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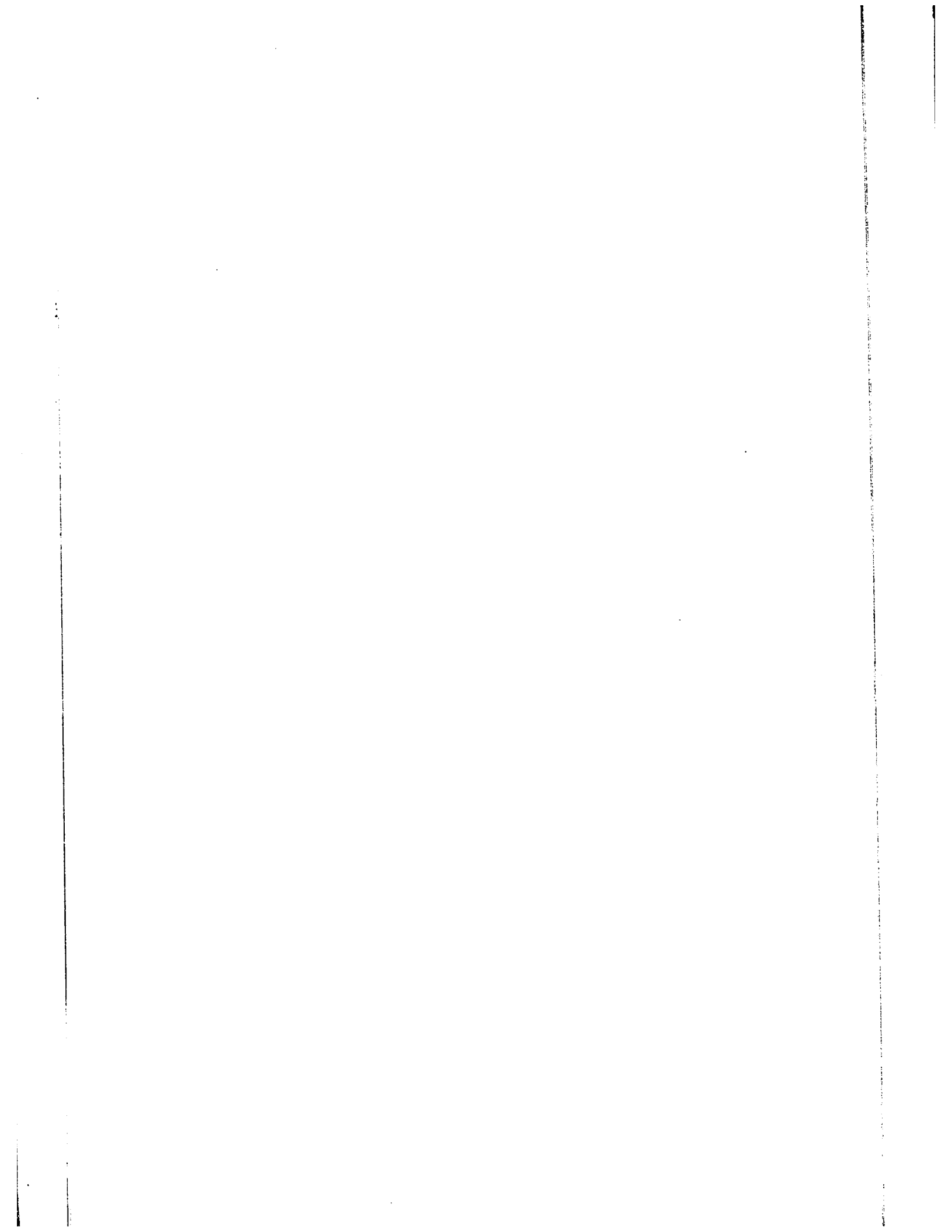
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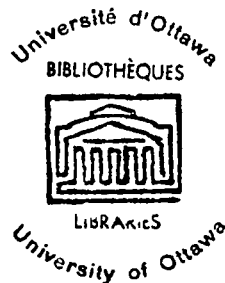


ESP

Core Religious Experience and the
Process of Self Actualization Within the
Context of a Religious Congregation

by Elinor J. Dickson

Thesis presented to the School of Graduate
Studies of the University of Ottawa as
partial fulfillment of the requirements
for the degree of
Doctor of Philosophy



Ottawa, Canada, 1977



E.J. Dickson, Ottawa, Canada, 1978

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Acknowledgments

This thesis was prepared under the supervision of Daniel Lee, Ph.D., and Henry Edwards, Ph.D., of the Faculty of Psychology of the University of Ottawa. The writer wishes to express her gratitude for their encouragement and direction in this project.

The writer would also like to express her gratitude to Kathleen Carey and L. Campbell, C.S.J., for their help in the rating of the data.

A special acknowledgment goes to Peter Campbell whose thesis Toward a Humanistic-transpersonal Psychology of Religion provided the framework and inspiration for this study.

Curriculum Studiorum

Elinor J. Dickson was born on June 10, 1939, in Toronto, Ontario. She received the Bachelor of Arts degree in English and Philosophy from the University of Toronto in 1968. She received the Master of Arts degree in Clinical-Counseling Psychology from the University of Ottawa, Ottawa, Ontario in 1974. The title of her thesis was The DAP as a Measure of Body Concept Articulation.

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Introduction

At the present time there is a renewed interest in the question of intense religious experience within all the human sciences that converge on the consciousness of man. Psychology as a science has only recently begun to play an integral part in the understanding of this uniquely rich human experience.

Those of a strictly psychoanalytic orientation have regarded such historical accounts of religious experience as manifestations of repressed sexuality, or as forms of hysteria, and generally have considered its presence as detrimental to the culture as a whole (Spangler, 1961; Moller, 1964; and Leuba, 1972). In North America, in the recent past, those who adhered to a rigid behaviorism simply discounted such phenomena as irrelevant to the field of psychology (Skinner, 1957). It is only with the acceptance of a humanistic, existential approach within the mainstream of psychology that an alternative hypothesis has presented itself within which to explore man's religious experience (Campbell, 1972).

Humanistic psychology, basing its premises on the study of the healthy personality, holds that man can envision the ideal of self-fulfillment, and, indeed, self-transcendence and therefore, is motivated from within to become all that he can become. Such a theory of motivation, based on man's reflection on his experience, required, in part, a different methodology than what had previously been accepted within psychology as "the" scientific method. Using the methodology of Husserl (1931) and Polanyi (1958), in terms of

the phenomenological approach, the importance of man's subjective experience as a manifestation of his consciousness was proposed as a valid starting point for psychology by such men as Allport (1942; 1967) and Maslow (1954), among others.

In particular, to make observations based on the subjective experience of others, and then validate such experience from an empirical and/or statistical viewpoint, became Maslow's methodology in studying the healthy personality. Many of the observations and hypotheses Maslow made in studying the healthy person concerned the role of transcendent, peak, and/or core religious experience in the process of self-actualization. Therefore, Maslow's writings in particular, will form the basis for the underlying questions in this study whose purpose is to examine the role and nature of core religious experience within a humanistic theory of personality.

As this is a relatively new area of research, it seems desirable to explore and build within an already established framework. The review of the literature in Chapter I, then, will examine closely Maslow's definitions of core religious experience and self-actualization. Particular attention will be paid to the hypotheses he offered concerning the relationship between these two concepts. Research findings in similar and/or adjacent areas will be brought in where appropriate to help clarify, either through criticism or substantiation, Maslow's basic concepts and hypotheses. Finally, these findings will be summarized and hypotheses stated for this study.

Chapter II will deal with the experimental design to test the hypotheses of this study. It begins with a description of the subjects, followed by a description of the tools. The procedure used in collecting the data is then outlined with particular attention given to the procedure employed in determining the presence of core religious experience. Then the hypotheses are presented in the null form. The final section of this chapter outlines the statistical analyses used in testing the hypotheses.

The presentation of the results are presented in Chapter III in the order of the stated hypotheses.

Chapter IV contains a discussion of the results. Following a summary of the results, each hypothesis is discussed with particular regard to Maslow's theoretical framework. A critical analysis of the study was undertaken. This is followed by a more general discussion as this study pertains to the validity and possible extension and application of Maslow's theoretical constructs. Out of this discussion came suggestions for further research and some concluding remarks.

CHAPTER I

Review of the Literature

In approaching the work of Abraham Maslow, it is necessary to keep in mind that he did not work from a theoretical model, but rather tended to follow the data which he collected using a phenomenological methodology. On the basis of the collected observations and the subjective reports of his subjects, Maslow made assumptions and built up an interpretative set of explanations. Also, as Maslow tended to "follow his data", it is necessary to look for the historical development that is present in his use of specific terms insofar as they relate to the development of his underlying theoretical concepts. This is particularly true in the case of his preoccupation with the concepts of peak experience and the self-actualization process. As stated in the introduction, this study will attempt to test some of the hypotheses, both implicit and explicit, suggested by Maslow, concerning the conditions that facilitate peak and/or core religious experience and the relationship of such experiences to levels of self-actualization. To this end, then, the first task will be to come to operational definitions of the terms "core religious experience" and "self-actualization" based upon a clear conceptualization of what these terms denote within Maslow's thinking.

Varieties of Transcendent Experience

As his work began to be discussed and challenged, Maslow became more and more aware of the necessity to differentiate and clarify

his use of terms. Some sense of this struggle becomes evident in looking at Maslow's findings, and his attempts to articulate them, in a chronological order. This is particularly true of the term transcendent experience.

In his early studies into the motivation of psychologically healthy people, Maslow found within their autobiographical material, or subjective reports, evidence that they had enjoyed a common experience. In his first major treatise on self-actualized people, Maslow described this experience as a "peak" experience. Such an experience embodies

feelings of limitless horizons opening up to the vision, the feeling of being simultaneously more powerful and also more helpless than one ever was before, the feeling of great ecstasy and wonder and awe, the loss of placing in time and space, with finally, the conviction that something valuable had happened, so that the subject is to some extent transformed and strengthened even in his daily life by such experience (Maslow, 1954, p. 216).

From subsequent study and refinement of these reports of experiences, Maslow delineated at least seventeen characteristics that he felt were common, to some degree, to all peak experiences.

1. The experience or object is seen as an entity, transcending usefulness, an end in itself.
2. The percept is fully attended, occupying the total attention.
3. Something is perceived in its own being, its own nature; one is aware of human irrelevance to it.
4. Richness of perception seems to increase, rather than decrease with experiencing. The object seems inexhaustible in its power to command a response.

5. Perception may be object-centered rather than ego-centered. It may be un-needing and desireless to the point that a fusion of the perceiver and the perceived may be felt.
6. The peak-experience is felt as self-justifying, self-validating, making any pain involved worthwhile.
7. Freedom from usual boundaries of time and space. There is a characteristic disorientation of time; judgment of it in peak experiences is very inaccurate.
8. The experience is seen, invariably, as good and desirable, intrinsically necessary, perhaps inevitable.
9. Peak-experience seems to be less relative, more absolute, as though the perception was of a reality independent of and beyond the life of man, yet intimately related to man, and to immediate reality also.
10. Perception is passive even though intense, aware, yet with a free, unclaiming attitude toward the perceived; receiving, but not demanding.
11. The emotional reaction has a special flavour of wonder, of awe, of humility before something great.
12. The whole of the world may be seen as a unity; or one small part of the world may be perceived as if it were, for the moment, all the world.
13. Ability to have a simultaneous grasp of both the abstract and the concrete aspects of the object or situation perceived.
14. Dichotomies, polarities, conflicts were fused, transcended, or resolved.
15. Godlike acceptance, when another person is perceived in his Being; no need to judge, relate, use, classify, condemn, etc.
16. Perception tends to be idiographic and non-classificatory.

17. Complete, even if only momentary, loss of inhibition, fear, anxiety, etc.

(Maslow, 1964, summary, p. 59-68).

At the time of writing about the characteristics of peak experience listed above, Maslow was using the terms "transcendent experience", "peak experience" and "core religious experience" interchangeably.

By my usage, however, they are often having "core religious experiences" or transcendent experiences when they report having peak-experiences (Maslow, 1971, p. 274).

However, when Maslow's work is taken in its entirety nuances of meaning seem to emerge which parallel his continued differentiation of the concept of self-actualization.

Within Maslow's framework, transcendent experience came to have a generic meaning. Transcendence, as Maslow wrote about it in 1969, was a concept that had grown to encompass the experience of oneself in any sphere. For example, one may have the experience of transcending space and time as in certain "mystical" states, or transcendence can

also mean to surpass in the sense of simply being able to do more than one thought one could do, or more than one had done in the past, e.g. simply to be able to run faster than one used to, or to be a better dancer, or pianist, or a better carpenter or whatever

(Maslow, 1964, p. 86-87).

Obviously, then, if transcendent experience includes both peak experience and core religious experience, as well as the active striving for self betterment or fulfillment, then there must be other ways of distinguishing these different experiences and labelling them appropriately.

For Maslow, one of the distinctive factors of the peak and core religious experience is the type of perception necessary for such an experience to occur. Peak experiences are not something one can command on cue or by effort alone. Rather, it appears that they "happen to you". Therefore, they are not contingent upon the normal attentive, perceptual processes that one has in hand. Peak experiences, it seems, occur when one is more passive, when one's attention is more free-floating or when one is engaged in B-cognition.¹

B-cognition is much more passive and receptive than active, although, of course, it never can be completely so. The best descriptions that I have found of this "passive" kind of cognizing comes from Eastern philosophers, especially from Lao-Tse and the Taoistic philosophers. Krishnamurti has an excellent phrase to describe my data. He calls it "choiceless awareness" ... It is gazing rather than looking, surrendering and submitting to the experience

(Maslow, 1964, p. 87).

This is very different from the ordinary cognitive process.

Ordinary cognition is a very active process. It is characteristically a kind of shaping and selection by the beholder. He chooses what to perceive and what not to perceive, he relates it to his needs and fears and interests, he gives it organization, arranging and rearranging it. In a word, he works at it

(Maslow, 1964, p. 86).

There are then, two ways of cognitively interacting with the environment. Besides actively shaping his perceptions, it appears

1. In this description, Maslow is talking about a type of perceptual style and experience to which he gives the name B-cognition, or cognition of being. Thus, another term for peak experience is B-cognition.

that man also has the potential to "let go" of his ordinary cognitive processes from time to time and give himself up to a more passive, receptive kind of cognizing where he is in a position to experience a higher integration of his faculties. This second, passive kind of cognition is associated with that type of transcendent experience which is more properly designated as "peak" and/or "core religious experience".

We have seen that so far as the peaks are concerned, apparently most of them are receptive phenomena. They invade the person and he must be able to let them. He can't force them, grasp them, or command them. Will power is useless; so is striving and straining. What's necessary is to be able to let go, to let things happen. I can give you some very homely examples to show what I mean. It was Angyal who told me that, in his experience, really obsessional people couldn't "float" in the water. They just couldn't let go, or be non-controlling. To float you must trust the water. Fight it and down you go. The same is true for urination, defecation, going to sleep, relaxing, etc. All these involve an ability to let go, to let things happen. Will power only interferes. In this same sense it begins to look as if the intrusion of will power may inhibit peak-experiences (Maslow, 1962, p. 17).

Maslow has attempted to explain why this should be so by saying, essentially, that transcendent experience of this type is a break from the rubricization, or categorization, of our past awareness.

All experiences, all behavior, all individuals can be reacted to by the psychologist in either of two ways: He may study an experience or a behavior in its own right, as unique and idiosyncratic, i.e., as different from any other experience or person or behavior in the whole world. Or he may respond to the experience not as unique, but as typical, i.e., as an example or representative or one or another class, category, or rubric of experience (Maslow, 1954, p. 203).

If we let go of our attention, then, we are in a position, at least potentially, to experience new perceptual or cognitive patterns that might not have emerged otherwise.

It may be well to point out here that "letting go" is not necessarily a less energetic form of attending. In some ways the normal process of rubricization takes place partially because it is "energy saving" and allows us to deal with a lot of material in a systematized way. The "letting go" or passive attending that Maslow is talking about is akin to Freud's "free-floating attention" and it simply gives us another way to approach reality.

The type of passive perception that Maslow talks about has been taken up by others. Naranjo and Ornstein (1971) have taken up the implications of this theme in commenting on Jerome Bruner's work on perceptual readiness.

Our experience is...an interactive process between the external world and the continuously revised models of our categories. We can select input, tune ourselves to relevant input, categorize, and finally construct our awareness from these and from our past experiences, our associations, thoughts and emotional states

(Naranjo and Ornstein, 1971, p. 189).

It would follow, then, from this interactive process that awareness is not merely a registration of the external world, but more in the nature of a construction, both from the person's own internal validity and the reality "out there". This is important because

If awareness is a construction and not a "registration" of the external world, then by altering the nature of the construction process our awareness can be changed

(Naranjo and Ornstein, 1971, p. 172).

This "altering the nature of the construction process" has been called by Diekman (1966) the process of "de-automatization". This process, as outlined by Diekman, gives one of the better explanations for the technique or the process associated with shifts in perception that can account for mystic experience and unitive consciousness.

Along with Maslow, Bruner, and Ornstein who talk of active or ordinary cognition, or structured experience, Diekman (1963) makes the point that "perceptual and cognitive structures require the nutriment of their accustomed stimuli for adequate functioning" (p. 331-332). However, he proposes two techniques that can produce de-automatization, namely what he calls renunciation and meditation. Briefly, renunciation can be viewed as a technique for breaking down the ordinary structures of cognition, and meditation as a focussing of attention in a new and different way that would result in an altered mode of perception.

Renunciation is understood by Diekman to mean the putting aside of normal cognitive stimuli, stimuli that would support the normal cognitive structures.

Meditation, as the other side of the coin, is seen by Diekman as the technique of concentrating on a specific object of thought until its "reality" stands forth in a different way.

In order to substantiate his explanation, Diekman undertook an experiment in which he instructed subjects to look at a blue vase. They were told that it was to be an experiment in concentration; and they were merely to try to see the vase as it existed

in itself without analyzing or thinking about the vase, that is, without giving way to thoughts about what it was made of, what it had in common with other vases, etc. After twelve sessions of fifteen to thirty-five minutes each, subjects who focussed on the vase in this way reported a perception of the vase somewhat altered. It seemed more "vivid", luminous, and one subject reported an experiencing of "merging" with the vase. Most felt that less time had elapsed than there actually had, and that they had experienced a quality of perception that was difficult to put into words (Diekman, 1963, p. 330).

This altered perception mirrors some parameters of the peak experience. More important for our purposes, the process of renunciation and meditation, as understood by Diekman, is a process that can be analysed and studied.

The subjects of the meditation experiment quoted earlier reported that a decrease in responsiveness to distracting stimuli took place as they became more practised. They became more effective, with less effort, in barring unwanted stimuli from awareness. These reports suggest that psychological barrier structures were established as the subjects became more adept. EEG studies of Zen monks yielded similar results. The effect of a distracting stimulus, as measured by the disappearance of alpha rhythms, was most prominent in the novices, less prominent in those of intermediate training, and almost absent in the master. It may be that the intensive, long-term practice of meditation creates temporary stimulus barriers producing a functional state of sensory isolation. On the basis of sensory isolation experiments it would be expected that long-term deprivation (or increased variability) of a particular

class of stimulus "nutriment" would cause an alteration in those functions previously established to deal with that class of stimuli. These alterations seem to be a type of de-automatization...Thus, renunciation alone can be viewed as producing de-automatization. When combined with contemplative meditation, it produces a very powerful effect (Diekman, 1963, p. 332).

