 0.79 ($SD = 0.89$). Converting these to a percentage of “yes” as a nominal category, regardless of frequency, yielded 2,183 affirmative responses or an overall affirmative response rate of 40% of the total sample who reported ever having had the experience. Independent assessment of affirmative responses for the year suggested a slight but steady decline. The figures were 39% for 1983–1984 combined ($n = 3,072$), 31% for 1988 ($n = 1,481$), and 31% for 1989 ($n = 936$).¹⁴⁴

Bourque and Back created an index of religious experience composed of three questions—the Stark and Bourque questions already noted, plus a third: “Have you ever had a feeling of being saved in Christ?”¹⁴⁵ In a sample of 3,168, 990 (31.2%) responded affirmatively to all three questions,¹⁴⁶ 794 (25%) to any two, and 566 (17.8%) to at least one.¹⁴⁷

The Hardy Question

As noted above, Alister Hardy’s interest in religious experience focused methodologically on soliciting open-ended responses from persons to both literary examples and descriptions of religious experiences. The most common description used by Hardy (quoted earlier) has been slightly modified by Hay and Morisy and used in several survey studies.

The precise wording of the Hay and Morisy question was “Have you ever been aware of or influenced by a presence or power, whether you call it God or not, which is different from your everyday self?”¹⁴⁸ Their survey was conducted in Great Britain. Respondents were chosen from a two-stage stratified sample: names randomly drawn from the electoral register, supplemented with names drawn at random of nonelectors from the households of the selected electors. In their sample of 1,865, 36% answered the question affirmatively. In the more restricted sample of 172 residents of an industrial area in England described earlier, Hay and Morisy found the high affirmative response rate of 72%.¹⁴⁹ The high rates were probably a function of face-to-face interviews, which have been shown to increase the number of affirmative responses to survey questions dealing with religious experience.¹⁵⁰ However, Hay also found a 65% affirmative response rate to his version of the Hardy question in a ran-

dom sample of postgraduate students at Nottingham University, England.¹⁵¹ He extensively interviewed respondents regarding their experiences, but the actual affirmation of the experience occurred before the interview. It may be that anticipating a discussion of reports of religious experience increases the rate of report. Hay has also cited a study by Lewis in which a high affirmative response rate to the Hardy question was obtained in a British sample of 108 nurses from two different hospitals in Leeds.¹⁵² Again, face-to-face interviews may have been a factor increasing response rates.

In a Gallup sample of 985 British citizens, Hay and Heald found a rate more typical of other general surveys using the Hardy question: 48% of their sample responded affirmatively to the question.¹⁵³ This closely matches the 44% rate found in previously unpublished data based upon an Australian sample of 1,228 by Morgan Research (the Australian affiliate of the Gallup Poll organization) and cited by Hay.¹⁵⁴ A survey in the United States of 3,000 produced a 31% affirmative response rate, closely matching the 35% response rate produced in a sample of 3,062 from the Princeton Research Center a few years earlier.¹⁵⁵ Hay has also cited two unpublished Gallup polls commissioned by the Alister Hardy Research Centre in 1985, indicating a 33% affirmative response to the Hardy question in a sample of 1,030 in Britain, and a 10% higher rate (43%) for a similar sample of 1,525 in the United States.¹⁵⁶ Finally, Back and Bourque reported three different Gallup surveys done in the United States, with affirmative response rates to the Hardy question of 21% in 1962 ($n = 3,232$), 32% in 1966 ($n = 3,518$), and 41% in 1967 ($n = 3,168$).¹⁵⁷

Thus, surveys from 1962 through 1987 in the United States, Britain, and Australia suggest a fairly wide range (21–72%) of affirmative responses to the Hardy question. However, when higher rates obtained from anticipated in-depth interviews are ignored, the affirmative response rates average in the 35–40% range for the Hardy question—paralleling fairly closely the rates for the Greeley and Bourque questions, and for the Stark question when the respondents are not restricted to church or synagogue members. Thus, it appears overall that 35% of persons sampled affirm some intense spiritual experience, felt by the researchers to measure mystical and/or numinous experience. At a minimum, then, the reports of such experiences have been clearly and conclusively established by survey studies to be statistically quite common among normal samples. What are we to make of these reports?

Most survey studies have included additional questions and demographic characteristics that can be correlated with the reports of religious experience. No simple pattern has emerged from the studies mentioned above, and unfortunately each study must be considered in terms of its sampling and the statistical models used. The range of data analysis is large, from naive to state-of-the-art sophistication. The major consistent findings are easily summarized: Women report more such experiences than men; the experiences tend to be age-related, increasing with age; they are characteristic of the educated and affluent; and they are more likely to be associated with indices of psychological health and well-being than with those of pathology or social dysfunction. Thus, Scharfstein's "everyday mysticism"¹⁵⁸ is supported by survey research in affirming the commonality of mysticism among both institutionally and noninstitutionally committed religious persons within the United States, the United Kingdom, and Australia.

Several studies have focused upon communication patterns of persons who have such experiences, noting that these persons do *not* discuss their experiences with others. Even Tamminen noted this among his young Scandinavian sample; the failure to communicate such experiences starts in childhood.¹⁵⁹ This may well account for the persistence of the be-

lief that such experiences are uncommon. The irony is that at least one-third of the population claims to have such experiences, but that few people talk about them publicly. This hidden dimension of religious experience is well documented and can be clarified by other studies, to be discussed below. However, before we begin to discuss these studies, a cautionary note is needed—one that confronts the issue of the language and experience central to much of the conceptual and empirical literature on mysticism.

A Cautionary Note: Mysticism and the Paranormal

Since its inception, North American psychology has been linked in the popular mind with psychic phenomena. As Coon has documented, many founding North American psychologists fought hard to separate the emerging science of psychology from “spiritualism” and “psychic,” to which it was connected in the popular mind.¹⁶⁰ Few psychologists, then or now, believe in the reality of parapsychological phenomena. Hood has identified religion and parapsychology as perhaps the most controversial research area in the psychology of religion.¹⁶¹

Yet within research on mysticism, several empirical facts emerge that are problematic. Some of the key theoreticians and empirical researchers have explicitly linked mysticism to parapsychology, with varying degrees of sympathy to both. These include such major figures as Greeley,¹⁶² Hardy,¹⁶³ and Hood.¹⁶⁴ Second, in classifications of open-ended responses to single-item questions to measure mysticism, one of the most common code categories is “paranormal.” Thus, many persons who affirm what the researchers assume to be a mystical or numinous item are in fact reporting paranormal experiences, such as telepathy, clairvoyance, or contact with the dead. Third, survey studies of mysticism commonly include items to assess paranormal experiences. For instance, paranormal experiences were included in the 1984, 1988, and 1989 General Social Survey data.¹⁶⁵ In virtually every survey, paranormal and mystical experiences are positively correlated: Persons who report paranormal experiences often report mystical experiences as well, and vice versa. Seldom is only one type of experience reported. Further support for this claim is that factor analysis of survey items that include mysticism and paranormal experience indicates that extrasensory perception, clairvoyance, contact with the dead, and mysticism form a single factor, meaning that these are empirically measuring one thing in the popular mind. If we exclude *déjà vu* experiences, which are also included in survey studies but neither conceptually nor empirically linked to paranormal experiences,¹⁶⁶ the range of affirmative responses is as high as or higher than the range of affirmative responses to religious items. As an example, Table 7.5 compares the distribution of affirmative responses to three items assessing paranormal experiences with the distribution of such responses to the Greeley question about mysticism.

Clearly, Table 7.5 reveals that reports of parapsychological experiences are at least as common as those of mystical experiences. This fact, combined with the strong intercorrelation among parapsychological and religious items that in a general sample yield a single factor, suggests that what is being tapped in these surveys is some assertion of experiencing a reality different from that postulated by mainstream science. However, the nature of that reality, is open to serious question. We have seen that open-ended responses to survey questions yield a wide range of experiences. It is likely that some respondents simply want to affirm experiences that offer evidential support not only for alternative beliefs, but for their own self-importance as well. Furthermore, it is likely that to tease out separate reports of such experiences as mystical and numinous experiences would require studies of sophisticated populations for whom such distinctions could be made, in terms of both conceptualizations

TABLE 7.5. Comparison of Affirmative Responses to Four Questions about Mystical or Paranormal Experiences in Three General Social Surveys

Year	Extrasensory perception	Clairvoyance	Contact with the dead	Mysticism
1984	<i>n</i> = 1,439 67%	<i>n</i> = 1,434 30%	<i>n</i> = 1,445 42%	<i>n</i> = 1,442 41%
1988	<i>n</i> = 1,456 64%	<i>n</i> = 1,440 28%	<i>n</i> = 1,459 40%	<i>n</i> = 1,451 32%
1989	<i>n</i> = 922 58%	<i>n</i> = 983 23%	<i>n</i> = 991 35%	<i>n</i> = 988 30%

Note. The four questions asked were as follows:

Mysticism: Have you ever felt as though you were close to a powerful spiritual force that seemed to lift you out of yourself?

Extrasensory perception: Have you ever felt as though you were in touch with someone when they were far away from you?

Clairvoyance: Have you ever seen events that were happening at a great distance as they were happening?

Contact with the dead: Have you ever felt as though you were in touch with someone who had died?

Adapted from Fox (1992, p. 422). Copyright 1992 by the Association for the Sociology of Religion. Adapted by permission.

and actual experience. However, it would seem that sampling from religiously committed persons would best allow distinctions between the religious and parapsychological experiences often associated with religion but perhaps best independently identified. For instance, the conceptual literature on mysticism clearly separates paranormal experiences from mystical ones. Moreover, many religious traditions carefully dissociate themselves from what they would term “occult” practices.

Some empirical evidence for this view is that when samples are carefully selected for their religious identification, paranormal experiences are infrequently cited, if at all, as instances of religious experiences. For instance, Margolis and Elifson carefully solicited a sample of persons who were willing to affirm that they had had a religious experience that researchers accepted as indicating some personal relationship to an ultimate reality.¹⁶⁷ Forty-five respondents were then carefully interviewed about their experiences; to avoid interviewer bias, a structured format was employed. The 69 experiences described were content-analyzed, yielding 20 themes. These were then factor-analyzed, yielding four factors, the major one of which was a mystical factor “very similar to the classical mystical experience described by Stace and others.”¹⁶⁸ Two of the other three factors (a life change experience factor and a visionary factor) were clearly religious experiences. One factor, vertigo experience, was a loss of control experienced negatively, often triggered by drugs or music. No paranormal experiences were reported. Thus, it is likely that survey questions worded to avoid religious language probably elicit a variety of experiences, including paranormal ones, that otherwise would not be identified as religious by the respondents.

However, in a survey study in the San Francisco Bay area, Wuthnow found not only that the majority of all respondents claimed to have experienced paranormal phenomena, but also that those who affirmed that they had ever been “in close contact with the sacred or holy” were the most likely to report paranormal experiences.¹⁶⁹ The conceptual literature on mysticism is replete with discussions of traditions warning against confounding paranormal and mystical experiences, even though they are often related.¹⁷⁰ It is unlikely that general populations make such distinctions, because they usually lack either the experiential base or

the conceptual sophistication to make such distinctions. As Yamane and Polzer have argued, religiously committed persons may be quite adept at distinguishing religious experiences from other types of intense or anomalous experiences.¹⁷¹ Of course, some outside mainstream traditions may define paranormal experiences as “religious,” or more likely by the more general term “spiritual.” It is likely that the use of the term “God” or not in survey items produces different results, in that persons committed to a mainstream religion are most likely to respond to religious language and to make distinctions among various experiences on the basis of religious knowledge.

Clearly, avoiding religious language in survey questions encourages the reporting of a wider range of experiences. Teasing out reports of experiences from a whole host of complex factors affecting their reporting requires more complex techniques than the methodology of survey research permits. Some of these issues have been explored in more measurement-based studies, many of which are correlational. However, there are also more laboratory-based and quasi-experimental studies. These permit even more precise identification of determinants of the reports of mystical experience.

Measurement Studies

Academic psychology of religion is heavily committed to what Gorsuch has called the “measurement paradigm.”¹⁷² One goal of measurement is to create reliable scales from clearly operationalized concepts. Many have thought that religious experiences, particularly the numinous and mystical varieties, cannot be reliably measured. However, two approaches to their measurement have been reasonably successful and have been used in several studies.

The Religious Experience Episodes Measure: The Influence of James

One approach to the measurement of mystical and numinous experiences has been to operationalize and quantify what might be called the “literary exemplar approach” of many of the more open-ended studies discussed above. Laski, Pafford, and Hardy gave particular examples of experiences and asked respondents whether they had ever had an experience like the one described. Hood essentially systematized this procedure in constructing the Religious Experience Episodes Measure (REEM).¹⁷³ He selected 15 experiences from James’s *The Varieties of Religious Experience*, presented them in booklet form, and had respondents rate on a 5-point scale the degree to which they had ever had an experience like each of these. Hood’s approach standardized the experiences presented to research subjects and allowed a quantification of the report of religious experience by summing the degree of similarity of one’s own experiences to those described in the REEM. Rosegrant modified the REEM by rephrasing “the elegant 19th century English” and reducing the number of items from 15 to 10.¹⁷⁴ Examples of REEM items as modified by Rosegrant are presented in Table 7.6.

Both Hood’s initial version¹⁷⁵ and Rosegrant’s modified version¹⁷⁶ of the REEM have high internal consistencies, suggesting that the experiences described cluster together. Unpolished factor analysis of the REEM also yields a single factor. Overall, the mixture of more numinous and mystical items, along with explicit or implicit religious language, suggests that the REEM is best used with religiously committed samples.¹⁷⁷ It also reflects elements of religious experience perhaps most common in North American Protestant experience—a common criticism leveled against James’s classic text, from which items for the REEM were originally selected. Holm found it difficult to make a meaningful translation of the REEM into

TABLE 7.6. Items from the Modified REEM

To what extent have you ever had an experience like this?

God is more real to me than any thought or person. I feel his presence, and I feel it more as I live in closer harmony with his laws. I feel him in the sunshine, or rain, and my feelings are best described as awe mixed with delirious restfulness.

Or like this?

I would suddenly feel the mood coming when I was at church, or with people reading, but only when my muscles were relaxed. It would irresistibly take over my mind and will, last what seemed like forever, and disappear in a way that resembled waking from anesthesia. One reason I think that I dislike this kind of trance was that I could not describe it to myself; even now I can't find the right words. It involved the disappearance of space, time, feeling, and the things I call my self. As ordinary consciousness disappeared, the sense of underlying essential consciousness grew stronger. At last nothing remained but a pure, abstract self.

Or like this?

Once, a few weeks after I came to the woods, I thought perhaps it was necessary to be near other people for a happy and healthy life. To be alone was somewhat unpleasant. But during a gentle rain, while I had these thoughts, I was suddenly aware of such good society in nature, in the pattern of drops and every sight and sound around my house, that the fancy advantages of being near people seemed insignificant, and I haven't thought about them since. Every little pine needle expanded with sympathy and befriended me. I was so definitely aware of something akin to me that I thought no place could ever be strange.

Note. From Rosegrant (1976) as adapted from Hood (1970). Copyright 1976 by the Society for the Scientific Study of Religion. Reprinted by permission.

Swedish, and had to create a version of the REEM appropriate to Swedish culture by selecting Nordic tales.¹⁷⁸

Hood initially created the REEM to test the hypothesis that intrinsically religious persons would score higher on the REEM than extrinsically religious persons.¹⁷⁹ In a sample of college students this hypothesis was supported, with intrinsic persons scoring significantly higher on the REEM than extrinsic persons. These findings are compatible with the survey research noted above, in which religiously committed persons often are identified to have high rates of reported mystical experiences. It further suggests, however, that among the religiously committed, intrinsic persons have higher scores (and hence perhaps report more experiences) than extrinsic persons. Using Allport's Intrinsic-Extrinsic scales to create a four-fold typology, based upon median splits on the Intrinsic and Extrinsic scales, indicated that "indiscriminately pro" (high extrinsic/high intrinsic, or IP) persons could not be distinguished from intrinsic persons on the basis of their REEM scores. Likewise, "indiscriminately anti" (low extrinsic/low intrinsic, or IA) persons could not be distinguished from extrinsic persons on the basis of their REEM scores. Survey researchers have often worried about "false positives" and "false negatives" in their surveys. How do we know that persons who report experiences are telling the truth? Some may not have the experiences they report (false positives). On the other hand, how do we know that persons denying these experiences are telling the truth? Some may refuse to admit experiences they have had (false negatives).

In this study Hood linked the methodological problem of distinguishing between intrinsics and IPs, and between extrinsics and IAs, with the possibility that the IPs are often false positives and the IAs false negatives in regard to the report of mystical experience. The basis for this hypothesis is that Allport believed the indiscriminate types to be motivated by conflicting stances with respect to religion: The IAs may be denying religious impulses they may in fact

feel, whereas the IPs may be feigning religious impulses they may not actually experience. It is this sort of dynamic and conflictual process that Allport felt made the indiscriminate categories potentially of significant research interest and of "central significance" for his theory.¹⁸⁰

In a second study, Hood replicated the relationship between Allport's fourfold typology and his own REEM scores.¹⁸¹ This time, using Rosegrant's modification of the REEM and categorizing persons according to their religious type produced similar high REEM scores for intrinsic and IP persons, and similar low scores for extrinsic and IA persons, as indicated in Table 7.7.

In order to directly test the possibility that the indiscriminate categories might represent false positives (in the case of IPs) and false negatives (in the case of IAs), Hood had interviewers in a double-blind condition conduct a bogus interview that included nearly 40 personal and religious questions. These served as baseline data and served to mask the key final question, which was prefaced by the comment that many of the preceding questions were designed to tap into whether or not respondents had ever had a mystical experience. Persons were then asked whether they had in fact ever had such an experience. The answer to this key question, whether "yes" or "no," was then analyzed with a "Stress Analyzer," a device that measures stress by means of detecting small voice tremors. Each subject's stress level was measured by comparing the affirmation or denial of a mystical experience to the baseline levels of stress in response to the bogus inventory. The numbers of persons affirming and denying mystical experiences, and the numbers showing stress when responding, are reported in Table 7.8 according to religious type.