Diekman's theorizing, then, helps to clarify the first of three points to look at in differentiating the concept of core religious experience. In the first place, the kind of transcendent experience that can more appropriately be called peak and/or core religious experience is defined by the type of cognitive process with which it is associated. The kind of passive cognition which Maslow describes as a prerequisite for B-cognition can be achieved through the techniques described by Diekman as renunciation and meditation. These techniques may be said to break through the previously automatized or rubricized cognitive patterns of day to day interaction and lead to an altered state of awareness.

Secondly, the resulting altered state of awareness may also be differentiated along a continuum of intensity. It would appear from Maslow's writings that peak experiences may be an altered state of consciousness that is on a continuum of mild to intense, whereas the core religious experience seems to be of a more intense nature.

One last word. It must by now be obvious to those who are familiar with the literature of mystical experiences that these peak experiences are very much like them, and overlap them but are not identical with them. What their true relationship is, I do not know. My best guess is that they are different in degree but not in kind (Maslow, 1962, p. 18).

Religious experience in general, as a type of experience defined primarily by its content, can be on a continuum from mild to intense. However, this paper, is confined essentially to core religious experience which may be understood as experience of a more intense nature.

The third area, then, is that of content or meaning of experience. As Maslow noted, there are many types of peak experiences depending on what their "trigger", or source, is and on the interpretation given to them. There is the experience of transcending oneself associated with childbirth, with orgasm, with a nature scene, or even certain drugs. These experiences also, may be more or less intense and may result in different kinds of interpretation as to what the experience meant. This has led to some attempts to classify peak experiences in different ways.

From the psychological point of view, the most concrete attempt to classify peak experiences was undertaken by Thorne (1963). He made six major classifications based on protocols collected in response to two statements. The first statement asked for an open-ended response to "The most exciting experience of my life was when...", and the second statement asked for an answer to "What is the highest (most fulfilling) experience you ever had in your life?"

The classification Thorne reported consists of the following categories:

- I. Sensual Peak Experiences.
 - A. Pleasurable sensations (from discrete modalities such as vision, hearing, smell, taste, touch)
 - B. Sexuality (erotic zone sensitivity, climatic orgasm)

- II. Emotional Peak Experiences.
 - A. Love (sexual, parental, for animals)
 - B. States of Euphoria (extreme good feeling, elation)
 - C. Humour
- III. Cognitive Peak Experiences. Adventures of the Mind.
 - A. Understanding and discovery
 - B. Invention and creativity.
- IV. Cognitive Peak Experiences. Man against Destiny.
 - A. Growth experiences, joy in growing up, finding oneself, becoming of age.
 - B. Man in control of himself, performing at his highest.
- V. Actualization of the Self. Coming to be what one can become.
 - A. Coming to like and respect the self.
 - B. Reorganization of the self.
- VI. Climax Experience. Moments of extreme beauty, Fulfillment, Joy, "full living".
 - A. Experiencing the ultimate, man in communion with nature.
 - B. Spiritual crises; fortitude born out of the white heat of adversity.
 - C. Orgastic experiences.
(Thorne, 1963, pp. 249-250).

Such an approach to classification can be debated, and does at times seem to suggest more clarity than is actually there. For example, it is difficult to differentiate between sensual peak experiences of a sexual nature in Category I and orgastic experiences in Category VI, except perhaps, on the continuum of intensity. However, what such a classification does make apparent is that there are a variety of experiences of a transcendent nature that may be called peak experiences. Among this variety are certain

experiences that are interpreted within a theological framework and, therefore, can be designated as core religious experiences.

Looking at the theological literature on intense religious experience, as contrasted with the psychological literature, one of the best attempts to categorize the core religious experience is in the writings of Stace (1960). Taking an historical approach, Stace summarized the defining features of the universal core of mystical experience which he says is "natural and non-creedal" and is apart from the various religious interpretations given to it which may vary from faith to faith.

This core religious experience he describes as:

1. a unitary consciousness
2. timelessness and spacelessness
3. sense of objectivity or reality
4. blessedness, peace
5. feeling of the holy, or sacred, or divine
6. sense of paradoxicality
7. alleged by mystics to be ineffable

(Stace, 1961, Summary: Chapter 2).

It is clear that these characteristics can be almost identically compared with some of the characteristics of the peak experience as enumerated by Maslow, and indeed, some of their sources overlap. The point, therefore, is not so much that core religious experience is an essentially different experience than the peak experience, but rather the core religious experience is a type of peak, transcendent experience that is arrived at through the "structure of some sort of theological schema". As Diekman points out, it is this theological schema that "is used to interpret and organize the experiences that occur" (Diekman, 1966, p. 328).

It is proposed that such an understanding of core religious experience is an appropriate and accurate use of the term within the framework of Maslow's writings. It can be defined operationally as an experience encompassing most of the following qualities.

It is an experience that is qualified by the fact that it is not actively sought or anticipated but rather is a matter of "surprise".

It is an experience of great intensity, lasting only for a relatively short period of time.

It is experienced as a consciousness outside of the "normal" mode of human cognition and is, therefore, experienced as an awareness of a supra-personal presence and/or God.

Within the reports, or descriptions, submitted by the subjects, at least four of the six following parameters must be met to a sufficiently high degree:

1. The whole universe including one's place within it is perceived as an integrated and unified whole;
2. A feeling of being disoriented in, and/or, unaware of time and space;
3. An experience of being completely and totally absorbed in the object of one's cognition;
4. An experience of being filled with wonder, awe, and humility;
5. An experience of being overwhelmed with a sense of beauty and goodness;
6. An experience seen as ineffable or difficult to describe in ordinary language.

In summary then, three terms "transcendent experience", "peak experience", and "core religious experience" appear in Maslow's writings.² However, a clearer conceptualization is brought into focus if transcendent experience is seen to be the more generic term. Within that, peak experience may be more universally applied to that type of experience which arises out of a "passive", reflective type of perception and has the parameters of unitive consciousness, loss of space and time, etc., as listed above. Religious experience, and particularly core religious experience, within Maslow's conceptual framework is that type of peak experience that is interpreted within a theological schema and is of an intense nature.

Maslow's concern, as a scientist, was to study the experience as a natural phenomena and to take it outside the overbeliefs of any of his subjects. Therefore, Maslow preferred the term peak experience. Such an approach to man's subjective experience required that kind of objectivity, and it seems, in fact, that such an objective view has given new light and impetus to the whole area of altered states of consciousness.

Certainly, as Bertocci (1971) reminds us, the psychologist as psychologist must try to separate out his own overbeliefs from any interpretation he may make of his data. However, it seems that one must define the experience in terms of overbeliefs (in fact, it is

2. For a further substantiation of this position, see McMahon (1972), in particular, pp. 74-84.

impossible to do otherwise) when the psychologist is studying the congruence between the subject and his experiencing process.

For example, if a person knowingly puts himself or herself into a state of sensory deprivation, as scientifically determined, and consequently begins to experience flashes of light or colour, or other hallucinatory content, that person is not likely to think of divine visitations or a schizophrenic break, but will instead look for an explanation in terms of a scientific understanding of the perceptual processes involved. On the other hand, if one is from an "aboriginal" culture and smoking certain leaves is believed to cause one to partake of the power of the gods, then subsequent feelings of power (either through the chemical action of the leaves, or the power of suggestion) will be attributed to divine visitation.

This undoubtedly holds true for experiments such as Pahnke's (1966, pp. 175-208). In a double blind drug experiment, he administered 30 mg. of psilocybin, and a placebo of nicotinic acid to Harvard Divinity School students just before a two and one-half hour religious service in the University Chapel. Pahnke had defined a nine category typology of mystical experience and found that "under conditions of our experiment, those subjects who received psilocybin experienced phenomena which were apparently indistinguishable from, if not identical with, certain categories defined by my typology of mysticism." (Pahnke, 1966, p. 201). Pahnke also found that there were personality changes in his subjects, but this is an unanswerable question (because inseparable)

as to the changes being due to the experience, as such, or to the theological context and subsequent meaning the experience had.

The object of the exercise in looking at the question of experience and meaning (for the individual) is not to be led up against the impossible, but rather to point out the desirability of studying a particular type of peak experience in relation to its context as proposed in studying the predisposing factors relating to the role of core religious experience in the process of self-actualization, and the effects of such experience on personality growth.

Transcendence and Self-Actualization

Core religious experience involves the process of de-automatization of the cognitive process. This de-automatization permits the possibility of a more unitive consciousness to emerge. Maslow argued that such an experience of integration of the faculties of the person, however momentary, resulted in the person becoming more self-actualized. In fact, self-actualization was redefined by Maslow in terms of the articulation of peak experiences in the subjects he studied.

In other words, any person in any of the peak experiences takes on temporarily many of the characteristics which I found in self-actualizing individuals. That is, for a time they become self-actualizers. We may think of it as a passing characterological change if we wish, and not just as an emotional-cognitive-expressive state. Not only are these his happiest and most thrilling moments, but they are also moments of greatest maturity, individuation, fulfilment - in a word, his healthiest moments....This makes it possible for us to redefine self-actualization in such

a way as to purge it of its static and typological shortcomings, and to make it less a kind of all-or-none pantheon into which some rare people enter at the age of 60

(Maslow, 1968, p. 97).

In the above quote three ways that Maslow used the term self-actualization can be differentiated. In his first efforts to capture some of the common characteristics of people he deemed healthy, or well-functioning human beings, Maslow listed several qualities that, in fact, became a kind of typology of self-actualization. In the beginning, it appears that Maslow looked upon the attainment of these qualities as a kind of end-state which one achieved in old age. Thus, self-actualization emerged as a goal or life achievement, in which a person appears to have a

superior perception of reality; increased acceptance of self, of others and of nature; increased spontaneity; increase in problem-centering; increased detachment and desire for privacy; increased autonomy and resistance of enculturation; greater freshness of appreciation and richness of emotional reaction; higher frequency of peak experiences; increased identification with the human species; changed (the clinician would say improved) interpersonal relations; more democratic character structure; greatly increased creativeness; certain changes in the value system

(Maslow, 1968, p. 26).

This first "understanding" of the concept of self-actualization left both methodological and theoretical criticisms in its wake.

Theoretically, Frankl argued that

self-actualization, if made an end in itself, contradicts the self-transcendent quality of human existence. Like happiness, self-actualization is an effect, the effect of meaning fulfilment (Frankl, 1969, p. 38).

Furthermore, Frankl argued against self-actualization theory as he felt "it is a severe and grave misinterpretation of man to deal with him as if he were a closed system" (as self-actualization theory does). (Frankl, 1966, p. 97).

A partial response to this criticism can be argued from Maslow's affirmation that

self-actualizing people are, without one single exception, involved in a cause outside their own skin, in something outside of themselves. They are devoted, working at something, something which is very precious to them - some calling or vocation in the old sense, the priestly sense

(Maslow, 1967, p. 280-281).

Such an understanding of vocation appears to come close to Frankl's open-ended search for meaning. Again, at a later period, Maslow talks of ultimately transcending the need for self-actualization.

The main thrust of Maslow's reply to this type of criticism would probably be that this difference is one of theory and is important only as long as it does not "obscure or deny the facts". What is important at this time is that for Maslow the empirical pursuit of "facts" was the more important thing. This pursuit eventually led Maslow to have to contend with the problem of the notion of "self" in self-actualization and other conceptual articulations. However, these problems will be looked at as they developed within his self-actualization concept.

Methodologically, the obvious criticism levelled at this notion of self-actualization, particularly as an end-state, or

goal, is that of biased sampling. As Smith points out, "his empirical definition of psychological health or self-actualization thus rests at root on his own implicit values that underlie this global judgment" (Smith, 1973, p. 24).

In other words, Maslow studied people whom he deemed were self-actualized and then enumerated their characteristics. Again, the only defense against such a criticism is to point out that Maslow looked upon the concept of self-actualization as a hypothesis and one which he subsequently set out to validate. For the present time, self-actualization may be looked upon as an convenient construct.

The second way in which Maslow used the term "self-actualization" was to describe the momentary, or transitory, state arrived at in peak experiences. Maslow found that the cognition in peak experiences was nearly identical to that state which he found in self-actualized people and therefore he concluded that peak experiences were in fact, moments of self-actualization. Although these moments appeared to have captured the life achievement known as self-actualization, they also seem to have served the purpose of re-emphasizing in Maslow's mind the developmental sequence through which one becomes self-actualized.

It was through his studies of peak experiences and the similarity of these transitory experiences with the more permanent characteristics of self-actualization that led Maslow to a third articulation of self-actualization more as a process. Between 1954 and 1968, he had moved to the conclusion that the presence

of peak experiences

makes self-actualization a matter of degree and of frequency rather than an all-or-none affair, and thereby makes it more amenable to available research procedures

(Maslow, 1968, p. 97).

Self-actualization, then, became more articulated in Maslow's subsequent studies as a process rather than a life achievement or end-goal. That is, the self-actualizing man as Maslow first studied him, was the person who had to a high degree fulfilled his deficiency needs and needs for belongingness and self-esteem. While it remains true that the characteristics of self-actualization appear to be more crystallized at one end of the motivational hierarchy, nevertheless it is perhaps more accurate to say that Maslow shifted his emphasis from self-actualization as a motivational source after the other needs are satisfied to self-actualization as the need to become everything that one is capable of becoming.

This need to actualize one's self, to "become all that one can be", tends more to be openended and to suggest many avenues for becoming self-actualized. Thus, as Maslow suggests, one doesn't have to look for "rare specimens" within the human race to study self-actualization, but one can look at its development along a continuum, and in the many ways that are open for one to transcend oneself. It is this process of self-actualization that Smith suggests is worth studying

I should like to salvage the process of self-actualization. I would interpret it as characterising a person's actions or experiences when they are in congruence with his

existing self (rather than dictated by external constraint or conformity, or driven by inner compulsions that are alien to the self.) Such actions or experiences feed back in their consequences to enrich the self, to express its values, or to further its enterprises. This I take it is the crux of Maslow's concept. It is also a major part of his rationale for psychological growth. I think that it is important and that a more adequate psychology of the self can build upon it
(Smith, 1973, p. 31).

Smith's insight clarifies Maslow's thinking. Rather than conceptualizing certain categories of lesser motivational sources that one somehow systematically transcends it is perhaps more helpful to think of self-actualization as an overriding process in which a person becomes more and more self-actualized whenever he engages in actions that are congruent with his existing self. That is, if one has the capacity to be intelligent, then one should study to actualize that intelligence. If studying, on the other hand, is incongruent with one's capabilities, then it will only lead to frustration, or some other greater "pathology".

In developing other self-actualizing qualities, Maslow suggests that they may be attained by "experiencing fully, vividly, selflessly, with full concentration and absorption" (Maslow, 1967, p. 282). Such honesty in experiencing and the courage to acknowledge one's experiences are a necessary step, he would argue, in minimizing the differences between the culturally determined self and authentic experience. The extent of the difference between the socially determined self and one's own inner experiences represents the amount of "repression" and therefore, blockage on the way to the actualization of the self.

This notion of experiences that are in congruence with the existing self leads to the main thrust of research that has been done in looking at those actions or experiences that further the parameters of self-actualization.

It is the model of openness to one's own experience and, subsequently, openness to others that forms the basic constructs of most encounter and sensitivity groups within the humanistic approach to personality growth or self-actualization.

In the first place, it might be hypothesized that psychologically healthy people are more ready to "let go" of their defenses, or to risk getting in touch with themselves and with others. Also, such a notion would find support in Jourard (1968) who contended that healthy people are more ready for self-disclosure. Gilligan's 1974 study shows that a group of fifty volunteers for a week-end sensitivity group had greater levels of self-actualization as measured by the Personal Orientation Inventory, than did fifty-five controls drawn from the same general population. Those that volunteered had greater inner-directedness, were more existential in their thinking, and had greater spontaneity in expressing their feelings behaviorally.

The process in all these groups appears to be one of opening a person up to his or her own experience and then through acceptance of that experience and feedback from others, to move forward based on a more clearly defined integration between one's actual experience and one's image of oneself.

Much of our experience of ourselves has been "predetermined" for us in terms of introjected values from our parents, friends, and culture, and may or may not be congruent with our own inner experience. These introjected values and manners of behaving have vastly rubricized our perceptions and experience of ourselves as well as other events. Gendlin (1962) and Rogers (1961) of the humanistic stream, would propose that it is through shifts in our perception, occasioned either by the group or by the therapist interaction that brings us to greater congruence with our own experiencing process and subsequent personality growth.

Campbell summarizes this position in one of the major proposals of his research.

The experience of congruence with the experiencing process, as developed by Carl Rogers and Eugene Gendlin, brings its own perceptual shifts and experience of unification as an individual proceeds along the path of becoming a more fully functioning person. However, these shifts in perception flow out of more profound transformations in the personality and sense of self (Campbell, 1972, p. 210).

Maslow's rationale of going beyond oneself in terms of relatedness would suggest a second hypothesis, namely that those who undergo a sensitivity or encounter session should become more self-actualized. Again, Gilligan (1974) found this to be true in that, immediately after the encounter week-end, his fifty subjects were more inner-directed and showed greater sensitivity to their own needs and feelings than before the week-end. Also, after a six week follow-up they still retained higher levels of inner-directedness and positive feelings of self-regard.

These findings of Gilligan are typical of studies undertaken by others such as Culbert, et. al., (1963) and Venino (1974) who also found that encounter group approaches do facilitate an increase in self-actualization as measured by the Personal Orientation Inventory. As well, Seelig (1974) found that self-actualization was facilitated across three group models, namely, a Rogerian Basic Encounter Group, a Gestalt group, and an Elimination of Self-Defeating Behavior Group.

Again, what seems to be the important factor in these studies is that they support the notion that self-actualization is possible when a person is able and willing at a particular time, to let go of his or her usual defensive pattern and risk going beyond themselves through being open to their own experience, and to others.

Self-actualization, in this sense, involved "active" cognition (as we have discussed it in Section I). It is self-actualization through mastery or through actively engaging one's self or one's environment. This third way of looking at self-actualization - as a process - suggests a parallel in Maslow's thinking with his enlargement of the concept of transcendent experience. By 1971, transcendence was more clearly articulated by Maslow as "going beyond oneself" in any sphere.

At one end of the continuum, it could simply mean running faster than one previously could, relating better with people, etc. Such efforts involve active choices, choices that could lead to greater self-actualization.

Self-actualization is not only an end state but also the process of actualizing one's potentialities at any time, in any amount. It is, for example, a matter of becoming smarter by studying if one is an intelligent person. Self-actualization means using one's intelligence...Self-actualization can consist of finger exercises at a piano keyboard. Self-actualization means working well to do the thing that one wants to do
(Maslow, 1967, p. 282-283).

At the other end of the continuum, self-actualization or transcendence can mean a going beyond which is seemingly apart from one's self determination. What has been said about "actively" pursued self-actualization through interaction with others, can also be applied to self-actualization through B-cognition as a much more specific and intense de-automatization of one's normal perceptual process.

In this regard, Maslow saw peak experiences, and/or core religious experiences as related to the process of self-actualization in at least three general ways. In the first instance, it appeared to Maslow that one would already have to have achieved a relatively high level of self-actualization for peak experiences to occur. Transcendence in the sense of peak experiences involves a letting go of the normal, rubricized interaction with the world. However, it would seem that if a person is unsure of himself, of his own identity, he would be less likely to let go, or to surrender himself voluntarily to his environment in the hope of achieving a fuller knowledge.

This security to leave oneself open, to risk, we have seen already operative in those who have gone into an encounter or

sensitivity group situation. In terms then of leaving oneself open to a condition in which one's mode of cognition is altered in an even more drastic way would seem to imply an already established secure identity.