As predicted, the proportions of persons affirming mystical experiences were similar for intrinsics and IPs, as were the proportions denying mystical experiences for extrinsics and IAs. However, intrinsic persons as a group expressed little stress, whereas IPs showed much more stress, when affirming mystical experiences. The case was less clear for extrinsics. Still, more than half the IA persons exhibited stress, and while many did so when reporting mystical experiences, it may be that indiscriminates as a group (whether pro or anti) indicated stress when talking about their religion (or the lack of it) because of their conflictual stance. In any case, the large number of IP persons affirming mystical experiences with great stress is consistent with the possibility that such persons are "false positives," attempting to appear religious by reporting experiences they believe they should experience but perhaps have not.

However, it is also possible that, as Rosegrant found, stress is often associated with the report of mystical experience; this was indicated by a .29 ($p < .05$) correlation between REEM scores and a measure of stress in a nature setting with 51 students.¹⁸² Although Rosegrant did not measure religious orientation in his study, it may be that the *lack* of correlation be-

TABLE 7.7. REEM Scores According to Religious Type

Religious type	Score
Intrinsic ($n = 31$)	Mean = 48.81, $SD = 12.21$
IP ($n = 46$)	Mean = 50.89, $SD = 14.79$
Extrinsic ($n = 39$)	Mean = 39.51, $SD = 17.07$
IA ($n = 31$)	Mean = 39.13, $SD = 18.80$

Note. $F(1, 143) = 5.69, p < .05$; post hoc comparisons grouped according to significant differences *between* clustered categories, at least $p < .05$. Categories *within* parentheses did not differ: (IP, I); (IA, E). Adapted from Hood (1978b, p. 426). Copyright 1978 by the Society for the Scientific Study of Religion. Adapted by permission.

TABLE 7.8. Numbers of Subjects Affirming and Denying Mystical Experience, and Showing Associated Stress, by Religious Type

Religious type	Mystical experience		Stress level	
	Affirming	Denying	High	Low
Intrinsic (<i>n</i> = 31)	28	3	3	28
IP (<i>n</i> = 46)	40	6	31	15
Extrinsic (<i>n</i> = 39)	3	36	8	31
IA (<i>n</i> = 31)	12	19	18	13

Note. There was an error in the original article: The numbers for mystical experience for extrinsics were reversed. All differences were significant at least at *p* < .05 for all groups except IAs for both mystical experience and stress. Adapted from Hood (1978b, p. 427). Copyright 1978 by the Society for the Scientific Study of Religion. Adapted by permission.

tween mysticism and a measure of meaningfulness used in his study indicates that mystical experiences are felt as stressful only when subjects are asked for a meaningful religious framework for interpretation. Consistent with this claim is that mystical experience as measured by the REEM is higher not only among intrinsically oriented persons, but also among religious denominations with strong norms for eliciting and interpreting mystical experiences.¹⁸³

Rosegrant's finding that mystical experiences as measured by the REEM were associated with stress experiences in a solitary nature setting¹⁸⁴ may be misleading. Hood has argued that stress per se is unlikely to elicit mystical experience; rather, an incongruity between anticipatory set stress and actual setting stress is likely to facilitate the report of mystical experience. In a study to test this hypothesis specifically in a nature setting, Hood administered Rosegrant's modification of the REEM to 93 males who, as part of the requirements for graduation from a private high school, participated in a week-long outdoors program.¹⁸⁵ One portion of this program entailed having students "solo." Each student was taken alone by Hood into a wilderness area; was issued minimal equipment (a tarp, water, and a mixture of nuts and candy for food); and was then left to spend the night in solitude. Various students were taken out over a five-night period, regardless of weather conditions. As some indication of the power of this experience, 29 of the 93 participants "broke solo," meaning that they returned to base camp before dawn. Before each outing, anticipatory stress was measured by having the students fill out a measure of subjective stress. In addition, setting stress was fortuitously varied by the fact that some students soloed on nights when there were strong rain and thunderstorms. Table 7.9 presents the means on the REEM for participants in this

TABLE 7.9. Mean REEM Scores for Participants under High- and Low-Stress Nature Solo Conditions, According to Anticipatory Stress Levels

Anticipatory stress	Setting stress	
	High	Low
High	32.44 (<i>SD</i> = 12.75) (<i>n</i> = 16)	52.83 (<i>SD</i> = 14.72) (<i>n</i> = 12)
Low	51.43 (<i>SD</i> = 9.37) (<i>n</i> = 21)	42.07 (<i>SD</i> = 4.95) (<i>n</i> = 15)

Note. Adapted from Hood (1978a, p. 283). Copyright 1978 by the Society for the Scientific Study of Religion. Adapted by permission.

exercise, according to anticipatory stress levels and setting stress conditions. Appropriate statistical tests indicated not only that set–setting incongruity elicited higher REEM scores, but also that it made no difference whether the incongruity was between high anticipatory stress and low setting stress or between low anticipatory stress and high setting stress. Either incongruity would work.

Subcultural differences in the emphasis upon and support of intense religious experiences should also be reflected in REEM scores. Hood and Hall had anthropologists select five “culturally fair” REEM items with which to compare four samples.¹⁸⁶ All subjects were Roman Catholics and were matched for education, gender, age, and social class. The four groups were Native Americans, acculturated Mexican-Americans (spoke English 100% of the time), Mexican-Americans (spoke Spanish at least 25% of the time), and Caucasians. As hypothesized, the two groups whose subcultures encourage intense experiences (Native Americans, Mexican-Americans) had higher REEM scores than either the Caucasians or the acculturated Mexican-Americans. The matching on relevant variables suggests that differences in the REEM scores reflect genuine subcultural differences in either the experiences themselves or the reporting of such experiences.

Several investigators have postulated that mystical and other intense religious experiences are related to and perhaps often elicited by hypnotic trance states. For instance, Gibbons and Jarnette suggest that at least some religious experiences may be trance states induced by stimuli located outside awareness.¹⁸⁷ Anthropologists have long argued for the similarity between hypnotic and religious ecstatic states.¹⁸⁸ Hood¹⁸⁹ found a correlation between the original form of the REEM and the Harvard Group Scale of Hypnotic Susceptibility¹⁹⁰ of .36 ($p < .01$) in a sample of 81 fundamentalist Protestants willing to be hypnotized. This is consistent with the finding that fundamentalist Protestants who report significant conversion experiences are also hypnotically suggestible.¹⁹¹ Perhaps the loss of sense of self reported in mystical experience parallels the loss of self in hypnotic states. However, we must be careful *not* to equate mysticism and hypnosis on the basis of similar processes that may operate in both.

It is also worth hypothesizing that the many different triggers or facilitating conditions for mystical experiences noted in survey research and other studies may have in common the fact that an individual fascinated by any given trigger acquires a momentary loss of sense of self, being “absorbed” or “fascinated” by his or her object of perception. Tellegen and Atkinson have proposed “absorption,” or openness to absorbing and self-altering states, to be a trait related to hypnosis.¹⁹² The only empirical study using their measure of absorption and a measure of mysticism is a study by Mathes relating mysticism, absorption, and romantic love. Unfortunately, he did not report the correlation between mysticism and absorption.¹⁹³ However, in Mathes’s study, Rubin’s measure of romantic love¹⁹⁴ was correlated with mysticism for both males and females. This is consistent with being fascinated or “absorbed” by the object of interest in both experiences. It is also consistent with the fact that both love and sexuality are frequently cited as triggers of mysticism in open-ended questionnaire and survey studies.

The relationship between mysticism and hypnosis has been negatively interpreted, particularly by psychodynamically oriented investigators. Both hypnotic susceptibility and religious experiences, especially mystical ones, are interpreted either as regressions to early states of ego development or as signs of adult weak ego development.¹⁹⁵ Hood has noted that claims to a relationship between weak ego development and religious experience are derived from primarily a priori theoretical commitments of dynamic theorists that not only are concep-

tually unwarranted but also lack empirical support.¹⁹⁶ In the only direct empirical test of a relationship between weak ego development and intense religious experience, both the conceptual and empirical inadequacies of this hypothesized relationship were demonstrated.¹⁹⁷

In this study, Hood administered the most psychometrically sophisticated measure of ego strength (Barron's Ego Strength scale¹⁹⁸) to a sample of 82 college students who also took the initial 15-item version of the REEM. Overall, there was a significant negative correlation ($r = -.31$) between the REEM and Barron's total scale, appearing to support the claim that intense religious experience is related to weak ego. However, part of the problem is conceptual, in that Barron's scale contains several religiously worded items; these religiously worded items are scored so that agreement indicates weak ego.¹⁹⁹ This suggests a conceptual bias against religious experience, so that one can simply assume that many religious beliefs reflect poor ego development and then use them as a measure of weak ego strength. Hood separated Barron's scale into two parts: the religiously worded items and the residual, nonreligiously worded items. Correlating these with the REEM yielded markedly different results, as shown in Table 7.10.

Inspection of Table 7.10 is instructive in two senses. First, negative correlations, supposedly indicating weak ego among persons reporting mystical experiences, were found with religiously worded items scored to indicate weak ego strength! This link reveals the conceptual basis of these items, and confounds many supposedly empirical findings. Removing the religious items removed any significant relationship between weak ego and religious experience. Furthermore, using a nondynamically oriented measure developed for use in survey research (Stark's Index of Psychic Inadequacy) revealed that among a sample of 114 college students, those with higher adequacy in psychological functioning as measured by this index had significantly higher REEM scores than those with lower adequacy as measured by this index.²⁰⁰

Thus, not only is there little conceptual or empirical support for the claim that weak ego strength must characterize persons who have intense religious experiences; such persons may also be more psychologically adequate than those who do not report such experiences. This latter claim is consistent with the normality of the report of mystical and numinous experiences noted in survey studies and with those theorists who are more sympathetic to religion. For instance, Maslow's popular theory of self-actualization postulates that more actualized persons are most likely to have and to report "peak experiences," Maslow's term for mystical and other related experiences.²⁰¹ Although his theory has generated little rigorous empirical research to support this claim, it serves as a useful conceptual counter to dynamic theories that postulate a relationship between regression and religious experience, for which there is also little rigorous empirical support.

TABLE 7.10. Correlations between the REEM and Barron's Total Ego Strength Scale, Religiously Worded Items, and Residual Items

	Religiously worded items	Nonreligiously worded items	REEM
Total ego strength scale	.47*	.93*	-.31*
Religiously worded items	—	-.46*	-.55*
Nonreligiously worded items	—	—	-.16

Note. Adapted from Hood (1974, p. 66). Copyright 1974 by the Society for the Scientific Study of Religion. Adapted by permission.

* $p < .01$.

The Mysticism Scale (M Scale): The Influence of Stace

James was the source for the range of experiences, both numinous and mystical, selected for the REEM. One criticism of the REEM is that although it does contain both numinous and mystical experiences according to the criteria discussed earlier, it is not particularly theory-driven. However, this is not the case with the Mysticism Scale (M Scale). It was developed by Hood²⁰² as a specific operationalization of Stace's²⁰³ phenomenological work, in which he identified both introvertive and extrovertive mysticism and their common core. It is currently the most widely used empirical measure of mysticism.²⁰⁴

Prior to the development of the M Scale, Stace's criteria of mysticism had influenced assessments in psychedelic research seeking to document the ontological validity of experiences elicited under drugs. Stace's criteria were developed under the assumption of causal indifference. Examples used by Stace were accepted as mystical, whether elicited under drug conditions or not.²⁰⁵ Research Box 7.3 presents a summary of, and recent follow-up data from, what is perhaps the most famous study in the psychology of religion—Pahnke's Good Friday experiment.

Pahnke's original study and Doblin's long-term follow-up are important in demonstrating the effect of set and setting on drug-facilitated mystical experiences, using Stace's explicit criteria. The general discussion of drugs and religious experience in Chapter 6 obviously applies to this experiment. Yet, in terms of this chapter, Pahnke was the first investigator to attempt explicitly to operationalize Stace's criteria of mysticism. His original questionnaire has been variously modified through the years, with many additional nonmystical items added. However, basic items relating to Stace's core criteria of mystical experience have remained virtually unchanged.²⁰⁶ The most recent expanded versions of Pahnke's questionnaire include items relevant to peak experiences, which we have discussed in Chapter 6. It is clear that the concept of "peak experience" has been broadened to include a wide variety of experiences, only some of which are mystical in Stace's sense of the term. The M Scale is explicitly designed to measure Stace's criteria of mysticism, distinct from a wide range of other experiences, including peak experiences.

Given that the M Scale is based upon Stace's demarcation of the phenomenological properties of mysticism, it is also of necessity driven by some of Stace's theoretical concerns. Most central is the fact that Stace has become the central figure in the debate between what we call the "common-core theorists" and the "diversity theorists." Common-core theorists assume that people can differentiate experience from interpretation, such that different interpretations may be applied to otherwise identical experiences. This theory is often characterized by its opponents as if it claims that there is an absolute, unmediated experience. In fact, Stace²⁰⁷ and other common-core theorists simply distinguish between degrees of interpretation, arguing that at some level different descriptions can mask quite similar (if not identical) experiences.

Diversity theorists—led by Katz, who edited an entire volume in response to Stace's work²⁰⁸—argue that no unmediated experience is possible, and that in the extreme, language is not simply used to interpret experience but in fact constitutes experience. Proudfoot is among the contemporary theorists (heavily influenced by psychology) who argue for the role of language in the constitution of, not simply the interpretation of, experience.²⁰⁹ Although we cannot engage this rich conceptual literature here, let us note that three fundamental assumptions implicit in Stace's work should be emphasized. First, the mystical experience is itself a universal experience that is essentially identical in phenomenological terms, despite

**Research Box 7.3. Drugs and Mysticism: Pahnke's "Good Friday" Experiment
(Pahnke, 1966; Doblin, 1991)**

In the psychology of religion's most famous and controversial study, Pahnke, as part of his doctoral dissertation, administered the drug psilocybin or a placebo in a double-blind study of 20 volunteers, all graduate students at Andover–Newton Theological Seminary. The subjects met to hear a broadcast of a Good Friday service after they had been given either psilocybin (experimental group) or nicotinic acid (placebo group). Participants met in groups of four, each consisting of two experimental subjects and two controls matched for compatibility. Each group had two leaders assigned, one of whom had been given psilocybin. Immediately after the service and then 6 months later, participants were administered a questionnaire, part of which consisted of Stace's specific common-core criteria of mysticism.

Nearly a quarter of a century later, from November 1986 to October 1989, Doblin contacted the original participants in the experiment. By either phone or personal contact, he was able to interview nine of the control participants and seven of the experimental participants from the original study. In addition, he was able to administer Pahnke's questionnaire to them. Thus, we have the responses on Stace's criteria of mysticism immediately after the service, then 6 months later, and finally nearly 25 years later. Assigning each score as the percentage of the possible maximum for that criteria, according to Pahnke's original procedure, yields the following results.

Stace category	Original Pahnke study				Doblin follow-up study (nearly 25 years later)	
	Immediate		6 months later		Expts. (n = 7)	Controls (n = 9)
	Expts. (n = 10)	Controls (n = 10)	Expts. (n = 10)	Controls (n = 10)		
1. Unity:						
a. Internal	70%	8%	60%	5%	77%	5%
b. External	38%	2%	39%	1%	51%	6%
2. Transcendence of space/time	84%	6%	78%	7%	73%	9%
3. Positive affect	57%	23%	54%	23%	56%	21%
4. Sacredness	53%	28%	58%	25%	68%	29%
5. Noetic quality	63%	18%	71%	18%	82%	24%
6. Paradoxicality	61%	13%	34%	3%	48%	4%
7. Ineffability	66%	18%	77%	15%	71%	3%
8. Transience	79%	8%	76%	9%	75%	9%

Note. Our table has been constructed to allow direct comparison between Doblin's percentages and Pahnke's. Terms have been altered to correspond more closely to M Scale terminology where relevant. Some of Pahnke's criteria were not Stace's (e.g., transience), and some of Stace's criteria were not employed by Pahnke (e.g., inner subjectivity). Expts., experimental participants.

wide variations in ideological interpretation of the experience (the common-core assumption). Second, the core categories of mystical experience are not all definitionally essential to any particular mystical experience, since there are always borderline cases, based upon fulfillment of only some of the criteria. Third, the introvertive and extrovertive forms of mysticism are most conceptually distinct: The former is an experience of unity devoid of content (pure consciousness), and the latter is an experience of unity in diversity, one with content. The psychometric properties of the M Scale should reflect these assumptions, and insofar as they do are adequate operationalizations of Stace's criteria. Of course, they also reflect in measurement terms what diversity theorists criticize conceptually in Stace's work. The issue for now is what light empirical research can shed on mysticism and its interpretation.

Psychometric Properties. The M Scale consists of 32 items (16 positively worded and 16 negatively worded items), covering all but one of the original common-core criteria of mysticism proposed by Stace.²¹⁰ Hood's original work indicated that the M Scale contains two factors.²¹¹ For our purposes, it is important to note that Factor I consists of items assessing an experience of unity (introvertive or extrovertive), while Factor II consists of items referring both to religious and knowledge claims. This is compatible with Stace's claim that a common experience (mystical experience of unity) may be variously interpreted. A factor analysis of the M Scale by Caird supports the original two-factor solution to the M Scale.²¹² Reinert and Stifler also support a two-factor solution, but suggest the possibility that religious items and knowledge items emerge as separate factors.²¹³ This splits the interpretative factor into religious and other modes of interpretation, which would not be inconsistent with Stace's theory. This would allow for an even greater range of interpretation of experience—a claim to knowledge that can be either religiously or nonreligiously based. However, the factor-analytic studies cited above are far from definitive; notably, they suffer from inadequate subject-to-items ratios. Overall, however, they are consistent in demonstrating two stable factors—one an experience factor associated with minimal interpretation, the other an interpretative factor that is probably heavily religiously influenced.