Maslow's hypothesis, that healthier people have more peak experiences, can be examined in terms of the process of de-automatization of the perceptual mode. In this connection, Diekman articulated two techniques for achieving de-automatization of the perceptual processes, namely, renunciation and meditation (cf. pp. 9-10). Reflecting on these techniques, it becomes apparent that renunciation involves a withdrawal from competing stimuli. In part, this requires that the person within himself be relatively conflict free or at least have enough ego-strength to be able to set aside stimuli that might otherwise overwhelm the mind or keep it fixed on certain rubricized thought patterns. The second technique, meditation, involves a concentration on an object or event in a nonanalytical way. Again, even the ability to concentrate involves a minimum of competing anxiety, etc., at least for that period of time. Thus, the cognitive process that seems to underlie the occurrence of peak and/or core religious experience would presuppose a person who is relatively self-actualized or is relatively well-functioning in terms of psychological health.

A second way in which Maslow observed the relationship between self-actualization and peak or core religious experience was in seeing the latter as a transitory state of the former.

In fact, peak experience became one of his definitions for the self-actualized state, even if one only experienced it temporarily.

The third observation that Maslow made in terms of the relationship between self-actualization and peak or core religious experience was that those who had peak experiences became more self-actualized by virtue of their having been immersed in such an experience.

To have a clear perception (rather than a purely abstract and verbal philosophical acceptance) that the universe is all of a piece and that one has a place in it...can be so profound and shaking an experience that it can change the person's character and his Weltanschauung forever after
(Maslow, 1964, p. 59).

In summary then, Maslow observed that healthy self-actualizers tended to have more peak and/or core religious experiences, and such experiences in turn enabled them to become more self-actualized. In the case of core religious experience, it is in its essence a moment of experiencing self-actualizing qualities. For such a type of experience to take place, however, one has to be in a state of "passive cognition" or "choiceless awareness". This seems to suggest that one is more likely to achieve such a state by seeking a certain level of solitude within one's environment so that one's attention can become more focussed and less bombarded with competing stimuli. If solitude is a condition for peak or core religious experiences, then, it would seem to follow that those who enter into it would have to possess a certain level of psychological health in order to attain the "focus" necessary for

peak or core religious experiences to occur. Otherwise, it could be hypothesized that people who are obsessive or anxious would run the risk of becoming increasingly so if they did not have a more "active: external environment with which to interact. On the other hand, those who are seeking withdrawal as a means of defense, that is, closing themselves off, rather than opening themselves to new experiences, would run the risk, perhaps, of being either overwhelmed by internal stimuli (i.e. fantasy) or of becoming depressed.

As stated earlier, in the case of risking to open oneself to experience in an encounter group or sensitivity group, those who volunteered for such a group were more self-actualized than controls (Gilligan, 1974). This would suggest, perhaps, that a person who is more comfortable, or free, within his existing experience to risk opening himself up to new experience so that personality growth can take place in terms of congruence within the person. The "readiness" to take on new forms of experience or action that are congruent with the existing self is another link in the process of self-actualization.

Humanists such as Maslow (1968) would argue that all persons in one sense, are on the way to becoming all that they can become, but at any given moment if they force or have something forced upon them that is outside of their "readiness", it is likely to be more harmful than good. This is not to say that a person cannot be in a relatively pathological state and still have meaningful encounter or a peak experience from which they derive much benefit. Indeed, this has been observed to happen. However, it appears that seeking to bring about self-

actualization beyond one's present level by engaging in certain prescribed rituals or techniques can be misleading or even counter to genuine personality growth. Specifically, in relation to core religious experience, Campbell makes the point that

what is often interpreted as unitive consciousness can be forced on the organism in much the same manner that introjected social values can be taken in--but in each instance, neither represents the real process of experiencing of the person himself. Rather, what is introjected or forced on the organism is present as a kind of alien object. Furthermore, if an individual becomes habituated to discovering his values or unitive consciousness through introjection or looking outside of himself (in this instance to a specific technique for de-automatization), then such a person becomes less and less open to the meaning of his own experience

(Campbell, 1972, p. 221).

It is really a question of technique that can alter one's perceptual field and a question of meaning which can alter one's personality. The self-actualized person can risk and enter into solitude because that is congruent with where he is at that time. Diekman, himself, in talking about the technique of de-automatization suggests that

Enduring personality change is made more likely by the emphasis on adapting behavior to the values and insights associated both with the doctrinal structure and with the stages of mystical experience

(Diekman, 1966, p. 328).

It appears that technique arbitrarily engaged in can bring about a "forced transcendence". This not only applies to Diekman's techniques, but other techniques as well including chemical ecstasy, alpha biofeedback, or other sensory deprivation strategies.

Maslow also warns us that a person may "run the danger of turning away from the world and from other people in his search for triggers to peak-experiences, any triggers...instead of being temporarily self-absorbed and inwardly searching, he may become simply a selfish person" (Maslow, 1964, p. viii).

For much the same reason, it is interesting to note that both Carl Jung (1958) and William James (1958), two of the writers within the realm of psychological thought most interested in transcendent experiences, were reluctant in their time, to engage in the techniques of the Eastern world. Part of their fear was due to western civilization's emphasis on technique alone, which they saw as another form of outward control. Along this line in a recent article, Eido Shimano strongly concludes that only researchers who are personally immersed in Zen can validly attempt to gain a "true understanding of the different perception and experience of reality to which Zen gives access" (Shimano, 1975, p. 1300-1302).

A person may become trapped in technique and achieve just another form of rubricization, or another perceptual mold. This understanding in the form of a warning has surfaced in recent literature. Ornstein (1976) warns against being able to distinguish between the "content" and the "container", pointing out how Western society, looking for meaning, is vulnerable to charlatans who would sell it technique. Again, in a recently published book, Bharati (1976) talks about the context and pretext of modern mysticism in much the same theme. Seeking through technique alone can destroy the intrinsic meaning.

For example, looking at Pahnke's experiment in giving psilocybin to divinity students before a two and one half hour church service, it was concluded that the drug helped to bring about the unitive experience. Personality change, which he also found, may or may not have been the result of the chemical alterations, or the chemical alteration plus unitive experience, plus religious interpretation. If a unitive experience suggests to a person that he or she is loved by God with whatever that means, then such resulting conviction may, for example, be the source of immense personality change.

It is not that technique or chemical ecstasy cannot bring about personality change, but to look at such change apart from the meaning given to such experiences by the person may be to miss the more important data. The question becomes, rather, what effect does the experience have on one's personality given his present psychological status and the cultural context of the experience.

In summary, then, there are three ways in which Maslow used the term self-actualization; namely, as an end-state, as a temporary state in peak experiences, and finally as a process. In coming to the importance of self-actualization as a process, Maslow's conceptualization seems to run parallel to his enlarged concept of transcendence. In fact, it becomes increasingly clear in Maslow's writings that man becomes self-actualized in any sphere of his life through transcendence. However, man's "going beyond" himself must always be congruent with his existing self with the view

that anything that man forces upon himself, or has forced upon him, will, only, ultimately, alienate him further from his own experience.

Self-actualization, then, can be achieved through mastery. A person can actively interact with his environment, can strive to excel, or to go beyond himself, physically, and cognitively. This can be referred to as transcendence through mastery. On the other hand, there is a passive, transcendence, a type of non-striving, non-interfering interaction with the environment. Both these modes of operation seem to require the dynamic of openness within the existing personality structure. That is, within the process of self-actualization, one has to be fairly self-actualized before one can risk new, growth experiences that will lead to further self-actualization. Finally, it would appear that transcendent experiences of any kind have to be congruent with the existing personality, or the attempts, either through striving, or through surrender, are liable to lead to frustration and further alienation of the person from his own experience.

Summarizing Maslow's observations and hypotheses thus far, brings out a theoretical and hypothetical area that is as yet unclear. That is, in the process of self-actualization, is transcendence through mastery and transcendence through "passive" cognition at different points, or levels, on a self-actualization continuum? Do such different modes of transcendence require different levels of self-actualization or different patterns of self-actualizing qualities? Or can one move from one type of transcendence to another simultaneously given environmental

conditions that favour one or the other? Some of these questions hinge on Maslow's concept of the "self" in the process of self-actualization. Since this is an area that needs to be differentiated and expanded upon, the next section will look at Maslow's concept of the self.

Transcendence and the Concept of the Self

Maslow, writing shortly before his death, expressed more precisely his conclusion that there are two kinds of self-actualizing people.

I have recently found it more and more useful to differentiate between two kinds (or better, degrees) of self-actualizing (SA) people, those who were clearly healthy, but with little or no experience of transcendence, and those in whom transcendent experiencing was important and even central

(Maslow, Theory Z, 1969, p. 31).

The distinction Maslow comes to is the distinction between those who "transcend" themselves primarily through "doing" and those who seek fulfillment to a larger degree through "meditation". Of the non-meditative self-actualizers he says

such people live in the world, coming to fulfillment in it. They master it, lead it, use it for good purposes, as (healthy) politicians or practical people do. That is, these people tend to be "doers" rather than "meditators" or contemplators, effective and pragmatic rather than esthetic, reality testing and cognitive rather than emotional and experiencing, perhaps mesomorphic rather than ectomorphic

(Maslow, Theory Z, 1969, p. 32).

In talking about two types of self-actualizing people, Maslow is also, it seems, talking about two concepts of the self. Indeed, Maslow refers to the Apollonian aspect of the self and to the

Dionysian aspect of the self. (Maslow, 1971, p. 346). For him, the Apollonian self is the orderly version of self-actualization and, as Smith comments, this is a version of the self in which

Actions "actualize" the self when they are done reflectively and responsibly to correspond to the value priorities that comprise the core of the person's self-accepted identity. Self-actualization is the cumulative product of such action, and is accompanied by self-understanding (Smith, 1973, p. 26).

On the other hand, the Dionysian version of self-actualization is seen by Maslow to be impulsive. If people are receptive or non-striving, self-actualizing experience erupts from within. Again, as Smith states, this version of the self is akin to Jung's "iceberg" conception in which "the true essential self, the source of creativity, of authenticity and value, lies mostly outside of awareness".

There is not a clear cut concept in Maslow's writings as to the exact meaning of the self. It was a concept Maslow continued to struggle with. On the one hand, in writing about Theory Z, Maslow placed his transcendent self-actualizers, or "meditators" on a higher continuum than "merely healthy self-actualizers" (Maslow, 1969, p. 32). This may be interpreted as the Dionysian version, or impulsive version, of the self being viewed as a "superior" level of self-actualization.

At another point, Maslow seemed more akin to Angyal's model of personality which encompasses the two diverse tendencies in man. The first tendency in man is acknowledged by Angyal as being the "trend toward increased autonomy" and it expresses itself in

spontaneity, self-assertiveness, striving for freedom and for mastery" (Angyal, 1956, p. 45). The second tendency is one in which man "seems rather to surrender himself willingly to seek a home for himself in and to become an organic part of something that he conceives as greater than himself" (Angyal, 1956, p. 45). It appears in Angyal's theory that the second tendency keeps man open-ended in the pursuit of actualization. The tendency to surrender, to become part of something greater, "rescues" man from mere self-determination.

Similarly, when talking of the integration of the Apollonian and Dionysian, Maslow states that

the empirical fact is that self-actualizing people, our best experiencers, are also our most compassionate, our great improvers and reformers of society, our most effective fighters against injustice, inequality, slavery, cruelty, exploitation (and also our best fighters for excellence, effectiveness, competence). And it also becomes clearer and clearer that the best "helpers" are the most fully functioning human persons
(Maslow, 1971, p. 346).

In other words, the "best" people are those who are simultaneously "meditators" and "doers". Beyond this point, one gets into a rather vague or moot area, if only because the data is not sufficient to further clarify the issue. In the tradition of Maslow, the problem is presented and it awaits the further collection of data upon which to build the solution.

With this in mind, then, the present study has been specifically designed to study the spontaneous (non-drug induced) emergence of core religious experience in terms of the conditions under which

it is most likely to come about, and in terms of the effect it has on personality, taking into consideration the existing personality of those undergoing such an experience.

Summary and Hypotheses

With a view to making an empirical contribution towards some of the controversial interpretations surrounding intense, or core religious experience, and its place in personality growth, this research has been based upon the research and constructs of Abraham Maslow. A critical examination of Maslow's developing concept of core religious experience and its place within the process of self-actualization gives consistency within an already established framework or "hypothesis". As this area of research is relatively new, it seems desirable to explore and to build within such an established set of constructs.

The current research will focus on two major questions that emerge from the larger body of speculation surrounding intense religious experience. The first major question will deal with the conditions that facilitate the spontaneous occurrence of core religious experience; the second major question will deal with the after effects of such experience on personality dynamics.

In regard to the first question, that is, the facilitating conditions underlying core religious experience in a natural (non-drug induced) setting, such conditions can be conceptualized as those "internal" to the person and those that are "external" to the person. The internal conditions in this case, would pertain to the pre-existent personality pattern of the person having such

experiences, and the external conditions would pertain to the degree and type of interaction between the person and his approach to the environment.

In turning our attention to the possible pre-existent personality characteristics underlying the occurrence of core religious experience, from the beginning of his investigations, Maslow found that peak experiences (or core religious experiences) appeared more frequently in psychologically healthy people. These are people who have satisfied to a large extent their lower physiological needs and their security needs, as well as their need to belong. They also possess a sufficiently high level of self esteem. In other words, they are people who can psychologically afford to "let go", or surrender themselves momentarily in the sense that Maslow proposes. They can afford to entertain novel patterns of perception or novel experience without seeking such experiences for their own sake, or as some type of "ultimate" escape from other forms of reality. The fact that they have a clear idea of their own identity is an integral part of their being able to risk temporarily "losing themselves" or going beyond themselves.

But it has been discovered that precisely those persons who have the clearest and strongest identity are exactly the ones who are most able to transcend the ego or the self and to become selfless, who are at least relatively selfless and relatively egoless
(Maslow, 1970, p. 67).

In his observations, Maslow found that core religious experience was more frequent among those who had an inner-directed approach to life and had a high level of self-regard. Therefore,

the first major hypothesis of this study states that those who have more frequent core religious experiences will have a higher level of self-actualization as measured by the Personal Orientation Inventory, than those who do not have such experiences.

Due to their non-defensive stand, healthy self-actualizers are able to stand open to the various possible ways of perceiving their environment. This openness is reflected in the studies by Leach (1962) and Allison (1973) who found that those who had peak experiences had lower dogmatism scores and tended to be higher self disclosers, particularly to significant others.

While flexibility and self disclosure appear to be correlates of healthy self-actualizers and predispose a person to opening or surrendering himself to transcendent experience, the fact is that in his subsequent observations, Maslow theorized about two types of self-actualizing people. He came to the conclusion that there are psychologically healthy or self-actualized people who are more accurately viewed as being "doers" or of pursuing the "mastery" tendency in Angyal's terms; there are others who engage more in transcendent behaviour or seek unitive experiences through a healthy surrendering to their environment.

In considering this observation of Maslow's, we might ask whether there are differences of degree in the personality factors of "peakers" and "non-peakers" with regard to self-actualization; or is the appearance of "peak" transcendent experience due to the stimulation pattern in the environment in which the self-actualized person finds him or herself; or is it some combination of these two factors?

In the case of personality differences between "non-peakers" and "peakers", the latter would, supposedly, be more open to their own inner experiences resulting, perhaps, in greater feeling reactivity, spontaneity and interpersonal sensitivity. In looking for differences between "peakers" and "non-peakers" then, a sub-hypothesis can be made that those who have core religious experiences will show greater feeling reactivity, spontaneity, and interpersonal sensitivity as measured by the Personal Orientation Inventory, than those who do not have such experiences.

To view the occurrence of core religious experience simply as difference in personality dynamics would be to investigate only one aspect of the problem. The conditions that are "internal" to the person are intermeshed with "external" conditions.

For example, in his technique of de-automatization of the perceptual processes, Diekman has isolated two components; namely, renunciation and contemplation. In renunciation, or solitude, there is a weakening of the required "nutriment" supporting ordinary cognitive and perceptual structures (p. 331-332). On the other hand, in contemplation, there is a refocussing of one's perceptual processes on an object, a word, or a mental image to the exclusion of other forms of cognizing, and this is done in a passive, or Taoistic state, on the part of the subject. That is, the subject "surrenders" himself to the object rather than trying to analyse it. This dual phenomena of renunciation and contemplation seems more likely to occur in the retreat state over the rest or vacation state, or the work state. In other words, in the retreat environment one is more likely to have a greater absence of competing stimuli than in

the work environment, or in the "rest and leisure" environment of a vacation. Moreover, in the retreat environment a person is more likely to engage in the process of de-automatization which is characterized by passive contemplation and the renunciation of competing stimuli.

Therefore, the second major hypothesis states that the retreat environment, characterized by the greatest degree of renunciation and the greatest opportunity for contemplation will give rise to the greatest number of core religious experiences; the vacation state with its rest factor and the possibility of letting go to a greater degree, or of being in solitude will give rise to the second highest number of core religious experiences; and the work state with its need to engage in rubricized functioning of the cognitive and perceptual processes to a greater degree will give rise to the least number of core religious experiences.

These conditions are considered primarily from the amount of stimulation engendered and the type of involvement demanded of the subject apart from the personality factors that allow one to "let go", or to put aside pressing needs, etc.

Again, in pursuing the necessity of renunciation and contemplation required to bring about core religious experience, an attempt was made to refine the data surrounding this factor by questionnaires concerning first, the amount of solitude sought in a day by people in the different settings; and secondly, by the type and manner of prayer from a physical and/or cognitive approach that the different subjects engaged in.

In this regard, then, one sub-hypothesis, under the second major hypothesis, would be that those who had core religious experiences will have higher scores on the Daily Diary: Section I which gives a summary of the hours spent in physical solitude, at least, and/or hours free from distracting stimuli.

A second sub-hypothesis would be that those who had more core religious experiences approached or engaged in their hours of prayer by passively entertaining a picture, or phrase in their mind, and/or who attempted to disengage their active cognitive process by focussing on an object.

One of the possible links between the hypothesis that those who have core religious experiences and the internal and external factors facilitating such experiences, may be found in the observation that healthy self-actualizers are more likely to seek periods of solitude, or spend time in passive contemplation.

Campbell gives us a well articulated rationale for hypothesizing this link between core religious or transcendent experience and the internal and external solitude necessary to bring it about

if life has forced us to discover and fight for an identity by being excessively set over-against the rest of reality, hewing out our unique self by resolutely affirming what we are not and hanging on to ground we have gained, then any shift in the delicate balance which hinges on preserving a clear demarcation point between where the subjective I leaves off and the world of objects begins is bound to bring a certain unrest.

The experience is just the opposite, however, for those whose inner security and sense

of self are such that they need not view themselves as a kind of walled fortress, behind which they prepare for the fearsome assaults which life seems to continually make upon them. Their experience of being loved and accepted has sufficiently nourished them so they can risk finding themselves in new ways, resulting in the possibility of actively seeking a wider sense of self that can become a pleasurable and sought after experience

(Campbell, 1972, p. 106).

Given then the observation that only healthy or well defined people can temporarily risk "losing" themselves in a transcendent experience, a third sub-hypothesis states that those who seek a greater degree of solitude within the external environment as measured by the Daily Diary: Section I, will also have higher scores on the Personal Orientation Inventory.

In summary, then, the first major question looks at the conditions that facilitate core religious experience. The pre-existent personality pattern must be in the healthy direction and the environment must allow for withdrawal from competing stimuli, in order that the person can "let go" of his normal, rubricized cognitive functioning.