More recently, Hood and his colleagues have proposed a three-factor solution to the M Scale, based upon more adequate sample size.²¹⁴ This three-factor solution fits Stace's phenomenology of mysticism quite nicely, in that both introvertive and extrovertive mysticism emerge as separate factors, along with an interpretative factor. This version of the M Scale is presented in Table 7.11. Because the three-factor solution to the M Scale is clearly the most adequate overall measure of mysticism in terms of Stace's theory, and because it permits the separate measurement of each type of mysticism as well as an interpretative factor, it is preferred for future research. However, the research to date has used the two-factor solution initially reported by Hood, in which introvertive and extrovertive mysticism are not independently measured, forming as they do part of the minimal phenomenological Factor I. Thus, the majority of studies of mysticism to date using two-factor solutions do not separately identify differential predictions for introvertive and extrovertive mysticism, but rather merge these two as a single factor expressing experiences of unity.

Relation to Other Measures of Mystical Experience. The initial publication of the M Scale related it to several other measures. The M Scale might be anticipated to correlate with the REEM, since the latter contains a mixture of items relating to numinous and mystical experiences. However, given the overall religious language explicit or implicit in the REEM, it was anticipated that the interpretative factor would correlate more strongly with the REEM

TABLE 7.11. Three-Factor Structure of the Mysticism Scale (M Scale)

<u>Factor I: Extrovertive Mysticism (12 items; alpha = .76)</u>	
6.	I have never had an experience in which I felt myself to be absorbed as one with all things.
8.	I have never had an experience in which I felt as if all things were alive.
10.	I have never had an experience in which all things seemed to be aware.
12.	I have had an experience in which I realized the oneness of myself with all things.
15.	I have never had an experience in which time and space were nonexistent.
19.	I have had an experience in which I felt everything in the world to be part of the same whole.
24.	I have never had an experience in which my own self seemed to merge into something greater.
27.	I have never had an experience in which time, space, and distance were meaningless.
28.	I have never had an experience in which I became aware of a unity to 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.
 <u>Factor II: Religious Interpretation (12 items; alpha = .76)</u>	
5.	I have experienced profound joy
7.	I have never experienced a perfectly peaceful state.
9.	I have never had an experience which seemed holy to me.
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.
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 experience in which I felt that all was perfection at the time.
20.	I have had an experience which I knew to be sacred.
22.	I have had an experience which left me with a feeling of awe.
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.
 <u>Factor III: Introvertive Mysticism (8 items; alpha = .69)</u>	
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.
11.	I have had an experience in which I had no sense of time or space.
21.	I have never had an experience which I was unable to express adequately through language.
23.	I have had an experience that is impossible to communicate.
32.	I have had an experience that cannot be expressed in words.

Note. Negatively worded items are reverse-scored. Items are numbered to correspond to the original two-factor solution reported in Hood (1975) and to allow easy comparison to Caird (1988) and Reinert and Stifler (1993). From Hood, Morris, and Watson (1993, p. 1177). Copyright 1993 by *Psychological Reports*. Reprinted by permission.

than would the phenomenological factor. This was the case in a sample of 52 students enrolled at a Protestant religious college in the South: Factor I correlated .34 with the REEM, whereas Factor II correlated .56 with the REEM. It was also found in another sample of 83 college students that Factor I correlated (-.75) more strongly with a measure of ego permissiveness than did Factor II (-.43).²¹⁵ Insofar as Taft's ego permissiveness measure²¹⁶ is related to openness to a wide range of anomalous experiences, including ecstatic emotions, intrinsic arousal, and peak experiences, it is not surprising that Factor I correlated more strongly with this measure than Factor II. The differential correlation of Factors I and II in the two studies is congruent with Stace's theory that experience can be separated from interpretation in varying degrees. Factor I correlates more strongly with measures of experience mini-

mally interpreted, and Factor II with measures of experience more extensively interpreted in religious language.

In Hood's original report, the M Scale factors correlated with a measure of intrinsic religion in roughly the same magnitude in a sample of 65 fundamentalist college students enrolled in a religious college in the South ($I = .68$, $II = .58$), supporting research as noted above between the REEM and intrinsic religion.²¹⁷ Furthermore, if in light of the assumption that intrinsic persons are likely to be frequent church attendees, Hood's finding that both frequent attendees and nonattendees had similar high scores on Factor I of the M Scale, but that only frequent church attendees had high Factor II scores,²¹⁸ makes sense in terms of Stace's distinction between experience and interpretation. Both frequent attendees and nonattendees reported mystical experiences in terms of their minimal phenomenological properties of an experience of union, but frequent church attendees were likely to interpret these experiences in religious terms. Nonattendees did not use traditional religious language to describe their experiences.

Holm prepared a Swedish translation of the M Scale and administered it to a sample of 122 Swedish informants.²¹⁹ Unlike the REEM, the M Scale could be meaningfully translated into Swedish and could be studied similarly to the way it was investigated in North America. Holm not only confirmed a two-factor solution closely paralleling Hood's initial mysticism and interpretation factors, but also found that in correlating the M Scale with ratings of a person's most significant personal experiences, Factor I correlated best with experiences reported by individuals without a Christian profile, whereas Factor II best related to more traditional Christian experiences. The revised Swedish version of the REEM, using Nordic accounts of intense experiences appropriate to a Finnish-Swedish culture, also showed patterns similar to those found in Hood's research with the REEM in the United States. In Holm's words:

We also discovered one factor which could be called a general mysticism factor and another where the experience was interpreted on a religious/Christian basis. The "religious interpretation factor" had strong correspondences with religious quality in the interviews and with the background variables of prayer frequency, bible study, church attendance and attitude towards Christianity. This factor thus covered experiences with an expressly Christian profile. It showed high correlations with the intrinsic scale, with the expressively Christian narratives on the REEM and with the religious quality on the interviews. Thus, overall, in a Finnish-Swedish culture the M Scale and REEM functioned very closely to how they function in American culture.²²⁰

Interestingly, Holm also noted that the distinction between a general mysticism factor (or impersonal mysticism) and a religious factor (or personal mysticism) has parallels with early research on mysticism in Sweden by Soderblom, who identified these as "infinity mysticism" and "personality mysticism," respectively.²²¹ This also parallels our earlier discussion of the distinction between impersonal and personal aspects of mystical experience, as noted by several investigators.

Relation to Measures of Other Personality Factors. Although the relationship between the religious factor of the M Scale and the more explicitly religiously worded REEM items is reasonable, the question of more general personality factors related to mysticism is of interest. M Scale scores have been correlated with standardized personality measures in two studies. In one, Hood found that most scales of the Minnesota Multiphasic Personality Inven-

tory (MMPI), a widely used measure to assess pathology, failed to correlate with the M Scale.²²² Furthermore, differential patterns of significant correlations between Factors I and II were compatible with a nonpathological interpretation of mysticism. For instance, Factor II (But not factor I) correlated significantly with the Lie (L) scale of the MMPI. This scale presumably measures the tendency to lie or present oneself in a favorable social light. However, insofar as Factor II represents a traditional religious stance, Hood suggested that high L scores for Factor II may represent the fact that the traditionally religious are less likely to engage in deviant social behaviors as measured by the L scale.²²³ Factor I did significantly correlate with two scales on the MMPI concerned with bodily processes (Hypochondria) and intense experiential states (Hysteria), which, in nonpathological terms, are likely to be compatible with mystical experience.²²⁴

Possible relationships between mysticism and absorption or hypnosis, discussed above in connection with the REEM as a measure of religious experience, are consistent with the work of Spanos and Moretti.²²⁵ They directly correlated the M Scale with the Tellegen and Atkinson Absorption scale and with three measures of hypnosis: the Carleton University Responsiveness to Suggestion Scale, which yields both an objective and a subjective score (CURSS-O and CURSS-S);²²⁶ the Field Hypnotic Depth scale;²²⁷ and the widely used Stanford Hypnotic Suggestibility Scale, Form C (SHSS:C).²²⁸ Overall, the M Scale correlated .53 with the Absorption scale, .37 with the Hypnotic Depth scale, .40 with the SHSS:C, and .36 with both the CURSS:O and CURSS:S in an all-female sample of university students. When mysticism was used as the criterion variable, regression analyses using the four hypnosis measures, absorption, and two other variables (neuroticism and psychosomatic symptoms) indicated that Absorption was the single best predictor, accounting for 29% of the variance, with Hypnotic Depth second best, adding an additional 5%. None of the other hypnotic scales, or the neuroticism or psychosomatic symptom scales, added predictive power.²²⁹ Spanos and Moritti concluded that while mystical experience can occur among the distraught and troubled, it is as frequent among the psychologically untroubled. However, mysticism per se is unrelated to psychopathology.

Using a measure of positive functioning, designed to measure "common-sense" personality characteristics of the healthy person,²³⁰ further supports the normality of those who report mystical experiences. Hood and his colleagues²³¹ administered the Jackson Personality Inventory (JPI)²³² to a sample of 118 college students. Factor I scores on the M Scale correlated significantly with 6 of the 15 JPI scales, suggesting a pattern of consistency with a general openness to experience, including tolerance, breadth of interest, innovation, and willingness to take risks. Not insignificantly, Factor I was also associated with a tendency to be critical of tradition and related negatively to value orthodoxy, whereas Factor II revealed the reverse pattern (i.e., value orthodoxy and a tendency to accept tradition). Factor II also correlated negatively with risk taking.²³³ Thus, consistent with much of the research noted above with the REEM and the M Scale, persons who report mystical experiences can be represented as open to experiences outside those accepted within various religious traditions. Again, one interpretation of this type of data is that conventionally religious persons have mystical experiences interpreted within their traditions and hence meaningful as confirming religious experiences, whereas less traditionally religious persons have mystical experiences they are unwilling to interpret within traditional frameworks and hence do not see them as confirming or verifying beliefs within an established tradition.

Two studies not directly employing the M Scale are relevant to this issue. Hood and Morris took virtually all items used in the empirical assessment of mysticism and factor-

analyzed them into scales, all with adequate reliability.²³⁴ These were then administered to a sample of respondents who rated the items for their applicability to defining mysticism as they understood it, and then rated them for whether or not they ever had experienced that item. Respondents did not differ on knowledge about mysticism, whether or not they personally identified themselves as having had a mystical experience. However, persons who denied having had such an experience did not mark items they knew to define mysticism as experiences they themselves had had, whereas those affirming mystical experience did. Thus, persons equally knowledgeable about mystical experiences differ on whether or not they mark an item as a function of having a mystical experience. This suggests that persons can know what mysticism is and yet not experience it.

In an additional analysis of these data by Morris and Hood, all those who indicated no religious identity (“nones,” $n = 40$) were compared to a randomly selected sample ($n = 40$) of those who identified themselves as Baptists.²³⁵ Persons were asked to indicate whether they had ever had a mystical experience. Using two factors developed to identify unity and religious interpretation (paralleling Stace’s distinctions and those found in the M Scale), Morris and Hood found that both “nones” and Baptists who reported mystical experiences used religious language to describe them, although Baptists scored higher on the use of religious language. Consistent with the larger study, the results suggest that individuals can distinguish between knowledge about mysticism and whether or not they have had a mystical experience. However, if they have had one, religious language is used to describe it—even by the “nones.” These results are consistent with survey research discussed above, in which Vernon found that religious “nones” nevertheless reported religious experiences. It may be that for many, the language of religion is the only language available to express these profound experiences.

In light of the research described above, it is worth noting that Troeltsch’s church–sect theory, extensively discussed in Chapter 9, was initially a church–sect–mysticism theory in which he postulated two mysticisms.²³⁶ One was simply the affirmation within religious traditions of a spiritual accessibility to the holy as defined by tradition. The other was a radical individualistic form of mysticism assuming no traditional support or mediation, since an individual experiencing this form has direct access to the transcendent. Garrett has tried to reintroduce these two mysticisms into contemporary discussions of church–sect theory, but with little success.²³⁷ This is unfortunate, since Troeltsch’s two mysticisms nicely fit the empirical data on the reporting of mystical experience, based upon Stace’s distinction between experience and its interpretation.

Mystical experiences within traditions are both interpreted and partly structured by an awareness of an experience meaningfully described within the beliefs of a tradition. They are the direct validation of what we have referred to above as “foundation realities.” The term “direct” does not mean absolutely unmediated; rather, it means that the tradition structures and provides a language framework within which experiences can be fully existentially encountered. As Katz²³⁸ and the diversity theorists have rightly insisted, Jews have Jewish mystical experiences and Buddhists have mystical experiences common to Buddhism. Indeed, most mystics have historically struggled to maintain themselves within established traditions—that is, to use the language and concepts of a given tradition to clarify and confirm their experiences.²³⁹ However, others experience mysticism outside established traditions and hence fail to find the language of established traditions meaningful. Such experiences are no less mystical and probably most correspond to what Factor I of the M Scale measures: the minimal phenomenological properties of a sense of union. For these mystics, the experience

does not confirm an established tradition, except insofar as direct access to the transcendent outside of tradition has itself become a mysticism of radical individuality.²⁴⁰ Such persons are unlikely to use the established language of a tradition to describe their experience, and may be seeking alternative frameworks to understand their experience or may merely be satisfied with a nonlinguistic recognition of the experience. This is consistent with Rosegrant's finding that mystical experiences may be reported but may not be perceived as meaningful.²⁴¹ It also reflects that the claim to ineffability can be a tactic to refuse to describe experiences, such that they become confirming of the reality claims of any established tradition. Obviously, the demand that experiences be described entails the use of language. Thus, not surprisingly, those who have focused upon having persons describe their "ineffable" experiences have found language to be a major factor affecting experience (or, better, experience as described). However, minimalist language, referring to such things as "unity," can produce agreement among persons; this may suggest a common element to experience even if that unity is variously described.

The report of mystical experience is 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 are likely to use it reluctantly as the only available language to express their experience. That mystical experience is a normal phenomenon reported among healthy individuals does not mean that others cannot also report these experiences. In the only empirical study administering the M Scale to both healthy and normal populations, Stifler and his colleagues administered the M Scale along with other measures to three relevant samples ($n = 30$ each): psychiatric inpatients meeting formal diagnostic criteria for psychotic disorders; senior members of various contemplative/mystical groups; and hospital staff members (as normal controls).²⁴² Using total M Scale scores, Stifler et al. found that psychotics (mean = 141.9, $SD = 10.4$) and contemplatives (mean = 142.8, $SD = 3.7$) could not be distinguished from each other, but that both differed from hospital staff controls (mean = 124.9, $SD = 3.9$).²⁴³ Thus, both psychotics and contemplatives reported mystical experiences more often than normal controls. Although these data are correlational, it is reasonable to assume that mysticism neither causes nor is produced by psychoses. Rather, psychotics, like contemplatives, can have or can report such experiences.

Consistent with this research is the work on temporal lobe epilepsy, commonly assumed to be associated with reports of mystical and other religious experiences. For instance, Persinger has argued that what he terms the "God experience" is an artifact of changes in temporal lobe activity.²⁴⁴ However, in a study of 46 outpatients in the Maudsley Epilepsy Clinic, Sensky found that patients with temporal lobe epilepsy did not have a higher rate of mystical experiences (or general religious experiences), compared to a control population.²⁴⁵ By contrast, a study by Persinger and Makarec found positive correlations between scores of their measure of complex epileptic signs and the report of paranormal and mystical experiences in a sample of 414 university students.²⁴⁶ Although neither of these studies used the M Scale to measure mystical experience, findings overall suggest that even if mystical experience is commonly associated with temporal lobe activity, it is no more common in actual temporal lobe epileptic patients than in control populations with normal temporal lobe activity. Hence, there is no firm empirical basis from which to assume neurophysiological deficiencies in those reporting mystical experiences.

Relation to More Abstract Concepts. Rather than focusing upon particular concrete triggers, Hood has argued that more abstract conceptualization may permit a more empirically

adequate investigation of the conditions and circumstances that trigger mystical experience.²⁴⁷ In particular, theological and philosophical interest in the concept of limits is useful.²⁴⁸ At the conceptual level, the idea of limits entails transcendence; in fact, awareness of limits makes the experience of transcendence possible. Perhaps the sudden contrast that occurs when a limit is suddenly transcended yields a contrast effect similar to a figure-ground reversal, in which what was previously unnoticed is thrown into stark relief. Hood has noted that such sudden contrasts are common in nature settings, particularly those in which stress is involved. Nature as a common trigger of mystical experiences is well documented in survey studies; often such experiences are associated with stress, which is itself sometimes cited as a trigger of mystical experience. In one study described earlier, the set-setting incongruity hypothesis was supported when the REEM was used as a measure. It has also been supported in research using the M Scale.

Hood took advantage of a week-long outdoors program at a private all-male high school.²⁴⁹ During this program, graduating seniors engaged in a variety of outdoor activities varying in degree of stress. Three particularly stressful activities were examined: rock climbing/rappelling (for the first time, for many students); whitewater rafting (down a river rated as difficult); and the experience (described earlier in this chapter) of staying alone in the woods one night with minimal equipment. A nonstressful activity (canoeing a calm river) was selected as a control. Just prior to participating in each activity, participants were administered a measure of subjective anticipatory stress for that activity. Immediately after each activity, the participants took the M Scale to assess mystical experience. The comparisons between set and setting stress for each high-stress activity supported the hypothesis that the interaction between these two types of stress elicits reports of mystical experience. It is important to note that anticipatory stress varied across situations, such that whether or not a particular person anticipated a given situation as stressful was not simply a function of its independently assessed situation stress. Also, in stressful situations, those anticipating low stress scored higher on mysticism than those anticipating high stress. Thus, set and setting stress incongruity elicit reports of mystical experience—not simply stress per se, either anticipatory or situational. Additional support for this hypothesis was found by using the canoe activity as a control; no student anticipated this activity to be stressful. Given the congruity between low anticipated stress and low setting stress, low M Scale scores resulted, as predicted. However, in high-stress activities anticipated as high in stress, M Scale scores were also predicted and obtained. Only the incongruity between setting and anticipatory stress produced high M Scale scores. Furthermore, with only one exception, these results held for both Factor I and Factor II scores; this suggests not only that the minimal phenomenological properties of mysticism are elicited, but also that they are seen as religiously relevant in the broad sense of this term. This replicates the findings discussed above with solo experiences in a nature setting when the REEM was used as a measure. Thus, it would appear that anticipatory and setting stress incongruities can elicit both mystical experiences of unity (M Scale) and more numinous religious experiences (REEM) in nature.