It was hypothesized that solitude is an essential factor involved in the occurrence of core religious experience. If the person going into solitude was psychologically unhealthy from a clinical point of view, his motives and the effects of his withdrawal on his personality would conceivably be very different than if he were a healthy personality seeking time to be with himself. The question of personality change is related not only to technique and/or environmental manipulation, but also, to the pre-existent personality of the subject.

This leads to the second major question of this study, namely, what is the effect of core religious experience on personality? Because of the great difficulty in studying peak or core religious experience in any kind of controlled setting there is virtually no empirical data to substantiate or clarify the effects of such experiences. As Maslow himself stated, although he had many hypotheses regarding the positive after effects of spontaneous peak experience, he had "no controlled data to present: only general agreement of subjects that there were such effects" (Maslow, 1968, p. 101).

Drawn from the general agreement of his subjects, Maslow put forward some propositions which he deemed were testable. He found that

1. Peak experiences may and do have some therapeutic effects in the strict sense of removing symptoms.
2. They can change the person's view of himself in a healthy direction.
3. They can change his view of other people and his relations to them in many ways.
4. They can change more or less permanently his view of the world, or of aspects or parts of it.
5. They can release him for greater creativity, spontaneity, expressiveness, idiosyncrasy.
6. He remembers the experience as a very important and desirable happening and seeks to repeat it.
7. The person is more apt to feel that life in general is worthwhile, even if it is

usually drab, pedestrian, painful or ungratifying, since beauty, excitement, honesty, play, goodness, truth and meaningfulness have been demonstrated to him to exist. That is, life itself is validated, and suicide and death-wishing must become less likely (Maslow, 1968, p. 101-102).

Leach (1962) also looked systematically at the after effects of such experiences as listed by Maslow, in terms of the data she collected on a hundred subjects. Out of the one hundred people questioned, twenty-eight reported having had some type of peak experience. Leach matched the descriptions these people gave concerning the effects their experience had on them with Maslow's above mentioned hypotheses of the after effects of peak experiences. Some support was found in isolated cases, or in three or four cases, for each hypothesis. (See Leach, 1962, pp. 43-46).

From an observational point of view, these findings lend some support to Maslow's observations that peak experiences have a self-actualizing effect on the individual experiencing them.

Similarly, Laski in her recorded observations of ecstatic experiences, reports the same general conclusions of the after effects of ecstatic experience. She found, generally, her subjects reported that

in these experiences we have a loss of the normal sense of relationships...and a regaining of that sense of relationships in improved form; that ecstatic experiences are...processes facilitating improved mental organization
(Laski, 1962, p. 280).

Although the similarity of these observations points to the hypothesis that peak experiences, or transcendence of self, in at

least a number of incidence leads to increased psychological health (see Maslow's observations 1 and 2 on p. 52), there is, as Maslow points out, no controlled data to support the observed after effects. Therefore, the third major hypothesis of this research will be to predict that those who have peak experiences in the form of core religious experiences will show increased signs of self-actualization as measured by the pre- and post-test scores of the Personal Orientation Inventory.

Thus, in presenting the hypotheses for this research, the position has been taken that the self-actualized person, particularly the self-actualized person who has great intra and interpersonal sensitivity, given a certain environment is predisposed to enter into a type of solitude that triggers de-automatization of the perceptual process. In this condition such a person is more likely to alter his state of consciousness in the mode of a core religious experience. Such an experience can, in turn, lead such a person to grasp a more profound sense of the integrity of the universe, and a deeper sense of its meaning. Such an integrative and self-validating experience should subsequently enable the person who has experienced it to achieve a still higher level of self-actualization and psychological health.

To test this position, then, the above mentioned hypotheses will be investigated in terms of the experimental design outlined in the following chapter.

CHAPTER II

Experimental Design

This chapter presents the design involved in conducting an experiment to test the three major hypotheses and the four sub-hypotheses proposed at the end of the preceding section. It begins with a description of the subjects taking part in the experiment. This is followed by a description of the tools used to collect the data: the Personal Orientation Inventory (POI), the Biographical Information Sheet, the Religious Experience Questionnaire (REQ), and two specially designed questionnaires for gathering information about the nature of experiences undergone by the subjects during the period of the experiment and the follow-up period. A third questionnaire is described which has been designed to look at the approach to meditation taken by each subject. Also described are two seven-point rating scales used by the judges to determine the presence or absence of core religious experience and/or peak experience. These rating scales are presented along with a description of the procedure undertaken by the judges to arrive at their classification. The procedure by which the data was obtained is then described. Finally, the hypotheses are stated in the null form followed by the design and statistical procedures employed in both the major and sub-hypotheses.

The Subjects

The seventy-eight subjects in this study are all comprised of religious women, that is members of formal religious congregations

within the Roman Catholic Church in Canada and the United States. Their ages are between twenty-three and sixty-six years with a mean age of forty and one-half years (see Figure 1).

In terms of occupation, they are from the professional and semi-professional bracket, including teachers, nurses, social workers, and administrators of different management levels. In all cases they volunteered to be in the study. No one in the study knew its exact purpose nor did they have any previous exposure to the tests.

The Tools

In order to test the above mentioned hypotheses adequately, the POI was used as a measure of self-actualization. Along with this test, a Daily Diary (DD), Section I: was used to determine the degree of "solitude" within the period under study, as well as an approach to Meditation Questionnaire (MQ). A Biographical Information Questionnaire was prepared to gather pertinent information about each of the subjects. Also, two questionnaires and two rating scales were devised to judge whether or not the individual subjects had undergone a core religious experience and/or a peak experience. Finally, the REQ was used as a second measure of core religious experience.

The POI was first published in 1966 as a "comprehensive measure of values and behavior seen to be of importance in the development of self-actualization", (Shostrom, 1973, p. 479) as based on the theorizing of Maslow. The POI consists of 150 two-choice comparative value and behavior judgments. The items are scored twice,

Figure 1

Sample Size, Age Range and Mean Age for the Groups in the
Retreat, Vacation, and Work Conditions

Group	Sample Size	Age Range	Mean Age (years)
Retreat	26	32-65	40.32
Vacation	26	23-66	38.16
Work	26	25-65	43.00

first for two basic scales of personal orientation, i.e., inner directed support (127 items) and time competence (23 items) and, second, for ten subscales each of which measured a conceptually important element of self-actualization. Such scales include (1) self-actualizing values (2) existentiality (3) feeling reactivity (4) spontaneity (5) self-regard (6) self-acceptance (7) nature of man; constructive (8) synergy (9) acceptance of aggression (10) capacity for intimate contact.

Development of the initial pool of items and their logical classification into categories of self-actualization was accomplished in consultation with Maslow (Shostrom, 1966, p. 5). In the initial validation study as presented by Shostrom (1965), eighteen prominent, doctoral level psychologists nominated "self-actualized" and "non-self-actualized" individuals who subsequently completed the POI. None of these subjects were involved in the initial item development. Scale differences between these nominated samples were significant at the .01 or .05 level of confidence for all but one of the subscales.

Since its inception, numerous studies have been undertaken to determine the reliability, the validity, and the fakability of the POI. The most recent and complete cataloging of these studies has been compiled by D. J. Tosi and C. A. Lindamon (1975). They give a summary of the reliability studies, the validity studies under the headings of construct validity, factorial validity, concurrent validity, predictive validity, and the fakability studies. Previous to this, the 1972 bibliography for the POI.

reports 147 references many of which are integrated into a 1971 review of research which is published as a supplement to the POI Manual (Shostrom, 1973, p. 479).

The consensus of opinion regarding the POI is generally that its use as a clinical diagnostic tool is still debatable, but that as a research tool it has proven to be very good. Some of the arguments against its use as a clinical tool border more on the underlying theoretical assumptions than on the test itself. In terms of the test, from a construction viewpoint, the weaknesses that seem to emerge are first of all, that the reliability of the Synergy scale is low, probably due to the fact that it contains so few items (Raanan, 1973, p. 477). A second criticism could be that the test lacks parsimony in its scale construction. Factorial studies reveal some item overlap. (Silverstein and Fisher, 1968); (Tosi and Hoffman, 1972); and Damm (1969) concluded that the best overall measure is the combined raw scores of the Inner-directed and Time-competent scales.

However, generally the factorial studies are consistent in their conclusion that the overall validity of the test, including the construct validity, has been consistently good.

The test is generally considered a good research instrument and seems especially suited to this study of the self-actualization process based upon Maslow's constructs.

The POI was used in this study to test two of the major hypotheses and two of the sub-hypotheses. Two other sub-hypotheses were tested by specially designed questionnaires. These

questionnaires are very simple and straightforward and are only used within this study in an exploratory manner. Section I of the DD (see Appendix 1) is used as a measure of "solitude", that is, hours spent alone and hours spent in prayer on a daily basis.

The MQ (see Appendix 2) was designed to look at "passive" versus "active" cognition in the subject's habitual approach to meditation or prayer.

A Biographical Information Questionnaire was formulated (see Appendix 3) and used to control for any possible factors such as age, education, etc., that might be an intervening variable within the study.

In order to determine whether individual subjects underwent core religious experiences during the period of this study two methods of collecting data were used.

The first method used for collecting information about core religious experiences basically followed the traditional questionnaire (IQ) used by Maslow (1971, p. 174). (see Appendix 4). Most research done in this area has used a questionnaire based on wording similar to Maslow's initial questionnaire and this has become the accepted method for measuring transcendent experiences. The general procedure has been to obtain descriptions from subjects which are then submitted to judges (two or three) who are versed in Maslow's criterion. After they make independent decisions as to the nature of the experience, the results are correlated to obtain an interjudge reliability quotient (Leach, 1962; Tanzer, 1969; Armor, 1970). This method of determining

the occurrence of transcendent experience has proven to be an acceptable research procedure due, in part, to the high inter-rater reliability, as for example, .95 in Leach (1962, p. 87).

Further precision was sought in this study by modifying the use of this "traditional" questionnaire. In this study the TQ was administered three times. At the beginning of the experimental condition it was administered to cover the preceding twenty-eight days, after the experimental condition it was administered to cover that particular period, and finally, it was administered after a one month follow-up period. This procedure provided some measure of control over the individual subjects' level of susceptibility in regard to core religious experience by providing base line data.

A second questionnaire was devised in the form of the DD (see Appendix A: Section II). This questionnaire is less "biased" or pointed in the type of information sought about the subjects' experiences and was kept on a daily basis during the twenty-eight days of the experimental condition and for a period of a one-week follow-up after a three week lapse following the experimental condition. Besides controlling for the bias involved in the wording of the questionnaire, each subject was her own control in terms of style and articulation of experience.

Rating scales for the judges were devised to further enhance the statistical validity of this study. The phenomenon associated with core religious experience (based on Maslow) was listed in question form to be answered along a seven-point rating scale

according to the presence and intensity of each of the parameters as discernible in the subjects' descriptions (see Appendix 5). A second similar rating scale based on the criterion of peak experiences was also devised as an added measure (see Appendix 6). These rating scales were used with both the TQ and the DD:
Section II.

Besides the use of questionnaires designed to tap the articulated subjective experience of each of the subjects, the REQ was administered at the end of the experimental period (see Appendix 7). This questionnaire was constructed by Hood (1975) to measure mystical experiences based upon the universal categories of Stace (1960). Given the religious quality of the experience, the descriptive phenomena described by Stace, such as unity, temporal and spatial qualities, ineffability and positive affect, overlap the categories stated by Maslow (see Chapter I, p. 15).

Therefore, this test was included as a second measure of core religious experience. It was felt that the subjective questionnaires as rated by the judges might be biased in that some subjects are more given to "poetical" or "rhapsodic", language than others when it comes to describing their experiences. However, a series of questions such as presented in the REQ was designed to control for this factor.

As a test, the REQ was a first attempt to construct an instrument for the empirical investigation of intense religious experience. The thirty-two items in this test were retained from a pool of 108 items based on Stace's conceptualizations. These

items had the greatest face validity and were the most clearly understood by the respondents. Also, they had the greatest empirical validity as determined by the discrimination indexes.

In terms of reliability, initial investigation showed a fairly high level of internal consistency based upon the correlational matrix relating the items to the total scale, and a factor analysis which resulted in two main factors; (1) a general mysticism factor and (2) a religious interpretation factor.

Construct validity at this stage rests on four correlational studies, that is, Taft's Ego Permissiveness Scale measuring openness to experience, Hoge's Intrinsic Religious Motivation Scale, and Hood's Religious Experience Episodes Measure, as well as the Minnesota Multiphasic Personality Inventory (Hood, 1975, p. 39).

The REQ was used in this study simply as another form of getting at a certain area of information that was intended to give an added measure of validity to the final criterion measure of core religious experience.

In summary then, the TQ (1, 2, and 3), the DD: Section II, and the REQ were used to collect data on core religious experience and peak experience. The POI was used as the measure of self-actualization and the MQ and DD: Section I were used to explore the major hypotheses a little further.

Experimental Procedure

Due to the nature and time structure of the three groups within this study, subjects were for the most part, assigned to

their experimental condition on the basis of their availability. Potentially, however, each subject was eligible for all conditions.

The Experimental Group was comprised of thirty religious women who underwent a 28-day directed retreat conducted by the Jesuits at a retreat house in Ontario. This condition generally meant that the subjects spent up to five or six hours a day in silent prayer, kept silence for most of the time, and attended Mass daily. Apart from this they saw a spiritual director for ten to thirty minutes daily, or every other day, in order to keep him informed, or to ask advice as to the direction of their prayer.

A second experimental group was comprised of thirty religious women who were on holidays for twenty-one to twenty-eight days at a lodge in Northern Ontario. This experimental condition generally meant an unstructured time involving swimming, and other forms of recreation as well as leisure time to read, pray, etc. Mass was attended daily.

The control group of thirty religious women was a group comprised of those engaged in their every day work over a period of twenty-eight days, whether that work consisted of nursing, teaching, management, etc. Mass was attended daily and a specific period set aside each day for meditation.

After assignment to their various groups each person was given an envelope containing the POI booklét, two answer sheets, three copies of the TQ, the MQ, and the REQ. Each subject was also given a file folder containing 28 daily diary sheets. Standardized written instructions were given out with the tests

including the time schedule for answering them and the procedure to follow (see Appendix 8). For example, the retreat group was given the written instructions in a group along with the POI and the questionnaires on the night preceding the retreat. They were asked to complete the POI and the TQ#1 and to return them on the following night before going on retreat. A similar procedure was followed for the other two groups. Throughout the 28-day experimental condition each subject was to keep a daily diary.³

The data were then submitted to statistical analyses in order to test the following hypotheses.

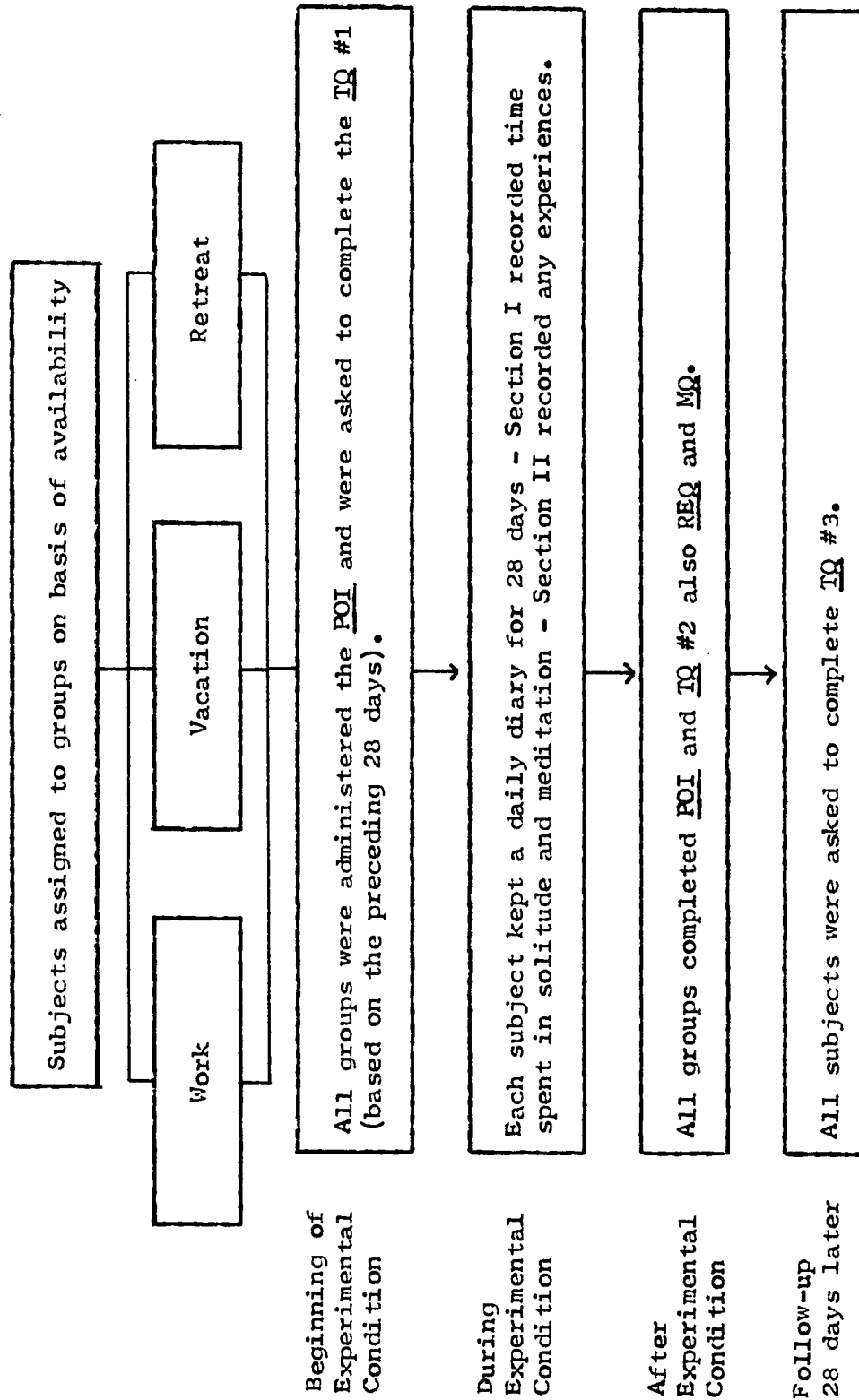
Hypotheses

"Passive" perception and the ability to "let go" depends on the absence of internal conflict, and/or sufficient ego strength to suppress conflict temporarily. Such ability Maslow saw as demanding a certain level of psychological health or a fairly high degree of self-actualization. The Inner Directed scale of the POI measures the independent and self-supportive ability of a person. The Time Competent scale measures a person's ability to live meaningfully in the present, that is, the past and the future are integrated into the present moment. These two scales comprise the composite score of self-actualization on the POI. Therefore, in testing the first hypothesis the null form states that

3. Forty-three subjects returned the DD which involved 172 weekly ratings by each judge. This was felt to be an adequate sample of experiences to correlate with the TQ#2.

Figure 2

Diagram of Procedure for Collecting Data



1. There will be no significant relationship between the degree of core religious experience and the pre-test scores on the Inner Directed and Time Competent scales of the POI as a measure of self-actualization.