The fact that both nature and prayer settings reliably elicit reports of mystical experience in traditionally religious persons has led some to suggest that prayer should be correlated with the report of mystical experience, particularly if the prayer is contemplative in nature. Hood and his colleagues, using a modified form of the M Scale, documented such a correlation in two separate studies.²⁵⁰ They found that among persons who prayed or meditated regularly, intrinsically religious persons had higher mysticism scores than extrinsics, in terms of both the minimal phenomenological properties of mysticism and its religious in-

terpretation. This finding is consistent with survey research by Poloma and Gallup, in which meditative prayer was related to experiences of closeness to God.²⁵¹ Thus, several studies suggest that meditative prayer, as opposed to petitionary or other forms of prayer, relates to both mystical (unity) and numinous (nearness) experiences of God. Finney and Malony have developed a theoretical model in which contemplative prayer should be a useful adjunct in psychotherapy when spiritual development is a treatment goal, and therapeutic progress should be associated with greater mystical awareness.²⁵² However, they failed to find empirical support for their theory when mysticism as measured by the M Scale did not increase during successful therapy aimed at spiritual development, even though time spent in contemplative prayer did increase.²⁵³

Mystical experiences are common in nature and in meditative prayer—two conditions that are often solitary. Hence, it may be that factors that meaningfully enhance solitude facilitate the report of mystical experience. Experimentally, it is possible to enhance solitude through the use of an isolation tank. If a religious set is given in an isolation tank, will the combination of set and enhanced isolation facilitate the report of mystical experience? Research Box 7.4 reports a study in which Hood and his colleagues explored this question.²⁵⁴

Summary. Overall, studies employing the M Scale have been successful in correlating the scale with predicted variables of theoretical significance. The M Scale has also proven useful in quasi-experimental studies eliciting mystical experience. Most studies to date have used a two-factor solution to the M Scale, in which introvertive and extrovertive mysticism are collapsed into a single experiential factor. Separating introvertive and extrovertive into separate scales, as recommended earlier, should permit theory development based upon the differential predictions that should follow from these two experiences of unity.

OVERVIEW

Clearly, mystical experience remains a central concern for those who would link the conceptual and empirical literatures on religious experience. The mystical and the numinous remain contenders for the unique in religion. They also provide an experiential basis that may require serious attention to the ontological claims of those who have such experiences. McClenon has argued that the uniformity of the report of a wide range of anomalous experiences suggests that cultural determination of these interpretations may account for less variance than many suppose.²⁵⁵ Although social scientists may not offer “proofs” for claims of mystical experience, neither can they—without hubris—deny the possibility that religion contains truths. Indeed, such truths may be as necessary for the experience as the more restricted claim that the *belief* in such truths is necessary. Few persons have such experiences without believing in their possibility in advance or becoming converted to their truth after the fact.

Research on mystical experiences is best approached in terms of what each methodology can contribute. The descriptive material of open-ended and qualitative studies enhances the narrowness and precision of survey research. Yet the two methods have revealed similar triggers and consequences of these experiences, and both methods have confirmed the normality of their occurrence. Survey research provides suggestive correlations and patterns for laboratory and quasi-experimental studies, which in turn have shown that mystical experience can be facilitated and follows patterns compatible with results from open-ended and

Research Box 7.4. The Differential Elicitation of Mystical Experience in an Isolation Tank (Hood, Morris, & Watson, 1990)

Solitude is often cited as one trigger of religious and mystical experiences. Hood and his colleagues placed individuals in a sensory isolation tank to maximize solitude. The tank was approximately 7.5 feet in diameter and 4 feet high. It contained a hydrated magnesium sulfate solution with a density of 1.30 grams/cc, a constant temperature of 34.1°C, and a depth of 10 inches. The tank was totally enclosed, lightproof, and soundproof. It was equipped with an intercom system so that a participant could communicate with an experimenter in another room.

Each participant in the study was placed in the isolation tank after being told about the typical images likely to occur under these conditions. In addition, participants were given a specific religious set (in boldface) or a nonreligious control set (in italics) as follows:

I am now going to invite you to keep silent for a period of 10 minutes. First you will try to attain silence, as total silence as possible of heart and mind. Having attained it, you will expose yourself to whatever [religious revelation/*insight*] it brings.^a

Participants had previously completed the Allport Religious Orientation scale and could be classified as intrinsic, extrinsic, and "indiscriminately pro" (IP) individuals. A modified version of the M Scale was used that allowed a simple "yes" or "no" response to each item, so that participants could respond over the intercom while still in the isolation tank. Results were as predicted: Under the religious set, both intrinsic and IP participants reported more religious interpretation of their experiences (higher Factor II scores) than extrinsics. However, the IP participants reported less minimal phenomenological properties of mysticism (lower Factor I scores) than either the intrinsics or the extrinsics. This suggests that the IP participants wished to "appear" religious by affirming religious experiences they did not actually have. Extrinsics had these experiences, as indicated by their Factor I scores, but did not describe them in religious language. Intrinsics both had the experiences and described them in religious language.

Further support for these views was evident in the control conditions. When participants were not presented with a religious set, none of the groups differed in the minimal phenomenological properties of mysticism (Factor I). However, intrinsics still interpreted their experiences in religious terms (Factor II), whereas neither extrinsic nor IP persons described their experiences in religious language in the control condition. Thus, the isolation tank elicited similar experiences in subjects of all religious types. The difference in Factor II under set conditions for the types suggests that the intrinsics consistently interpreted their tank experiences as religious; extrinsics consistently interpreted their tank experiences as less religious; and IP persons only interpreted their tank experiences as religious when given an explicit religious set.

^aThese instructions were adapted from those used by de Mello (1984) in his study of prayer.

survey research. All these are then given various alternative interpretations by the theological, philosophical, and historical literature.

If there is any picture to be suggested at this point, it is to be sketched in broad lines; yet even this picture is helpful. 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—as at least what is real for them, if not in some sense as the ultimate “Real.” Mysticism, real or Real, has proven itself susceptible to empirical investigation. Clearly, much remains to be done. Future progress will surely be interdisciplinary. Even if McGinn is correct in his fear that an empirical reading of mystical texts from a psychological perspective has only an “ambiguous contribution” to make, he is correct in noting that psychological investigators and those involved in studying the history and theory of mysticism must cooperate in what to date is an “unrealized conversation.”²⁵⁶

NOTES

1. Kazantzakis (1961, p. 45).
2. Blofeld (1970, p. 24).
3. Scholem (1969, p. 16).
4. W. James, quoted in McDermott (1967, pp. 798–799).
5. Smith (1978, p. ix).
6. Clark (1984); Davis (1989); Swinburne (1981).
7. Katz (1977).
8. Schuon (1975).
9. Jones (1994).
10. An excellent summary of this literature is provided in McGinn (1991).
11. Thorner (1966).
12. Kaufman (1958).
13. Thorner (1966, p. 82).
14. Stace (1960).
15. Forman (1990).
16. Stace (1960, p. 131).
17. Forman (1990, p. 8).
18. Hood (1989).
19. Hood (1985).
20. Otto (1917/1958).
21. Hick (1989).
22. Hood (1995b).
23. Stace (1960); Otto (1932, especially pp. 47–72).
24. Hick (1989, pp. 252–296).
25. Hood (1995c).
26. Hood (1995a).
27. Hick (1989, p. 162).
28. Smart (1964, pp. 121–122). Smart cites the religion of the Upanishads as one example.
29. Smart (1978).
30. Stace (1960, pp. 11–12).
31. Stace (1960, pp. 11–12).
32. Hood (1995b).
33. Hood (1995b).
34. Hodges (1974).
35. Garrett (1974).
36. Jones (1986, p. 225).
37. See Hood (1992a, 1995c).
38. Swinburne (1981, p. 190).
39. Bowker (1973).

40. Berger (1979).
41. O'Brien (1965).
42. Preus (1987).
43. See Coon (1992); Hood (1994).
44. Leuba (1925).
45. Freud (1927/1961).
46. Freud (1930/1961).
47. See Hood (1976a, 1992b); Shafraanske (1995).
48. Durkheim (1915).
49. See Hood (1992a, 1995c).
50. James (1890/1950, 1902/1985).
51. Myers (1903/1961).
52. Hood (1995c).
53. Quoted in Perry (1935, Vol. 2, p. 331). Emphasis in original.
54. Bucke (1901/1961).
55. Kolakowski (1985).
56. See Hardy (1965, 1966).
57. Jung (1938).
58. Jung (1954/1968).
59. Jung (1938).
60. McGinn (1991, p. 343).
61. Inge (1899, p. 3). The definitions are reviewed in an appendix to the text (pp. 335–348).
62. Zaehner (1957).
63. Buber (1965, p. 24).
64. James (1902/1958).
65. Quoted in McGinn (1991, pp. 267–268).
66. Hood (1975).
67. Hood (1970).
68. Laski (1961).
69. Laski (1961, p. 9).
70. Laski (1961).
71. Laski (1961, p. 5, footnote 1).
72. Laski (1961, pp. 526–533).
73. Laski (1961, pp. 369–374).
74. Wulff (1995).
75. Laski (1961, p. 399, texts 1a, 1b).
76. Lewis (1956, p. viii).
77. Lewis (1956, p. 238).
78. Pafford (1973).
79. Pafford (1973, p. 251). The actual text was from W. H. Hudson's autobiography. See Hudson (1939).
80. Pafford obtained 475 questionnaires, but primarily analyzed only 400. He took the first 100 by gender in both the university and grammar school samples for the 400. His analyses were generally based upon the 264 respondents of the 400 who reported experiences similar to the one described. In a few instances some persons described more than one experience, and these were used in some analyses not discussed here.
81. Pafford (1973, p. 91).
82. Pafford (1973, p. 19).
83. Klingberg (1959).
84. Klingberg (1959, p. 212).
85. An unspecified number of compositions contained more than one experience.
86. Klingberg (1959, p. 213).
87. Klingberg (1959, p. 212).
88. Klingberg (1959, p. 215).
89. Fahs (1950).
90. Elkind and Elkind (1970).
91. Elkind and Elkind (1970, p. 104). Students were also asked to respond to the question "Why does God permit war, murder, disease?", but few did, and this item is ignored in our discussion.
92. Elkind and Elkind (1970, p. 104).