In his later writings, Maslow observed that even among those classified as "self-actualizers" there were those who had peak or core religious experiences and those who did not. It is, perhaps, that certain characteristics of self-actualization are more prominent in those who have a higher degree of core religious experience, while those who self-actualize through "mastery", or doing, may have other characteristics. It may be that those who are given to a "surrender" type of transcendent experience are more in touch with their own needs and feelings and be more open and/or sensitive to others. Along with the two major scales, the POI has ten subscales that look at five different areas, or prominent characteristics of self-actualization. In particular, there are two scales that measure Feeling Reactivity and two subscales that measure Interpersonal Sensitivity. Therefore, in terms of exploring further any differences among self-actualizers in terms of their susceptibility to core religious experience it is hypothesized that

- 1 (a). There will be no significant relationship between the degree of core religious experience and the Feeling Reactivity and Interpersonal scales of the POI.

Along with a relatively high degree of self-actualization, Maslow has stated that core religious experience is more likely

to occur in a passive, reflective state, when a person is able to "let go" of the normal tension and set aside the necessity to focus his/her attention in a rubricized fashion. Therefore, it is hypothesized that

2. In terms of external surroundings, there will be no significant difference between those in an active work setting, those in a vacation setting, and those in a retreat setting and the degree of core religious experience in each of the settings over a twenty-eight day period.

Further, as the occurrence of core religious experience appears to be related to the degree of renunciation of normal cognitive stimuli, it is hypothesized that

- 2 (a). There will be no significant relationship between the degree of solitude (number of hours) engaged in during the 28 day period and the degree of core religious experience.

Along with the technique of renunciation of competing stimuli, it has been found that meditation in the form of non-analytical attention, or surrendering oneself to an object, word or image helps to facilitate the occurrence of transcendent experience.

Therefore, it is hypothesized that

- 2 (b). There will be no significant relationship between the type of prayer or meditation practice engaged in, as measured by the MQ, and the degree of core religious experience.

Maslow would argue that only the healthy person can willingly withdraw into deeper levels of solitude, or "let go" of his ordinary perceptual processes for sustained periods of time.

Therefore, it is hypothesized that

- 2 (c). There will be no significant relationship between the degree of solitude engaged in (number of hours) and the POI, as a measure of self-actualization.

Maslow viewed the attainment of core religious experience as a transitory moment of self-actualization, as a moment when all the powers of the person seem to come together at a higher level of integration allowing the perceiver to see more clearly into the essence of reality and to experience a more profound joy. Maslow felt such an experience could only lead to an increase in psychological health and to a further step in the process of self-actualization. Therefore, the third major hypothesis states that

3. There will be no significant difference in the level of self-actualization (measured after the experimental condition) between those subjects with higher ratings of core religious experience and those subjects with lower ratings of core religious experience, taking into consideration the subjects' level of self-actualization before the experimental condition.

These hypotheses were submitted to the following statistical analyses to see if they could be rejected or not.

Preliminary Statistical Analyses

In order to prepare the data for hypotheses testing, some preliminary statistical analyses were undertaken. First, the interjudge reliability of ratings of core religious experience and peak experience were obtained. For this purpose the Ebel method of reliability by the intraclass correlation was used (Guilford, 1954, p. 395).

Four intraclass correlations were obtained including judge's

ratings of (1) core religious experience on the TQ (1, 2, and 3); (2) the DD: Section II; (3) for peak experience on the TQ (1, 2, and 3); and for peak experience on the DD: Section II.

The sum of the judge's ratings for the TQ #2 was used as the main criterion for the degree of core religious experience. To strengthen this measure further, two correlations were carried out. The first correlation was between the TQ #2 scores and the REQ scores. The REQ lists 32 items based on the conceptualization of core religious experience. As some subjects might be more given to expressing themselves in "rhapsodic" or "poetical" language on the TQ (which might be interpreted as a higher degree of core religious experience) than other subjects, it was felt that the REQ as an "objective" measure would help control for this factor if there was a high correlation between the REQ and the TQ. Also, there was the possibility that the wording of the TQ might bias the subjects differently towards a certain type of answer. The DD kept by each subject would, therefore, serve as a measure of control for this possibility. The daily diary, though much less direct in eliciting data would also presumably, include any data that would be reported in the TQ. A significant correlation between these two measures would control for some of the bias in the response set. The Pearson r formula was used in obtaining these correlations.⁴

4. All further analyses referred to throughout this section are based on the formulas used in the Statistical Package for the Social Sciences, McGraw-Hill, New York, 1970, unless stated otherwise.

A second preliminary analysis involved looking at any possible effects due to the involvement of spiritual directors in the retreat group. These effects were analysed by the use of a one-way analysis of variance.

Finally, the subjects' age might have affected the criterion of core religious experience in one direction by the amount of experience in prayer, or it might have affected it in the opposite direction in that older subjects could be more reticent about expressing their experiences, or even in their approach to prayer. Therefore, an analysis of variance was carried out between those over 40 (the grand mean age) and those under 40 and the degree of core religious experience.

Major Statistical Analyses

The first hypothesis stated that those who had a higher degree of core religious experience would be more self-actualized than those who had lower core religious experience ratings. This hypothesis was tested as part of a 2 x 3 analysis of variance. In order to obtain a median split between high and low self-actualizers a frequency analysis was carried out on the Time Competent and Inner Directed scores from the POI. The 2 x 3 analysis of variance was then undertaken for each of these scales across the three groups with the degree of core religious experience as the dependent variable.

The first sub-hypothesis was concerned with looking at the significant characteristics of self-actualization that were related to the occurrence of core religious experience. In order

to test this hypotheses a multiple regression analysis was performed relating all twelve scales of the POI to the degree of core religious experience.

The second major hypothesis stated that the external surroundings as embodied in the three groups, Work, Vacation, and Retreat would be related to the degree of core religious experience insofar as each condition respectively allowed the subjects to be free from the necessity of engaging in a high degree of rubricized cognitive interactions. To test this hypothesis a polynomial trend analysis was performed, following the 2 x 3 analysis of variance outlined in relation to the first hypothesis.

To explore further the interaction between environmental circumstances and the occurrence of core religious experience, three sub-hypotheses were tested under the second major hypothesis. The first sub-hypothesis stated that those who spent more time in solitude during the 28-day period would be more likely to have core religious experiences. Therefore, a Pearson r correlation was calculated between the time spent alone, or in reflection over the 28 days and the degree of core religious experiences; and the time spent in meditation over the 28 days and the degree of core religious experience.

A second sub-hypothesis stated that if the approach taken to meditation was physically and/or cognitively more "passive" it would be more highly related to the occurrence of core religious experience. Again, the Pearson r was calculated between the MQ scores and the degree of core religious experience.

The third sub-hypothesis stated that those who engaged in more hours of solitude and meditation would be more self-actualized than those who spent less time in solitude. To test this hypothesis a correlation using the Pearson r was calculated between hours spent in solitude and meditation and the scales of the POI.

The third major hypothesis stated that those who had a higher degree of core religious experience would be more self-actualized following such an experience. This hypothesis was tested by a 2×3 analysis of variance between those with a high degree of core religious experience and those with a low degree of core religious experience across the three groups with the post-test POI scores as the dependent variable. A correlational matrix was carried out between the pre and post test POI scores to obtain the highest correlated pre-test POI scores which were then used in the above analysis as covariates. The Scheffé test was then applied to any significant interactions.

Finally, in order to examine and compare any possible relationship between the effects of peak experiences and self-actualization levels, three analyses were carried out substituting peak experience ratings in place of core religious experience ratings. That is, a multiple regression analysis was carried out to see if the self-actualization characteristics related to peak experiences were the same as though related to core religious experience; a trend analysis was carried out to look at the effect of environmental conditions on peak experiences; and thirdly, a 2×3 analysis of variance with pre POI scores as covariates and the

post POI scores as the dependent variable was carried out to see if the effect of peak experience was similar or different to that of core religious experience.

CHAPTER III

Presentation of Results

The presentation of results will follow the same pattern as that outlined in the preceding section on statistical analysis. First, the results of the preliminary analyses will be presented and then the results of each of the analyses will be presented as they pertain to the hypothesis being tested. The significance level for rejection of the null hypotheses was set at the 0.05 level.

Preliminary Analyses

The interjudge reliability ratings based on Ebel's intraclass reliability method are presented in Table 1. This Table shows that the correlation coefficients for core religious experience ratings based on the TQ were .896 for a single rater and .945 for two raters. The correlation coefficients for core religious experience ratings based on the DD were .928 for a single rater and .953 for two raters. Similarly the correlation coefficients for ratings of peak experience based on the TQ were .889 for a single rater and .956 for two raters. Peak experience ratings based on the DD showed correlation coefficients of .889 for a single rater and .985 for two raters. The Pearson r coefficients and level of significance are included for comparison.

Table 2 gives the analysis of variance undertaken to see if there were any effects in the retreat group due to the subjects' interaction with their spiritual directors. There were three

Table 1

Correlation Coefficients for Judge's Ratings of Core Religious Experience Scale and Peak Experience Scale based on the TQ and DD

Scale	Reliability	N	r
Core Religious Experience			
<u>TQ</u>	EBEL		
	(single rater)	78	.896
	(two raters)	78	.945
	PEARSON r	78	.886*
<u>DD</u>	EBEL		
	(single rater)	43	.928
	(two raters)	43	.953
	PEARSON r	43	.993*
Peak Experience			
<u>TQ</u>	EBEL		
	(single rater)	78	.889
	(two raters)	78	.956
	PEARSON r	78	.912*
<u>DD</u>	EBEL		
	(single rater)	43	.899
	(two raters)	43	.985
	PEARSON r	43	.990*

* .001 level of significance

Table 2

Analysis of Variance for the Effect of Spiritual Directors
on the Degree of Core Religious Experience scores in the
Retreat Group

Source	df	SS	MS	F
Between Groups	2	1306.85	653.42	1.491 (NS)
Within Groups	<u>23</u>	<u>10078.27</u>	438.19	
Total	25	11385.12		

different directors but the analysis showed no significant difference between them and the subjects' respective reporting of core religious experience on the TQ #2. The F probability was 0.2461. Since there were no significant effects this variable was eliminated in the major analyses.

The effect of subjects' age on the degree of core religious experience was calculated and there was no significant difference between those over 40 years and those under 40 in any of the groups. Table 3 shows the result of this analysis.

Major Analyses

The first hypothesis stated that there would be no significant difference between the subjects' pre-level of self-actualization and the degree to which they had core religious experiences. This hypothesis was tested by means of a two by three analysis of variance in which self-actualization scores for Time Competency and Inner Directedness were separated into high and low categories by means of a median split and then examined across the three conditions of work, vacation and retreat with core religious ratings as the dependent variable. Table 4 shows the results of this analysis. There were no significant main effects for High-Low Time Competency scores, nor any significant Interaction effects. Therefore, the first hypothesis cannot be rejected. Similarly, Table 5 shows that there were no significant differences with regard to main effects for High-Low Inner-Directed scores or Interaction effects. In this case also, the first hypothesis could not be rejected. A subsequent power analysis showed that

Table 3

Analysis of Variance for the Effect of High and Low Age Groups on the Degree of Core Religious Experience for the Groups Work, Vacation and Retreat

Source	SS	df	MS	F
HiLo-Age	57.546	1	57.546	0.274 (NS)
Group	8219.895	2	4109.945	
HiLo-Age/Group	49.172	2	24.586	0.117 (NS)
Residual	<u>15104.840</u>	<u>72</u>	<u>209.789</u>	
Total	23400.816	77	303.906	

Table 4

Analysis of Variance for the Effect of High and Low Time
Competent Groups on the Degree of Core Religious Experience
across Work, Vacation, and Retreat Groups

Source	SS	df	MS	F
HiLo-Tc	38.811	1	38.811	0.186
Group	7866.223	2	3933.111	18.831*
HiLo-Tc/Group	134.559	2	67.279	0.322
Residual	<u>15038.191</u>	<u>72</u>	208.864	
Total	23400.816	77		

* p .001

Table 5

Analysis of Variance for the Effect of High and Low Inner Directed Groups on the Degree of Core Religious Experience across Work, Vacation and Retreat Groups

Source	SS	df	MS	F
HiLo-ID	0.487	1	0.487	0.002
Group	8115.691	2	4057.846	19.712*
HiLo-ID/Group	389.226	2	194.613	0.945
Residual	<u>14821.848</u>	<u>72</u>	205.859	
Total	23400.816	77		

* p .001

the a priori probability of detecting a significant effect in this analysis was small. For the analysis in both Tables 4 and 5 the power value was .9, which is very low. The non-significance indicated in both measures of self-actualization is due in part to the fact that the phenomenon existed predominantly in only one group leaving two empty cells in this initial analysis.

The sub-hypothesis examined the relationship between the POI scores, in particular the Feeling scales (Feeling Reactivity and Spontaneity) and the Interpersonal Sensitivity scales (Acceptance of Aggression and Capacity for Intimacy) and degree of core religious experience by means of a multiple regression analysis. (For a summary of the multiple regression equations for all variables and the overall descriptive and inferential statistics see Appendix 9). The multiple r^2 showed that overall the POI scales accounted for 40 percent of the variance in predicting the degree of core religious experience. Table 6 lists the standardized coefficients for rank ordered POI variables. From this we see that the most significant predictors (cut-off score over 35) of core religious experience in a positive direction were the Constructive Nature of Man scale, followed by the Time Competency scale. There was a strong negative relationship between core religious experience and Inner-directedness and Self-actualizing values. Although Hypothesis 1a was tentative and exploratory, it could not be rejected. However, three of the four scales hypothesized as significant did rank as the next three most positively correlated characteristics of self-actualization in the occurrence of core religious experience.

Table 6

Standardized Regression Coefficients for Rank Ordered POI
Variables as predictors of Core Religious Experience

<u>POI</u> Scale	Std. Regression Coefficient
Inner Directed	-0.55148
Self-Actualizing Values	-0.41077
Constructive Nature of Man	0.40861
Time Competency	0.34743
Spontaneity	0.26148
Acceptance of Aggression	0.26085
Existentiality	-0.25484
Feeling Reactivity	0.24954
Synergy	0.16357
Self-Regard	0.12081
Time Incompetent	0.05766
Other Directed	-0.03288
Self Acceptance	-0.02321
Capacity for Intimate Contact	-0.01288

As a further point of interest, the relationship between peak experience ratings and the scales of the POI were calculated by means of a multiple regression analysis. Table 7 showed the standardized regression coefficients for rank ordered POI variables as predictors of peak experience. (See Appendix 10 for summary of regression table). Overall, only 25 percent of the variance in peak experience was accounted for by the POI scales. In the positive direction it would appear that peak experiences are more highly related to Other Directedness and one of the Interpersonal Sensitivity scales, namely Acceptance of Aggression. On the other hand, the Feeling Reactivity scale was highly correlated in the negative direction. Again, in regard to peak experiences and the POI scales Hypothesis 1a could not be rejected.

The second major hypothesis stated that there would be a significant difference in the occurrence of core religious experience due to the environmental setting. Tables 4 and 5 confirmed this significance (see pgs. 72 and 73). Also, this significance was expected to follow a linear path with the work setting producing the lowest core religious experience ratings and the retreat setting producing the most. Table 8 shows the polynomial trend analysis for the three groups. The linear term is highly significant allowing for hypothesis 2 to be rejected, but the deviation from the linear term is also significant. Figure 3 shows a graph of the polynomial regression of the group means. The deviation from the linear term becomes apparent in that the vacation setting did not generate significantly higher core religious experience ratings than the work group

Table 7

Standardized Regression Coefficients for Rank Ordered POI
Variables as predictors of Peak Experience

<u>POI</u> Scale	Std. Regression Coefficient
Other Directed	0.48762
Feeling Reactivity	-0.43944
Acceptance of Aggression	0.43107
Time Incompetent	-0.30929
Inner Directed	-0.27734
Self-Actualizing Values	0.23646
Spontaneity	0.22831
Time Competent	-0.22792
Capacity for Intimate Contact	0.16459
Self Regard	0.15608
Self Acceptance	0.14549
Constructive Nature of Man	-0.09406
Synergy	0.08877
Existentiality	0.04664

Table 8

Polynomial Trend Analysis for the Groups Work, Vacation and
Retreat on the Degree of Core Religious Experience

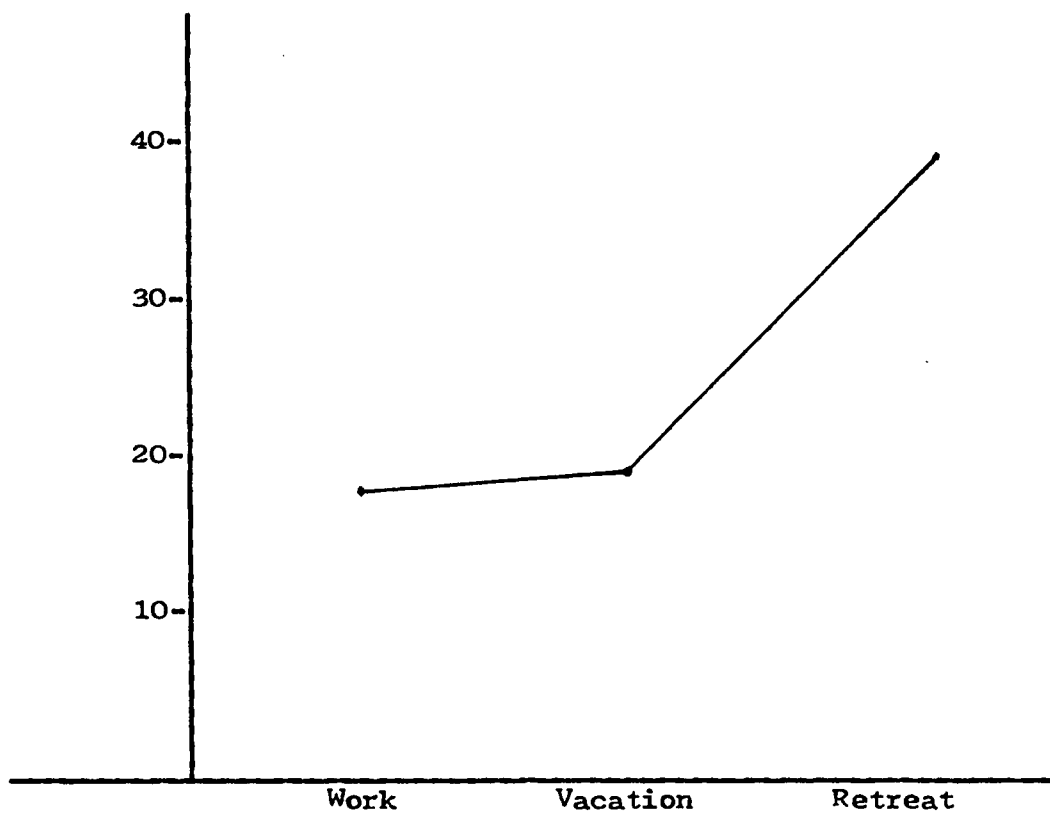
Source	df	SS	MS	F
Between Groups	2	8189.2370	4094.6184	
Linear Term	1	6469.2305		31.896*
Dev. From Linear	1	1720.0065		8.480**
Within Groups	<u>75</u>	<u>15211.5771</u>	202.8210	
Total	77	23400.8125		

* p .001

** p .005

Figure 3

Polynomial Regression of Group Means Plotted for Core Religious Experience Scores



while the retreat group generated a very high occurrence of core religious experience.

This trend can be compared with the occurrence of peak experience which Table 9 shows deviates significantly from the linear. As would be expected, the vacation setting generated the greatest number of peak experiences which would have their source in nature or in close moments of friendship, etc. (see Figure 4).

Time spent in solitude, or alone, usually involves some relinquishing of the normal rubricized cognitive patterns brought into use in focussing on day to day demands. It appears that this type of renunciation is an important step in the occurrence of core religious experience. Therefore, sub-hypothesis 2a stated that there would be a significant relationship between the time spent in solitude and the degree of core religious experience and time spent in meditation and core religious experience. The Pearson r correlation coefficient between solitude and core religious experience was 0.6115 (significant at the .001 level). Similarly, the correlation coefficient between meditation time and core religious experience was 0.5974 (significant at the .001 level), allowing hypothesis 2a to be rejected.

Not only is the time spent alone or in meditation necessary for the occurrence of core religious experience, but the concept of renunciation also involves the importance of a certain approach taken in meditation insofar as one "lets go" of their normal cognitive processes and/or focusses on something in a non-analytical way. To explore this hypothesis, a Pearson r correlation was run between the occurrence of core religious experience and the MQ (which was scored

Table 9

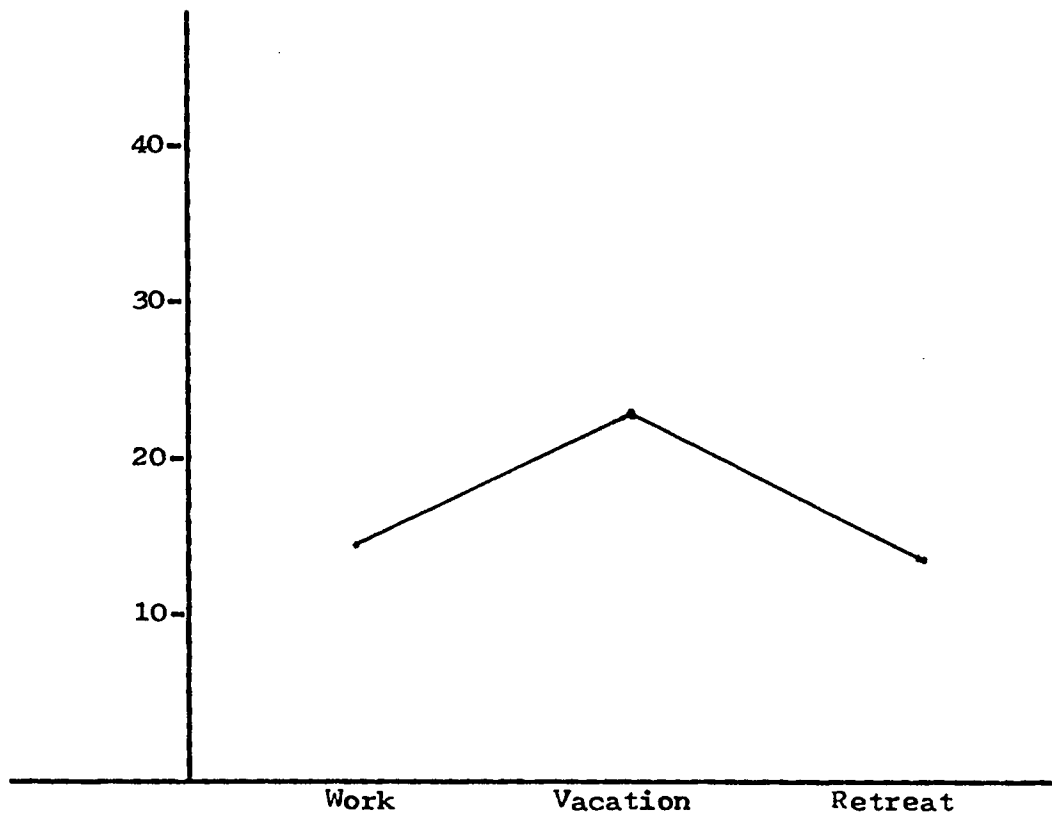
Polynomial Trend Analysis for the Groups Work, Vacation and
Retreat on the Degree of Peak Experience

Source	df	SS	MS	F
Between Groups	2	960.5346	480.2671	
Linear Term	1	0.4808	0.4808	0.011
Dev. from Linear	1	960.0539	960.0537	22.533*
Within Groups	<u>75</u>	<u>3195.4558</u>	42.6061	
Total	77	4155.9883		

* p .001

Figure 4

Polynomial Regression of Group Means Plotted for Peak Experience Scores



for a "passive" non-analytical approach to meditation). The correlation coefficient obtained was 0.4231 (significant at the .001 level), again allowing hypothesis 2b to be rejected.

A possible link between the first and second major hypothesis suggested that those who are more self-actualized are more likely to seek deeper levels of solitude as a positive need (and inversely are not afraid of losing their own identity by withdrawing). This was sought as a possible link between core religious experience and a healthy withdrawal into solitude. To explore this, sub-hypothesis 2c was analysed by looking at the relationship between time spent in solitude and the scales of the POI and time spent in meditation and the scales of the POI. Two significant characteristics emerged from the POI for both variables. Time spent in solitude was related to the major POI variable of Time Competency (Pearson r was 0.4113, significant at the .001 level) and to seeing the nature of man as essentially good (Pearson r was 0.4033, significant at the .001 level). Meditation time was related to the same two scales, that is, Time Competency (Pearson r was 0.4227, significant at the .001 level) and Nature of Man (Pearson r was 0.3613, significant at the .001 level). Hypothesis 2c, therefore, was also rejected.

To see if these two POI scales were related to the occurrence of core religious experience a follow-up analysis of variance was carried out between high and low core religious experience scores and the POI scales. Again, the two scales that were significant were Time Competency and the Nature of Man. These analyses are shown in Tables 10 and 11

Table 10

Analysis of Variance for the Effect of High and Low Core Religious Experience Ratings on the POI Time Competent Scale

Source	SS	df	MS	F
HiLo-CRE	34.675	1	34.675	4.231*
Residual	<u>622.820</u>	<u>76</u>	<u>8.195</u>	
Total	657.495	77	8.539	

* p .04

Table 11

Analysis of Variance for the Effect of High and Low Core Religious Experience Ratings on the FOI Nature of Man Subscale

Source	SS	df	MS	F
HiLo-CRE	30.810	1	30.810	11.815*
Residual	<u>198.177</u>	<u>76</u>	<u>2.608</u>	
Total	228.987	77	2.974	

* p .001

respectively, with the Time Competent scale being significant at the .04 level and the subscale Nature of Man being significant at the .001 level.

The third hypothesis had stated that those who had core religious experiences would be more self-actualized on post-test measures of the POI than those who did not have such experiences. No significant main effects were found on post-test POI scales for this factor across all groups using the pre-test scores as covariates. However, two significant interactions were found between the level of core religious experience and the three groups. The significant interactions occurred on one major scale (Inner-Directedness) and one subscale (Capacity for Intimacy) of the POI. These analyses are presented in Tables 12 and 13 respectively. A breakdown of the cell means and standard deviations was computed to see where the interaction was occurring. For this analyses core religious experience was computed as a criterion score of 40 or over. Given this more absolute measure of core religious experience, the breakdown revealed that one cell, namely the work group, reported no core religious experience, while the vacation group reported only two. The distribution of subjects within each cell and the resulting means confirmed the significant interactions as artifacts rather than a meaningful interaction (see Figures 5 and 6). In the null form, the third hypothesis could not be rejected. However, a statistical power analysis showed that the a priori probability of rejecting the null hypothesis was low. The power value of the Inner-directed scale in Table 12 is .46 given $\alpha = .05$; $u = 1$; $f = 1.457$ and $n = 78$ (Cohen, 1969, p. 305). The

Table 12

Analysis of Covariance for Effect of High and Low Core Religious Experience Ratings on the Post-test POI Inner-directed Scale across Work, Vacation, and Retreat Groups with Pre-test POI Inner-directed and Spontaneity Scales as Covariates

Source	SS	df	MS	F
Covariates				
POI-ID	2471.237	1	2471.237	
POI-S	296.828	1	296.828	
Main Effects				
HiLo-CRE	30.413	1	30.413	1.457
Group	154.691	2	77.345	3.706
2-Way Interactions				
HiLo-CRE Group	189.895	1	189.895	9.099*
Residual	<u>1481.762</u>	<u>71</u>	<u>20.870</u>	
Total	9745.391	77	126.564	

* p .004

Figure 5

Plotted Cell Means showing Interaction Across Groups for POI
Inner-Directed Scale

	Work		Vacation		Retreat	
	<u>Mean</u>	<u>Subjects</u>	<u>Mean</u>	<u>Subjects</u>	<u>Mean</u>	<u>Subjects</u>
Hi-CRE	0.0	0	63.500	2	89.286	14
Lo-CRE	88.577	26	87.125	24	83.417	12

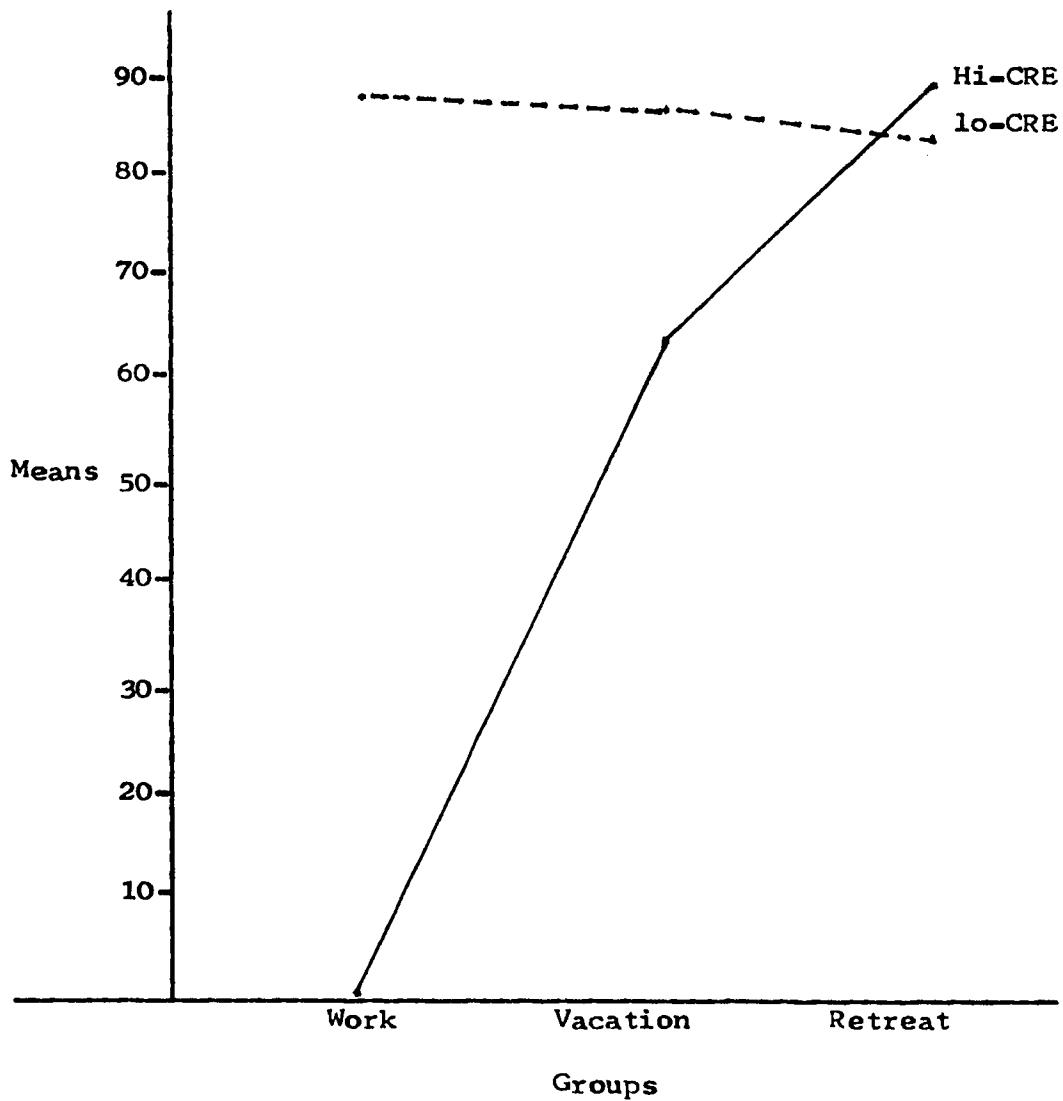


Table 13

Analysis of Variance for the Effect of High and Low Core Religious Experience Ratings on the Post-test POI Capacity for Intimate Contact Scale across Work, Vacation, and Retreat Groups with POI Pre-test Inner-directed and Spontaneity Scales as Covariates

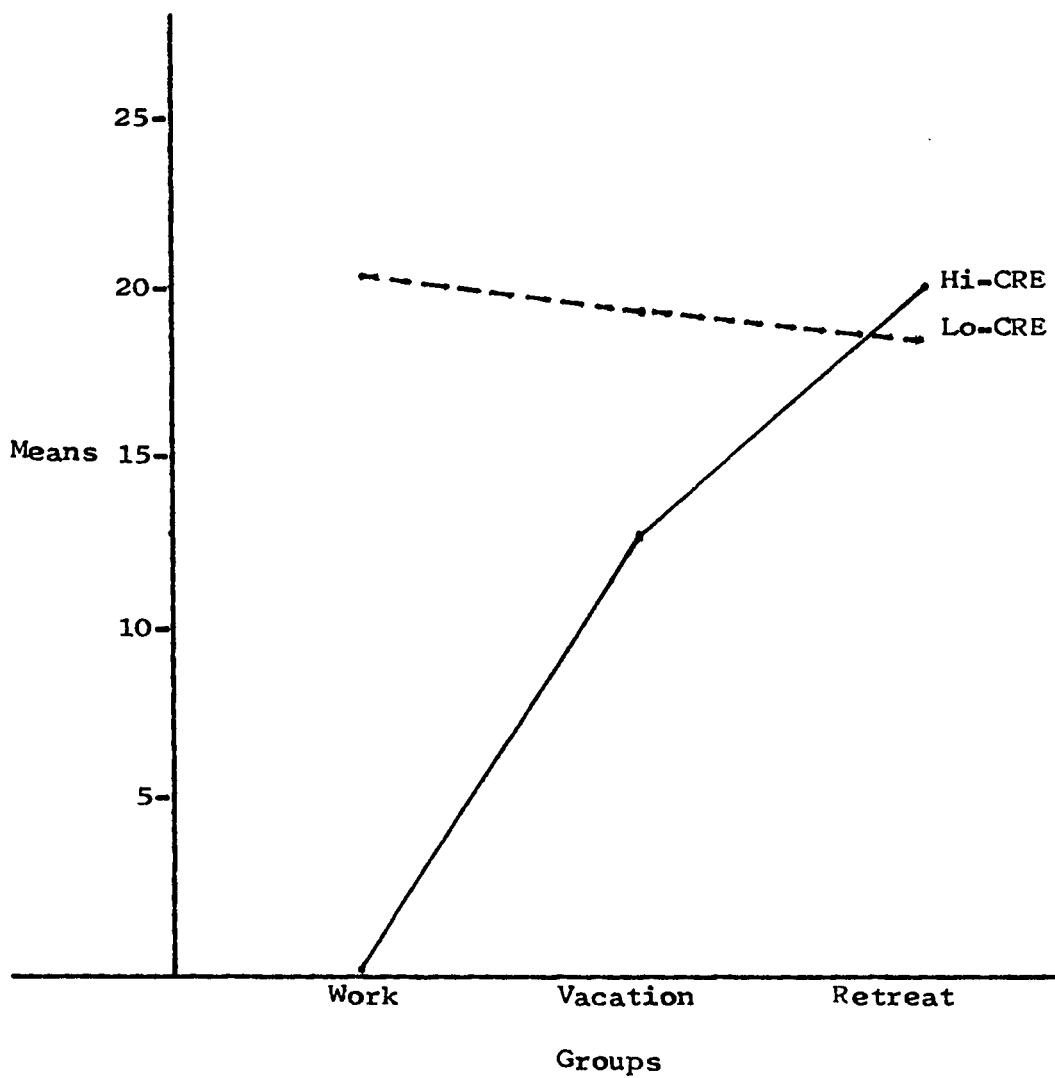
Source	SS	df	MS	F
Covariates				
POI-ID	111.235	1	111.235	
POI-S	45.035	1	45.035	
Main Effects				
HiLo-CRE	2.408	1	2.408	0.388
Group	32.173	2	16.087	2.592
2-Way Interactions				
HiLo-CRE Group	23.704	1	23.704	3.819*
Residual	<u>440.654</u>	<u>71</u>	<u>6.206</u>	
Total	1010.609	77	13.125	

* p .05

Figure 6

Plotted Cell Means showing Interaction Across Groups for POI
Capacity for Intimacy Scale

	Work		Vacation		Retreat	
	<u>Mean</u>	<u>Subjects</u>	<u>Mean</u>	<u>Subjects</u>	<u>Mean</u>	<u>Subjects</u>
Hi-CRE	0.0	0	13.00	2	20.071	14
Lo-CRE	20.577	26	19.792	24	18.250	12



Capacity for Intimate Contact scale (Table 13) only has a power value of 9 given $\alpha = .05$; $u = 1$; $f = .388$ and $n = 78$ (Cohen, 1969, p. 305).

Again, the possible effects of peak experience on subsequent measures of self-actualization were analysed as an interesting comparison with core religious experience. A similar analysis of covariance was carried out substituting high and low peak experience scores for core religious scores. A criterion score was set at 23 (a score midway between the minimum and maximum peak score) which more accurately defined the category of peak experience. Based on this analysis, no significant differences were found on post-test scores of the POI.

Chapter IV summarizes and discusses these results and their implications.

CHAPTER IV

Discussion of Results

A summary of the results of this study show that many of the hypotheses implicit in Maslow's writings are upheld. Each hypothesis is discussed in turn, therefore, within the context of Maslow's theoretical position. Then the limitations of the study are discussed. This is followed by a more general discussion applying the findings to the larger question of a humanistic approach and some of its implications for a psychology of religion. The general discussion leads into suggestions for further research.

Summary

The first hypothesis predicted that those subjects with higher scores on the Inner Directed and Time Competent scales of the FOI would have more core religious experiences. Hypothesis 1 could not be rejected, but a multiple regression analysis involving all FOI scales and the degree of core religious experience showed that the two significant scales related in a positive direction were Constructive Nature of Man and Time Competency. Inner-directed and Self-actualizing Values were highly correlated in a negative direction. Although sub-hypothesis 1a was exploratory in nature, it stated that the best predictors of core religious experience would be the Feeling and Interpersonal Sensitivity scales. These latter scales were positively related to core religious experience, however, they were not as significant as the scales involving a constructive view of the nature of man and time competency.

The 2 x 3 analysis of variance used in testing the first hypothesis did show that there was a significant difference between the three groups and the degree of core religious experience. A polynomial trend analysis revealed that there was both a significant linear term and a significant deviation from the linear term. The plotted group means showed the work group had the lowest core religious experience ratings, the vacation group had only a slightly higher degree (therefore, causing a deviation from the linear trend) and the retreat group had the highest rating. By comparison, peak experience ratings showed a curvilinear trend with work and retreat groups being lower for peak experience and the vacation group being the highest.

A Pearson r correlation revealed that the occurrence of core religious experience was significantly linked to the amount of time spent in solitude and the amount of time spent in meditation as predicted in Hypothesis 2a.

Hypothesis 2b was tested with a Pearson r correlation and showed a significant correlation between a "passive" approach taken in meditation and the occurrence of core religious experience.