93. Hood (1973b).
94. See Katz (1992); Proudfoot (1985); Scharfstein (1993).
95. Hood (1973b).
96. See Thomas and Cooper (1978, 1980).
97. Thomas and Cooper (1978, p. 434).
98. Hardy (1979).
99. Hardy (1979, p. 18) cites an example from Beatrice Webb, reported in an address given by Mary Stokes of the World Congress of Faiths.
100. Hardy (1979, p. 20).
101. Hardy (1979, p. 23).
102. Hardy (1979, p. 26). See Table 6.1 of the present book, item 1d.
103. Hardy (1979, p. 27). See Table 6.1 of the present book, item 7v.
104. Hardy (1979, pp. 19–20).
105. Hay (1994, especially pp. 20–23).
106. Hay (1994, p. 21).
107. Hay (1994, p. 22).
108. The materials may be completed by the time this book goes to press. Interested scholars can contact L. B. Brown, Director, Alister Hardy Research Centre, Westminster College, Oxford, England OX2 9AT.
109. Hay and Morisy (1985).
110. Hay and Morisy (1985, p. 214).
111. Hay and Morisy (1985, p. 217).
112. Hay and Morisy (1985, p. 214).
113. Hay (1979).
114. Hay (1979, p. 165).
115. It is typical of this research tradition that more than one experience may be described by a respondent and included in analyses. Hay (1979, p. 167) reports a total of 109 experiences from the 65 affirmative responses to the question.
116. Mathes, Zevon, Roter, and Joerger (1982).
117. Shostrom (1964).
118. Hood (1977a).
119. The groups did not differ on Factor I or Factor II; the use of extreme scores and the fact that Factors I and II correlate probably account for this. See Hood (1977a, p. 270, footnote 3).
120. Hood and Hall (1980).
121. Glock and Stark (1965).
122. Glock and Stark (1965, p. 157).
123. Glock and Stark (1965, p. 157).
124. Glock and Stark (1965, p. 157).
125. Vernon (1968).
126. Tamminen (1991).
127. Tamminen (1991, p. 42).
128. Back and Bourque (1970).
129. Back and Bourque (1970).
130. Bourque (1969).
131. Gallup (1978).
132. Yamane and Polzer (1994, p. 4).
133. Gallup and Newport (1990).
134. Gallup and Casteli (1990).
135. See Greeley (1974, 1975).
136. Greeley (1975, p. 58).
137. Davis and Smith (1994).
138. Greeley (1974).
139. Hay and Morisy (1978).
140. Thomas and Cooper (1978, 1980).
141. Greeley (1975, p. 65).
142. McClenon (1984).
143. Yamane and Polzer (1994, p. 25).
144. The total *n* for these years varies slightly (5,489) from the 5,420 in the Yamane and Polzer text, prob-

- ably depending upon how missing responses to some questions resulted in inclusion or exclusion of subjects. Rounding of percentages also produced slight variations between the years, considered both independently and cumulatively.
145. Bourque and Back (1971, p. 8).
 146. Thirty-one percent is often reported as indicating the total affirmative response to the Bourque question. However, since an index of three items was used, the data reported by Bourque and Back (1971, p. 10) cannot isolate the effect of one particular item from the effects of the other two.
 147. Bourque and Back (1971, p. 10).
 148. Hay and Morisy (1985, p. 214).
 149. Hay and Morisy (1985).
 150. See Back and Bourque (1970).
 151. Hay (1979).
 152. Hay (1994, p. 8).
 153. Hay and Heald (1987).
 154. Hay (1994, p. 7).
 155. Princeton Research Center (1978).
 156. Hay (1994, p. 7).
 157. Back and Bourque (1970).
 158. Scharfstein (1973, pp. 63–70).
 159. Tamminen (1991, p. 62).
 160. Coon (1992).
 161. Hood (1994).
 162. Greeley (1975).
 163. Hardy (1965, 1966).
 164. Hood (1989).
 165. Fox (1992).
 166. *Déjà vu* emerges as a single factor in Fox's analysis of survey items included in the 1984, 1988, and 1989 General Social Surveys. See Fox (1992, pp. 423–424).
 167. Margolis and Elifson (1979, p. 62).
 168. Margolis and Elifson (1979, p. 64).
 169. Wuthnow (1978, p. 72).
 170. Zollschan, Schumaker, and Walsh (1995).
 171. Yamane and Polzer (1994).
 172. Gorsuch (1984).
 173. Hood (1970).
 174. Rosegrant (1976, p. 306).
 175. Hood (1970, p. 287) reported a Kuder–Richardson internal consistency of .84.
 176. Rosegrant (1976, p. 306) reported a Cronbach's alpha internal consistency of .73.
 177. It is not clear what the effects may be of explicit instructions that the religious language of the REEM is not essential and that one ought to focus upon the underlying description, not the language used. See Rosegrant (1976, p. 306). This is especially pertinent in light of recent conceptual debates on the relationship between religious language and experience, as well as the empirical studies described later in this chapter.
 178. Holm (1982).
 179. Hood (1970).
 180. Allport and Ross (1967, p. 442).
 181. Hood (1978b).
 182. Rosegrant (1976, p. 307).
 183. Hood (1972).
 184. Rosegrant (1976).
 185. Hood (1978a).
 186. Hood and Hall (1977).
 187. Gibbons and Jarnette (1972).
 188. Lewis (1971).
 189. Hood (1973a).
 190. Shor and Orne (1962).
 191. Gibbons and Jarnette (1972).
 192. Tellegen and Atkinson (1974).

193. Mathes (1982).
194. Rubin (1970).
195. See Allison (1961); Owens (1972); Prince and Savage (1972).
196. Hood (1985).
197. Hood (1974).
198. Barron (1953).
199. The one exception is the item referring to church attendance.
200. Hood (1974, p. 68). The means on the REEM for the two groups were 40.7 ($SD = 12.9$) and 33.0 ($SD = 2.9$), respectively. A t test of difference between means was significant, $t(112) = 3.10, p < .01$.
201. Maslow (1964).
202. Hood (1975).
203. Stace (1960).
204. Lukoff and Lu (1988).
205. Stace (1960, pp. 29–31).
206. Doblin (1991, p. 8).
207. Stace (1960, pp. 31–38).
208. Katz (1977).
209. Proudfoot (1985).
210. Hood (1975) excluded paradoxicality as a criterion of mysticism. Also, Stace (1960, pp. 270–276) seemed to waiver on how essential a property it is for mysticism.
211. Hood (1975, pp. 30–34).
212. Caird (1988).
213. Reinert and Stifler (1993).
214. Hood, Morris, and Watson (1993).
215. Hood (1975, pp. 35–36).
216. Taft (1970).
217. Hood (1975).
218. Hood (1976b).
219. Holm (1982).
220. Holm (1982, p. 273).
221. Soderblom (1963), cited in Holm (1982, pp. 275–276).
222. Hood (1975, pp. 37–39).
223. Hood (1975, pp. 38–39).
224. Hood (1975, pp. 38–39).
225. Spanos and Moretti (1988).
226. Spanos, Radtke, Hodgins, Stam, and Bertrand (1983).
227. Field (1965).
228. Weitzenhoffer and Hilgard (1962).
229. Spanos and Moretti (1988, p. 110).
230. Jackson (1978).
231. Hood, Hall, Watson, and Biderman (1979).
232. Jackson (1976).
233. Hood et al. (1979, pp. 805–806). We ignore Hood et al.'s discussion of gender differences (see p. 805) in favor of a general description of these data.
234. Hood and Morris (1981a).
235. Morris and Hood (1980).
236. Troeltsch (1931).
237. Garrett (1975).
238. Katz (1977).
239. Katz (1983).
240. Troeltsch (1931).
241. Rosegrant (1976).
242. Stifler, Greer, Sneck, and Dovenmuehle (1993).
243. The variance for psychotics on the M Scale was much greater than that for either normals or contemplatives. This was also true for other measures used in the study. See Stifler et al. (1993, p. 369).
244. Persinger (1987).
245. Sensky (1983).

246. Persinger and Makare (1987).
247. Hood (1977b).
248. Grossman (1975).
249. Hood (1977b).
250. See Hood, Morris, and Watson (1987, 1989).
251. Poloma and Gallup (1991).
252. Finney and Malony (1985b).
253. Finney and Malony (1985a).
254. Hood, Morris, and Watson (1990).
255. McClenon (1990).
256. McGinn (1991, p. 343).