In Hypothesis 2c a possible link was sought between the amount of time spent in solitude and the FOI scales. A significant correlation was found between amount of time spent in solitude and the Time Competency and Constructive Nature of Man scales on the FOI. A similar result was found for meditation time. To follow this relationship further, an analysis of variance was carried

out between high and low core religious experience scores and the Time Competency and Constructive Nature of Man scales. This proved to be significant as well.

The third major hypothesis looked at the effects of core religious experience on levels of self-actualization. There were no significant main effects on any of the POI scales so the third hypothesis was not rejected. There were two significant interactions but a breakdown of the data revealed that one cell had no subjects and the interactions were attributed to artifacts rather than real differences. Similarly, a comparative analysis of the effects of peak experience revealed no significant differences on post-test levels of the POI scales.

Hypothesis 1

The first hypothesis was formulated to look at the relationship between the level of self-actualization the subjects possessed and the degree of core religious experience they subsequently attained during the following 28 days. The rationale behind the hypothesis was that subjects would already have to have a sufficiently high level of self-actualization in order to risk opening themselves to a transcendent experience of this type. As stated earlier, core religious experience requires a renunciation of competing stimuli (a kind of external and internal solitude) and the ability to focus one's attention in a non-analytic manner. This ability to willingly "let go" of one's normal rubricized manner of cognizing seems to call for a large measure of inner security and self-awareness.

The two major scales of the FOI were used as the measure of self-actualization. The first major scale, Time Competency, measures the degree to which the person lives fully in the present and integrates within the present the reflections on the past and the immediate goals of the future. This is in contrast to the more "neurotic" person who lives out of the past in terms of guilt, resentments or regrets and/or the person who lives out of the idealized goals of the future, or the fear of the unknown.

The second major scale, Inner-Directedness measures the degree to which subjects "belong to themselves". That is, inner-directed persons depend primarily on their own experience and secondarily on the experience of others in their life decisions. Consequently, they can resist conformity and are more autonomous in their dealings with others.

However, the results showed that there were no significant differences on either scale so the first hypothesis could not be rejected.

A description of the Time Competent and Inner-Directed scales showed that there was enough variance between the subjects across these scales. For example, the Time Competent scale had a minimum score of 11 and a maximum score of 23 with both the mean and median falling at 17.5. The Inner-Directed scale had a minimum score of 47 and a maximum score of 104 with both the mean and median falling at 85. The failure to reject the null hypothesis appeared to be that while those who had a high degree of core religious experience were more self-actualized, those who were more self-actualized did not necessarily have a high degree

of core religious experience. Failure to predict in the direction of self-actualization to core religious experience in the "high" group might suggest that there are two types of self-actualizers as Maslow talks about them, or at least, another parameter of self-actualization is more important in the generation of core religious experience. Hypothesis 1a explored this question a little further.

Hypothesis 1a

This hypothesis arose, in part, out of Maslow's observation of two types of self-actualizing people, those who were "meditators" (transcenders) and those who were "doers". Although this is too comprehensive a question to answer within the context of this study, it does suggest that there are, perhaps, certain characteristics of self-actualization that are more conducive to the occurrence of core religious experience than others.

A tentative hypothesis was formulated to look at this question based on the overall characteristic of openness to experience. For this reason the areas of Feeling and Interpersonal Sensitivity were singled out as possibly the most observable distinguishing characteristics. Two scales make up the dimension of Feeling. The first, Feeling Reactivity measured the subjects' sensitivity to their own needs and feelings and the second, Spontaneity measured their ability to express these feelings behaviorally. It was thought that perhaps this openness to one's own experience and lack of self-consciousness might be prominent factors disposing a person to the occurrence of core religious experience.

Similarly, the scale of Interpersonal Sensitivity, made up of Acceptance of Aggression and Capacity for Intimate Contact, also measures the dimension of openness to the other and to the other's experience. Again, it was felt that such lack of defensiveness in terms of being present to the other might be a prominent factor in the occurrence of core religious experience.

The standardized regression coefficients, however, showed that while three of the four predicted variables were positively related to core religious experience the most highly correlated variables in a positive direction were the Constructive Nature of Man scale and the Time Competency scale. Inner-Directedness and Self-Actualizing Values were highly correlated in the negative direction.

In terms of looking for the significant characteristics related to core religious experience, it was decided to examine the above mentioned scales on the basis of their statistical significance. The Constructive Nature of Man scale had an F ratio of 9.611 (See Appendix 9) making it significant at the .01 level. The Self-Actualizing scale had an F ratio of 5.375 making it significant at the .05 level. Since these were both subscales of the POI and had not been examined in the overall measures in Hypothesis 1, an analysis of variance was run using High and Low categories of Nature of Man and Self-Actualizing Values across the Work, Vacation and Retreat groups with core religious experience as the dependent variable. The main

effect for Self-Actualizing Values was not significant with an F ratio of 0.676 (0.51 level of significance). The Nature of Man scale showed a main effect between those with high core religious and those without with an F ratio of 2.296 which approaches significance at the .10 level. A comparison of cell means showed that those with higher Nature of Man scores had more core religious experiences. This latter statistic takes on some importance when discussed in conjunction with Hypothesis 2c which looks at the link between core religious experience, depth of solitude and self-actualization.

Hypothesis 2

Besides looking at the possible levels or characteristics of self-actualization that influence the occurrence of core religious experience, the second major hypothesis was formulated to look at the effect of environmental surroundings on the occurrence of core religious experience. For this purpose, three environmental conditions were chosen each allowing for different levels of solitude and the renunciation of competing cognitive stimuli.

It was hypothesized that there would be a linear trend with the work condition producing the fewest core religious experiences, the vacation condition producing more and the retreat condition producing the most. A polynomial trend analysis showed a significant trend with the retreat condition producing the most, as expected, and the work condition producing the least. However, the vacation condition significantly deviated from the linear trend as it produced fewer core religious experiences than expected.

The results affirmed that, overall, the need for an environment where one can "let go" or renounce the ordinary rubricized cognitive structures is a significant element in the occurrence of core religious experience. Also, the deviation from the linear trend as occasioned by the vacation group suggested that a high degree of solitude is necessary before core religious experience can occur.

Hypothesis 2a

To further explore this major hypothesis three sub-hypothesis were formulated. The first of these was concerned with the question of solitude. As stated, the most distinguishing characteristic between the three groups was the amount of time the subjects had to be alone and/or to reflect. For example, the DD: Section I showed that those in the retreat group spent an average of 397 hours in solitude during the waking hours over the 28 day period. Those in the vacation group spent an average of 119 hours in solitude, and those in the work group spent 49 hours in solitude during the 28 day period. Similarly, the time spent in actual meditation ranged from a mean of 26 hours for the work group; 28 hours for the vacation group; and, 136 hours for the retreat group.

The significant correlation between time spent in solitude and time spent in meditation and core religious experience over a 28 day period further defines the three conditions in a way compatible with Maslow's observed need for solitude and with Diekman's renunciation "technique" as a prerequisite for core religious experiences.

Hypothesis 2b

The second sub-hypothesis attempted to explore further the concept of renunciation in psychological terms, namely that of "letting go" or disengaging the normal thought processes while at the same time focussing in a non-analytical way. The MQ was formulated to inquire into the subjects' habitual approach to, or manner of, meditating. It was found that those who prayed in a quiet place, who "let everything go" (that is, did not focus on problems, worries, etc. in prayer), who become unaware of themselves, and/or those who focus on some word or object during the time of prayer were the subjects who had a significantly high degree of core religious experience.

Although the subjects in the vacation group spent considerably more time in solitude than those in the work group the trend analysis in Hypothesis 2 showed that they did not have proportionately more core religious experiences. This is, perhaps, due to the fact that while solitude is a necessary prerequisite (Hypothesis 2a) a type of "focussed" attention is also necessary for core religious experience. That is, those on vacation did not spend much more time in actual meditation than those in the work group, while the retreat group spent a considerable amount of time in meditation. Also, while in meditation those who were more "focussed" or "intense" in remaining faithful to a non-analytic approach had significantly more core religious experiences.

It would seem that the combination of solitude and focussed attention that characterizes the retreat group gave rise to a significantly greater degree of core religious experience. This is compatible with Diekman's twofold technique of "renunciation" and "meditation" (see p p. 8-10).

The necessity of physical and psychological solitude has been recognized for some time historically in spiritual and theological literature as a necessary condition for intense religious experience. Recently its role in neurological and psychological terms has been more clearly defined as the renunciation of competing stimuli, alpha states through non-analytic focussing on a word or object. This kind of "passive" perception takes a good deal of psychological energy, in fact, probably more than rubricized perceptual patterns that are biologically energy saving devices (Ornstein, 1975).

The ability to enter into **such** a state of solitude would seem to require a certain amount of psychological health. Maslow recognized this in his study of self-actualizing people.

For all my subjects it is true that they can be solitary without harm to themselves and without discomfort. Furthermore, it is true for almost all that they positively like solitude and privacy to a definitely greater degree than the average person

(Maslow, 1954, p. 160).

This is contrary, perhaps, to the popular notion that solitude, or withdrawal, is mainly associated with unhealthy psychological tendencies.

Hypothesis 2c

The third sub-hypothesis, therefore, looked at the relationship between time spent in solitude and meditation and parameters of self-actualization. A significant correlation was found between both solitude and meditation and one major scale of the FOI, Time Competency and one FOI subscale, the Constructive Nature of Man.

The Time Competent scale measures the degree to which a person lives and acts in the present bringing in the past through reflective thought and projecting into the future with long range aspirations tied to immediate goals. This is in contrast to the acting out of the guilts, regrets, resentments of the past as split off from the present, or living out of the "idealized" goals, plans, expectations, or fears of the future. It would appear then, that the Time Competent person as one living in the present, would not be so victimized by depressive ruminations, or anxieties over past regrets or future expectations. A Time Competent person could seek solitude without experiencing discomfort and in fact, could enjoy the solitude in terms of their reflection on the past and openness to the future. That is, an anxious person might fear solitude because they could be overwhelmed with their own thoughts or lose their sense of boundaries which they normally maintain through activity (either physical or cognitive) and social interaction. On the other hand, a depressive person might withdraw to escape from themselves rather than seek solitude to

get in touch with themselves, or they might ruminate and become more depressed rather than reflect meaningfully on their own experience. Such people would not be in a position to engage in the focussed attention necessary for core religious experience. Therefore, as a follow-up observation it was decided to look at those subjects who had core religious experiences in terms of the POI scales.

An analysis of variance showed that those subjects who had core religious experiences were significantly different from those who did not on the pre-test POI scales of Time Competency and Nature of Man.

There appears to be a three-way interaction between level of solitude, degree of core religious experience and the Time Competent and Constructive Nature of Man scales. Those who had core religious experiences sought deeper levels of solitude (physical and psychological) and were time competent and saw man as essentially good.

The relationship between time competency and core religious experience is not a reversible one as Hypothesis 1, which stated that time competent subjects would have a significantly higher degree of core religious experience, could not be rejected. This is to say that not all time competent people had core religious experiences, but those who had core religious experiences were time competent.

This does indicate, however, that those who have the ability to live more fully in the present moment when placed in an environment conducive to external and internal solitude are more likely to have core religious experience.

The most significant scale to emerge as the best single indicator of persons likely to have core religious experience was the Nature of Man scale. That is, among those who had core religious experience in the retreat group, the Nature of Man scale was significant at the .001 level and in terms of predicting core religious experience in a retreat setting the Nature of Man scale approached significance at the .10 level.

The Nature of Man scale measures the degree to which a person sees man as essentially good. That is, he has the ability to see that dichotomies are not opposites and he looks upon man in a synergistic manner. As the description in the FOI manual states

He can resolve the goodness-evil, masculine-feminine, selfishness-unselfishness and spirituality-sensuality dichotomies
(Shostrom, 1968, p. 20).

It would appear then the one of the most important parameters of self-actualization in the occurrence of core religious experience is the ability to transcend dichotomies in one's perception of man. Maslow would relate this ability to transcend these dichotomies to need-disinterested perception.

Our understanding of perception and therefore of the perceived world will be much changed and enlarged if we study carefully the distinction between need-interested and need-disinterested or desireless perception. Because

the latter is so much more concrete and less abstracted and selective, it is possible for such a person to see more easily the intrinsic nature of the percept. Also, he can perceive simultaneously the opposites, the dichotomies, the polarities, the contradictions and the incompatibles. It is as if less developed people lived in an Aristotelian world in which classes and concepts have sharp boundaries and are mutually exclusive and incompatible, e.g. male-female, selfish-unselfish, adult-child, kind-cruel, good-bad. A is A and everything else is not -A in the Aristotelian logic, and never the twain shall meet. But seen by self-actualizing people is the fact that A and not -A interpenetrate and are one, that any person is simultaneously good and bad, male and female, adult and child. One cannot place a whole person on a continuum, only an abstracted aspect of that person
(Maslow, 1968, p. 37).

If a "need-disinterested perception" results in a synergistic awareness of man then it is compatible that core religious experience is related both to this type of awareness and to the ability to be more fully aware in the present moment as Time Competency suggests.

In summary then, it appears that a time competent person who has a synergistic awareness of man is more likely to have core religious experience when placed in an environment allowing for a high degree of solitude and the time to meditate in a focussed though "non-analytic" manner. The second major question, then, remains to be discussed. That is, what are the effects of such an experience on subsequent levels of self-actualization?

Hypothesis 3

The third major hypothesis stated that given existing levels of self-actualization there would be an increase in self-actualization

for those who had core religious experiences. The analysis of covariance showed that there was no significant increase in levels of self-actualization as measured by the post-test POI scales. Therefore, the hypothesis could not be rejected on the basis of main effects.

Two significant interactions were found, one on the Inner-Directed scale and one on the Capacity for Intimate Contact scale. In investigating the source of this significance it was discovered that given the more absolute criterion measure of 40 or over as constituting a core religious experience, one cell, namely the work group, had no subjects in it. Given the means for the other cells, the interaction was rejected as an artifact.

As a follow-up to this analysis, however, the retreat group was found to contain 14 of the 16 core religious experiences reported. It was decided to examine the differential effect of core religious experience or its absence within the retreat group as the number of subjects per cell was comparable. In this case, looking at the two major scales a t-test showed that given no significant difference in the pre-test scores, those who had core religious experiences were more inner-directed after the retreat than those who did not have such an experience, approaching significance at the .07 level ($t = 1.924$ and $df 24$).

Core religious experiences are by definition self-validating when all "the powers of the person come together" in an intense way. A significant increase in inner-directedness suggests that

going beyond oneself in this way is an affirmation of one's identity, or of what is already there, while at the same time feeling freer and more autonomous in terms of being motivated from within.

Although there was no real significance across pre-posttest means the scales of the POI showed a consistent trend worth commenting upon. That is, with the exception of the Time Competency and Nature of Man scales (which separated the core and non-core groups on the pre-test levels) all the other scales showed increased means for those who had core religious experiences while the means were decreased for those who did not have such experiences (See Figure 7).

This finding suggested that while core religious experience in itself is potentially a positive experience, at the same time those who are less time competent or do not have a transcendent view of man if placed in a retreat setting characterized by a high degree of solitude not only do not have core religious experiences but tend to become less self-actualized. In terms of the implications for people going on thirty day retreats and/or spiritual direction, these findings merit further research.

As a point of interest the effects of peak experiences were analyzed but no significance was found.

Peak experiences as an auxiliary measure in this study have to be compared with core religious experience not only in terms of their expressed content, but also in terms of their intensity.

Figure 7

Mean Scores of Pre- and Post-test POI Scales for High and Low Core Religious Experience Groups in the Retreat Setting

Scale	High-CRE		Low-CRE	
	<u>Pre</u>	<u>Post</u>	<u>Pre</u>	<u>Post</u>
Time Competency	19.285	18.428	18.75	17.75
Inner-Directed	87.571	89.285	86.25	83.416*
Self-actualizing Values	19.428	19.571	20.5	19.166
Existentiality	20.714	21.071	21.08	20.75
Feeling Reactivity	15.857	16.071	14.833	13.5
Spontaneity	12.571	12.714	12.	11.333
Self Regard	12.	12.07	12.225	10.666
Self Acceptance	16.714	16.642	15.5	15.083
Nature of Man	13.571	13.428	12.166	13.25
Synergy	7.571	7.5	7.166	7.083
Aggression	16.71	17.21	14.9	13.6
Capacity for Intimacy	19.357	20.071	19.166	18.25

* p. .07

For example, the mean intensity rating for core religious experience was 40, while the same mean score for peak experience was 23. For that reason, they are not directly comparable as distinct experiences. Peak experiences as they appeared in the vacation setting appear rather as a category of experiences in their own right.

Armor (1969) classified two conceptual models of peak experience; those which are experienced as moments of heightened awareness and those which are experienced as a qualitatively different form of consciousness. An important underlying factor of this classification seems to be in large measure a matter of intensity.

Therefore, the results of the peak experiences are, perhaps, best discussed as the results of an experience of heightened awareness. From this viewpoint then, the results indicate that the POI scales as measures of self-actualization are not as important a factor in the occurrence of peak experiences as they account for only 25% of the variance. Secondly, peak experiences occurred more frequently in the relaxed vacation setting where the solitude and "focussed attention" was not so intense, but where ordinary cognitive structures could be more relaxed.

This additional analysis of peak experience as heightened awareness allowed for the tentative conclusion that the results of this study proper apply to intense transcendent experiences.

Limitations

The limitations of this study are related to very general problems in the study of process variables involved in self-actualization. That is, the hypotheses generated by the theory in regard to the reciprocal relationship between transcendent experience and self-actualization have been difficult to study from a methodological point of view. It appears from Maslow's theory and from the observations of others (Huxley; Clark, 1965) that intense religious experience has a tremendous power to change personality. This observation alone makes such experiences interesting and important for a theory of personality change, but like all critical experiences, including those that occur during psychotherapy, studying them in an empirical way has presented a problem. For example, the frequency of the phenomena occurring in a given sample is highly unpredictable. A subsequent power analysis showed the ability to reject the null hypothesis was low given the effect size and the population. This study is limited, then, insofar as it cannot say with any great certainty that core religious experience is not related to certain parameters of self-actualization. What it is able to say is that even given the low power, the direction of synergistic awareness appears to be the area which is most vital for further research.

This study was designed to test some existing hypotheses regarding intense transcendent experience and self-actualization and to explore further implications and ways of studying the process of self-actualization. The methodology was lacking in that complete randomization of the subjects was next to impossible from a practical point of view. Also, the population was selective which was both an advantage (the groups had homogenous subjects) and a disadvantage (generalization of results is limited). Future research would have to look at sex differences, different populations, and additional measures. The simpler questionnaires such as the MO have only face validity.

The whole question of the methodology involved in the study of subjective experience is present in this study. The reaffirmation of psychology as a science of inner experience (Bergin, 1964) brings with it the challenge to revitalize methods of measurement in this direction. The subjective report has been the primary method used in a phenomenological approach to the presence of variables such as core religious experience. This brings with it the problems of individual differences involving the subjects' level of self-disclosure, medium of expression, meaning, etc. that are an intrinsic part of individual experience. This measurement problem remains as a challenge. However, in this study, an attempt was made to get at more of the individual parameters by eliciting the same data from three different angles and over varying time periods. The REQ, the TQ #1, 2, and 3, and the DD over 28 days were designed to control for the aspects of stimulus-response and expression idioms inherent in individual differences in subjective experience. Significant correlations between these measures as well as high correlations between judge's ratings of the experience made for a considerably tighter measure than has been used in previous research such as Leach (1962), Tanzer (1967) and Armour (1970).

The theoretical limitations in this study revolve around the open-ended concept of the process of self-actualization that exists in Maslow's writings. Some of the "vagueness" within this concept appears to be the result of some ambivalence in Maslow's

approach. That is, while upholding the necessity for empirical validation, he also had an ingrained respect for the uniqueness of the individual and looked upon the creative or mystic person, in particular, in a holistic, rather than an atomistic, manner (Maslow, 1972b). The problem when one doesn't look at discrete variables is that it becomes difficult to explore further, or to know which direction to go in terms of ongoing research. Part of the importance of this study as a pioneering work, then, was to isolate some of the significant personality and environmental variables involved in transcendent experience with the hope of giving further direction to research and discussion.

General Discussion and Suggestions for Further Research

A transcendent view of man as measured by the Nature of Man scale on the POI emerged as the most distinguishing characteristic related to core religious experience. Maslow related this synergistic awareness to desireless or need-disinterested perception, and from a psychological point of view this was supported in the fact that those persons who had core religious experience were time competent (had the psychological capacity to live meaningfully in the present). On the other hand Maslow linked this mode of perception, implicitly or explicitly, to a philosophical position that Fromm (1956) has termed paradoxical logic, as different from Aristotelian logic.

The teachers of paradoxical logic say that man can perceive reality only in contradictions, and can never perceive in thought the ultimate reality-Unity, the One itself. This led to the

consequence that one did not seek as the ultimate aim to find the answer in thought. Thought can only lead us to the knowledge that it cannot give us the ultimate answer. The world of thought remains caught in the paradox. The only way in which the world can be grasped ultimately lies, not in thought, but in the act, in the experience of oneness. This paradoxical logic leads to the conclusion that the love of God is neither the knowledge of God in thought, nor the thought of one's love of God, but in the act of experiencing the oneness with God (Fromm, 1956, p. 65).

In the western World, Aristotelian logic has led to an emphasis on technique. On the other hand, Fromm points out that in the Eastern culture paradoxical logic places emphasis on intellectual tolerance and on self-transformation through experience with the one. That is, experience precedes thought in the grasping of ultimate reality.

Apart from its religious overbelief, the question of paradoxical logic based on experience emphasizes a different aspect of knowing. This position, involving the transcendence of apparent dichotomies in reality, and how this shapes our concept of the self, deserves further study. First, some further research should concern itself with the measurement of a transcendent view of man. The Nature of Man scale could be researched in terms of its correlates. Among these, the Synergy scale in the POI, weak mainly because it contains so few items, could be restructured and possibly correlated and/or integrated into the synergistic view of man.

Based on a more comprehensive scale measuring a synergistic view of reality, some form of replication study could be carried out such as assigning persons on retreat to groups on the basis

of their synergistic view of reality scores. A second study might be to look at the interaction between a transcendent view of man, time competency and solitude/meditation by manipulating these variables to assess the degree to which a subject can increase the likelihood of core religious experience.

Another question that arises is the relationship between time competency, as a measure of psychological health, and a synergistic view of man. This relationship could be explored in terms of other measures. This is an important question if one considers the attaining of a synergistic view of man in terms of its developmental factors. This may be the link, for example, to a better understanding between "peakers" and "non-peakers" and whether or not theoretically it is more meaningful to talk about two types of self-actualizers or whether it is a matter of two approaches to knowledge.

For intense transcendent experience to occur it appears that solitude and focussed attention in meditation are necessary conditions. Within this the subject must be time competent and have a transcendent view of man. This raises the question of congruence within the experiencing process for further growth to occur. For example, there was some indication in this study that self-actualization levels decreased if the subject was on retreat and did not possess a previously higher level of time competency and synergistic perception and/or had no core religious experience. Future research could look at this question of

congruence with subjects in high and low groups based on time competency and/or synergistic measures in terms of their perceptual experience in a study such as Diekman's (See pp. 8-10) or Pahnke's (See pp. 16-17). Also additional measures of "healthy" versus "unhealthy" subjects based on Minnesota Multiphasic Personality Inventory scores or Eysenck Personality Inventory scores could be studied in conditions of solitude and subsequent personality measures.

Perhaps some of the most meaningful discussion and future research can occur within the specific population and context of this study. The whole question of the primacy of experience and the experiencing process and the recent moves towards such a position in theology and philosophy as well as psychology raises the possibility for the first time of a real integration between these fields as well as the other sciences.

For example, in stating the theological-philosophical position Bernard Lonergan has written

This transformation of the notion of science has led to a transformation of the notion of philosophy. In a first phase, from Descartes to Kant, philosophy became critical: from concern with objects it turned to the cognitional activities of subjects. In a second phase, after the interlude of German idealism which attempted to restore speculative system, philosophy became more and more concerned with the good subject, the authentic subject. Schopenhauer wrote on Die Welt als Wille und Vorstellung, Kierkegaard took his stand on faith, Newman rested his case on conscience, Nietzsche was concerned with the will to power, Dilthey aimed at a Lebensphilosophie, Blondel wanted a philosophy of action,

Ricoeur today is writing a philosophy of will, and it is in this line of thought that stand the personalists and many existentialists. The consequence in theology is, I should say, what Karl Rahner has named die anthropologische Wende, the turn to the study of man as basic (Lonergan, 1970, p. 48).

Lonergan's own work on the nature of knowing as contained in his book Insight (1958) looks at experience as one fundamental capacity upon which man bases thought and judgment. This he proposes as the methodology of theology with great emphasis on the fact that one cannot look at theology apart from the theologian. Coming from a different viewpoint, Gendlin (1962) deals with the question of experience and the creation of meaning. From a theoretical point of view an interesting study could take experience as a focal point in the integration of theology and psychology through a comparison and critical evaluation of the works of Bernard Lonergan and the humanistic psychologists, in particular Eugene Gendlin.

At a more applied level, the question of core religious experience is seen by Lonergan as important to the whole question of dialogue within Christian, non-Christian and atheistic orientations. Lonergan sees Maslow's articulation of transcendent experience as distinct from traditions, beliefs, imperatives and rituals. Understanding others in terms of this dimension "would account for variation in religious commitment, involvement, engagement" (Lonergan, 1970, p. 46).

Psychology by remaining true to its own mandate to observe, validate and predict can bring concepts and methodology to bear

upon such problems while avoiding the temptation to merely speculate about them or restate them in quasi-religious terminology.

Also, within the context of this study, the findings suggest ways of applying psychology to elucidate the spirituality and religious formation of those who have already accepted an image of man as self-transcendent. For example, the dynamics involved in "living in the present moment" take on a more concrete form in terms of mental health concepts and what is involved in achieving such a state. This is one setting in which the goals and aims of gestalt therapy can be meaningfully engaged in and not simply as a technique that has no context beyond itself. The "desireless perception" of the mystics can be understood and clarified in terms of present day neuro-psychological concepts. Questions such as when solitude can play a beneficial role can be better appreciated. The whole question of societies and/or communities that promote or hinder the development of synergistic thought can be researched further if synergy is an important factor in attaining self-transcendence through a unitive consciousness. Some of the attributes of such a community as suggested by Maslow (1971) can be assessed in terms of specific religious goals and practices.

This study showed only minimal results indicating the positive effects of core religious experience on subsequent levels of self-actualization. This is an area that needs to be researched further, perhaps by looking at other areas of personality, attitude and/or behavior change as well as by follow-up studies over a six month or one year period.

Conclusions

In conclusion, in the context of this research using a religious congregation, it appears that there is a three way relationship between the occurrence of core religious experience, depth of solitude and the subjects' ability to live in the present moment, and the perception of man as essentially good beyond the dichotomies apparent in his nature. That is, a high degree of solitude, which would permit the renunciation of competing stimuli, is a necessary but not sufficient condition for the occurrence of core religious experience. Within the context of solitude those subjects who had CRE were distinguished by their competent and had a constructive view of the nature of man.

There was no significant increase apparent in subsequent levels of self-actualization following the occurrence of core religious experience. The lack of results here makes it more difficult to demonstrate or support the transcendent notion of man implicit in humanistic theory. However, it is equally true that the results attained are contrary to some psychoanalytic orientations who interpret intense religious experience as an hysterical or more pathological experience.

Besides giving empirical validation to some of Maslow's observations and humanistic interpretations, another important

contribution of this study has been to pinpoint some discrete variables within the concept of self-actualization that can be applied to an ongoing psychology of religion. As well, the methodology, while imperfect, has demonstrated the ability of psychology to study the inner experience of man and in so doing to both draw upon and make a contribution to such fields as philosophy and theology who are more and more turning to the phenomena of experience as the starting point of knowledge.

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Appendix 1

Daily Diary: Sections I and II

Appendix 1

DAILY DIARY: # _____

Code No. _____

Section I:

1. In your "waking hours", how much time did you spend alone, or in silence, when you were able to be quiet or reflective? _____
2. How much of the above time were you able to spend in periods of prayer or meditation? _____

Section II:

1. Briefly describe any significant experience that may have happened to you today.

Appendix 2
Meditation Questionnaire

Appendix 2

Meditation Questionnaire

Code No. _____

Listed below are eight statements describing, in some manner, different aspects of approaching prayer or meditation. Put a check mark in the box beside the statement(s) that would best describe your approach, or method, during periods of private prayer. More than one may apply to you.

1. I usually pray in some quiet place like the chapel or my room.
2. I try to become involved in thinking about some scene from Scripture, or in thinking about some truth of religion.
3. I try to let "everything go" when I come to prayer. That is, I let go of my worries, distractions, and problems and try to empty myself out.
4. I usually walk outdoors (or weather permitting) prefer to be outdoors during my periods of prayer.
5. I focus on some word, or object (i.e. crucifix, candle, my breathing) and try to become very still inside.
6. I only sit still for short periods of time (15 min.) and then read for awhile, or say some formal prayers, or go and walk around.
7. I usually bring my concerns, worries and problems to prayer to discuss with the Lord.
8. I usually sit very still or even become unaware of my physical posture during prayer.

Appendix 3

Biographical Information Questionnaire

Appendix 3

Biographical Information Questionnaire

1. Code No.:
2. Address:
3. Age:
4. Birthplace:
5. Birthplace of parents: Mother
Father
6. Religious order:
7. Number of years in religious life:
8. Education:
9. Occupation:
10. Do you usually make a directed retreat?
11. Have you made a thirty-day retreat before?
12. If you have not made a thirty-day retreat, would you be willing to make one if possible?

Appendix 4
Traditional Questionnaire

Appendix 4

Traditional Questionnaire

Code No. _____

Please think back over the preceding 28 days and try and recall any experiences during that time which were for you moments of extreme happiness of joy, moments of rapture, intense beauty, or any other moments or heightened awareness.

In your own words, would you briefly try to describe that experience(s) in itself, and your feelings at that time.

Following this, would you try to describe in a few words the source or meaning of that experience for you, and the conditions under which it took place. You may use the back of this sheet or additional sheets, if you wish.

Appendix 5

**Judge's Instructions and Intensity Rating Scale
of the Parameters of Core Religious Experience**

Judges' Instructions for Appendix 5: Core Religious Experience

You will be given a 7-point rating scale for each description submitted by a subject (both Questionnaire A and Questionnaire B). Please assess the degree of presence for each of the parameters listed on the Rating Scale, based on the descriptions given by the subjects.

Remember, that apart from these descriptive parameters, a core religious experience is one that has its source (meaning) in some type of spiritual awareness.

Specifically, core religious experience is:

An experience that is qualified by the fact that it is not actively sought or anticipated, but rather is a matter of "surprise".

An experience of great intensity, lasting only for a relatively short period of time.

An experience of a consciousness outside of the "normal" mode of human cognition and is, therefore, experienced as an awareness of a supra-personal presence and/or God.

Appendix 6

**Judges' Instructions and Intensity Rating Scale
for the Parameters of Peak Experience**

Judges' Instructions for Appendix 6: Peak Experiences

After having rated each of the subject's descriptions for core religious experiences, use the set of rating scales marked "peak experiences" and rate each of the parameters again according to this classification.

Peak experiences may not be as intense as core religious experiences and will not have a specifically religious (spiritual) content or meaning. For example, such experiences might arise from sensual awareness - understood as a heightened sense of the ordinary modalities of vision, hearing, smell, taste, or touch; or from emotional awareness - as a deep moment of friendship, an extreme good feeling in the ordinary sense; or from cognitive awareness - understood as a moment of deep understanding, or some intellectual discovery; or self awareness - understood as a deeper understanding of oneself, of experiencing one's best performance.

That is, in peak experiences the person is in a "passive" state (not actively involved in the cognitive process) and there is an experience of transcending oneself, but somehow the source of the experience is related to oneself, comes out of oneself, rather than the experience of an awareness outside of oneself, such as the experience of a supra-personal presence.

Appendix 6

Intensity Rating Scale of the Parameters of Peak Experience

Assess the degree of presence for each of the parameters listed below, based on the descriptions given by the subject, and according to the instructions given for scoring peak experiences.

---Very much-----To some degree-----Slightly-----Definitely---
not

The whole universe including one's place in it is perceived as an integrated and unified whole.

A feeling of being disoriented in, and/or, unaware of time and space.

An experience of being completely and totally absorbed in the object of one's cognition.

An experience of being filled with wonder, awe, and/or humility.

An experience of being overwhelmed with a sense of beauty and goodness and love.

An experience seen as ineffable or difficult to describe in ordinary language.

Appendix 7
Religious Experience Questionnaire

Appendix 7

The attached questionnaire contains brief descriptions of a number of experiences. Some descriptions refer to phenomena you may have experienced in the past 28 days, while others refer to phenomena that you may not have experienced. In each case, note the description carefully and then place a mark (number) in the margin according to how much the description applies to your own experience. Write +1, +2, or -1, -2, or ? depending on how you feel in each case.

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

Please mark each item trying to avoid if at all possible marking any time with a ?. In responding to the questions, please understand that the items may be considered as applying to one experience or as applying to several different experiences. After completing the booklet, please be sure that all items have been marked - leave no items unanswered.

Code No. _____

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

19. I have had an experience in which I felt everything in the world to be part of the same whole. _____
20. I have had an experience which I knew to be sacred. _____
21. I have never had an experience which I was unable to express adequately through language. _____
22. I have had an experience which left me with a feeling of awe. _____
23. I have had an experience that is impossible to communicate. _____
24. I have never had an experience in which my own self seemed to merge into something greater. _____
25. I have never had an experience which left me with a feeling of wonder. _____
26. I have never had an experience in which deeper aspects of reality were revealed to me. _____
27. I have never had an experience in which time and space were non-existent. _____
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. _____
32. I have had an experience that cannot be expressed in words. _____

Appendix 8
Subjects' Written Instructions

Appendix 8

Written Instructions

Dear Sisters,

If you take the brown envelope that has been given to you, you will find it contains the Personal Orientation Inventory (POI) along with two answer sheets. Also, it contains three copies of a Questionnaire labelled 1, 2, and 3 respectively. As explained to you, your participation in this program requires that you fill out the questionnaires according to the timetable written below and that you follow the procedure as outlined.

Tonight, then, you take the POI booklet and fill in one of the answer sheets. The instructions, as we have gone over them, are on the front of the booklet if you need to refer to them. Then take the Questionnaire #1 and respond to it. These two sheets (the Questionnaire #1 and the answer sheet to the POI) are to be handed in to the designated person as soon as they are completed. **MAKE SURE YOUR CODE NO. IS ON EVERYTHING YOU HAND IN.** In the same manner, you do these questionnaires again on the date listed below.

Also, you have a file folder which contains 35 daily questionnaires. These are to be answered on each consecutive evening for the next 28 evenings starting tomorrow night. As you finish each day, number your sheet 1, 2, 3, 4, etc. and put it at the bottom of the pile.

At the end of the next 28 days you will find that you have 7 daily diary sheets and one questionnaire (3) left. These are to be filled in according to the dates listed below.

The schedule for your particular group is:

POI	POI	
Questionnaire #1	Questionnaire #2	Questionnaire #3
Daily Diary		Daily Diary

If you have any questions you may refer them to _____ who has been briefed on this study. Your cooperation in this research is very much appreciated.

Sincerely,

Appendix 9

**Multiple Regression Equation for all Variables of POI
as Predictors of Core Religious Experience**

Appendix 9

Multiple Regression Equation for all Variables of the FOI
as Predictors of Core Religious Experience

Multiple R 0.63550
R Square 0.40386
Adjusted R Square 0.27139
Standard Error 14.88053

Variable	B	Beta	Std. Error B	F
PO114	-0.5871298D-01	-0.01288	0.99820	0.003
PO101	0.3713697	0.05766	1.48104	0.063
PO102	2.072724	0.34743	1.65691	1.565
PO103	-0.5120713D-01	-0.03288	0.60322	0.007
PO104	-0.8607886	-0.55148	0.77475	1.234
PO105	-2.687515	-0.41077	1.15917	5.375*
PO106	-0.9853426	-0.25484	0.88240	1.247
PO107	1.356560	0.24954	1.00858	1.809
PO108	1.434583	0.26148	0.82463	3.026
PO109	0.7775817	0.12081	1.08721	0.512
PO110	-0.1133961	-0.02321	0.86385	0.017
PO111	4.130652	0.40861	1.33240	9.611**
PO112	2.727640	0.16357	2.21003	1.523
PO112	1.492615	0.26085	0.99996	2.228
(Constant)	0.2541875			

All Variables are in the Equation

* p .05

** p .01

Appendix 10

**Multiple Regression Equation for all Variables of POI
as Predictors of Peak Experience**

Appendix 10

Multiple Regression Equation for all Variables of the POI
as Predictors of Peak Experience

Multiple R 0.49586
R Square 0.24588
Adjusted R Square 0.07830
Standard Error 7.05323

Variable	B	Beta	Std. Error B	F
PO114	0.3161620	0.16459	0.47314	0.447
PO101	-0.8394686	-0.30929	0.70200	1.430
PO102	-0.5730117	-0.22792	0.78536	0.532
PO103	0.3200283	0.48762	0.28592	1.253
PO104	-0.1824311	-0.27734	0.36722	0.247
PO105	0.6519769	0.23646	0.54943	1.408
PO106	0.7600000D-01	0.04664	0.41825	0.033
PO107	-1.006736	-0.43944	0.47806	4.435
PO108	0.5278799	0.22831	0.39087	1.824
PO109	0.4233724	0.15608	0.51533	0.675
PO110	0.2995476	0.14549	0.40945	0.535
PO111	-0.4006954	-0.09406	0.63155	0.403
PO112	0.6238349	0.08877	1.04754	0.355
PO113	1.039481	0.43107	0.47397	4.810
(Constant)	-2.343253			

All Variables are in the Equation

Appendix 11

**Abstract of Core Religious Experience
in the Process of Self-Actualization**

Appendix 11

Core Religious Experience in the Process of Self-actualization
Within the Context of a Religious Congregation¹

This study was designed to examine intense religious experience within the constructs of self-actualization and core religious experience proposed by Maslow. Three groups of 26 religious women each were studied over a 28 day period in settings allowing for graded degrees of solitude, i.e. work, vacation and retreat. The results show that a high degree of solitude (retreat condition) is necessary but not sufficient for the occurrence of core religious experiences. That is, those who had core religious experiences were also significantly more time-competent and had a constructive view of the Nature of Man as measured by the POI scale.

A covariate analysis of the post-test scores showed no significant differences between those who had core religious experiences and those who did not. However, an interesting trend was revealed across 10 of the 12 POI scales which showed that those on retreat who had core religious experiences had increased self-actualization scores while those who did not have core religious experiences actually decreased in level of self-actualization.

¹ Elinor J. Dickson, M.A., Doctoral thesis presented to the University of Ottawa, Canada, October 15, 1977.