MEANING AND ADJUSTMENT: A STUDY OF ACTIVE

PROFESSIONALS, PROFESSORS AND CLERGY

OF A SOUTHWESTERN STATE

By

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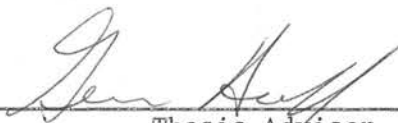University of Texas
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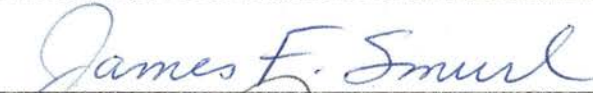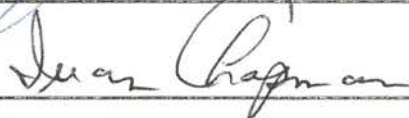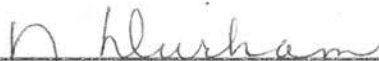Thesis Approved:

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PREFACE

Longitudinal studies are very desirable when making a comparison

between generations. This was impossible in the case of the present

study. However, a study of retired professionals in a southwestern

state had recently been made so it became feasible to make a comparison

between these retired professionals and their active counterparts.

This was especially attractive since two recent and well known measures

of morale had been used in the previous study of retired professionals.

This made it possible to use the same instruments for the study of the

active professionals that had been used in the study of the retired

professionals. Dr. F. Gene Acuff, the author of the study of the

retired professionals, gave me access to his findings and free rein to

do whatever I would with them. For this I am most appreciative.

I would like to give special thanks and appreciation to Dr. Donald

E. Allen, Professor of Sociology, for the many week-ends he spent with

me working on the computer programs for the analysis of the data.

Without his help I would still be shuffling cards somewhere. I would

also like to express my appreciation to Dr. Ivan Chapman, whose keen

wit and insight into the theoretical bases of sociology have been a

constant challenge to my own thought and a needed corrective for my

tendency to go too far in one direction without considering other pos-

sibilities. My thanks also to Dr. Richard Dodder who introduced me to

many fascinating possibilities in the use of statistics in sociology.

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CHAPTER I

INTRODUCTION

Social gerontology found its beginnings in symbolic interaction-
ism[1] in spite of the fact that structural functionalism has been the
major thrust of American sociology over the past several decades.[2]
The arrival of the disengagement theory of aging,[3] however, signalled
the beginning of what appears to be a lasting controversy in gero-
sociological literature. Disengagement theory is firmly rooted in
structural functional theory which utilizes the language of systems
and functions.[4] Systematic wholes constitute the basic unit of analy-
sis in structural functionalism whether this be in terms of individu-
als, societies, or cultures. Thus the basic units of analysis in
structural functionalism are personality systems, social systems, and

[1] Arnold M. Rose, "A Current Theoretical Issue in Social Gerontolo-
gy," in Older People and Their Social World, ed. by Arnold M. Rose and
Warren A. Peterson (Philadelphia: F. A. Davis, 1965), pp. 359-366.

[2] Ely Chinoy, Society, An Introduction to Sociology (New York,
1967), pp. 92-113.

[3] Elaine Cumming and William Henry, Growing Old: The Process of
Disengagement (New York, 1961).

[4] Basic literature for the structural functional position includes:
Talcott Parsons, The Social System (New York, 1966); Robert K. Merton,
Social Theory and Social Structure (New York, 1968); George Homans, The
Human Group (New York, 1950); and Marion J. Levy, The Structure of
Society (Princeton, New Jersey, 1952).

cultural systems.[5] The system is thought to be determinant of the

parts, thus an explanation of individual behavior would be predicated

upon an analysis of the system. Structural functional theory is

divorced in many ways from the individual and the concerns of the

individual except as the individual fits into the framework of the

social system. Structural functional theory views the social system

as existing apart from the individual[6] but with real consequences upon

the behavior of individuals.

The disengagement theory of aging characterizes the aging individ-

ual as one whose abilities and levels of performance naturally and

inevitably decline. Simultaneously, society is seen as relinquishing

its demands upon the declining individual. This supposedly results in

a mutually satisfying disengagement between individual and society. It

is satisfying to the individual in that demands are commensurate with

declining levels of ability which allows the individual to ultimately

withdraw gracefully from all demands of society. Disengagement is seen

as satisfying to the social system in that it not only means that the

contributions to society by the individual will be carried out at a

level of continuing acceptable quality by someone younger but that

there will be room for new members of society as they progress from

childhood to the responsibilities of adulthood which include the roles

of parenthood and work. According to structural functional theory, the

social system retains its functional capacity with the concomitant

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[5]Parsons, p. 6.

[6]Don Martindale, The Nature and Types of Sociological Theory (Boston, 1960), p. 446.

assumption that what is good for the system is good for the individual.[7]

The activity theory of aging, based in symbolic interactionism, maintains that one's sources of meaning and morale remain pretty much the same throughout life. The individual is seen as deriving meaning and morale from on-going interaction in the present no matter what his age. Each person is viewed as having the right to demand some satisfaction in living regardless of past, present, or future usefulness to society. Demands of a social system are seen as unnecessary constraints limiting human behavior in ways deemed undesirable and providing an ideology rather than a scientific view of man.[8] In terms of activity theory loss of roles is seen as an unnecessary consequence of aging and as a source of lowered morale. This is in contrast to the disengagement or structural functionalist view of aging. The contrast is that the structural functional view is from the system. That is, if the system is functioning, human values at the individual level will be realized at a maximum. Symbolic interactionism on the other hand assumes that human values are the product of human interaction or human arrangements and thus not dependent upon some inexorable system requirements.

Attempts to meld the activity theory and the disengagement theory include the use of reference group theory.[9] Reference group theory

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[7]This is implicit in the idea of functionalism.

[8]Ivan Chapman, _The End of Free Inquiry: A Study in Reality Construction_ (Oklahoma State University, 1971).

[9]James Romeis, Rodney Albert, and Gene Acuff, "Reference Group Theory: A Synthesizing Concept for the Disengagement and Interactionist Theories," _The International Review of Sociology_, Vol. 1, No. 1 (March, 1971), pp. 66-70.

holds than an individual finds meaning in life through his relation-
ships to meaningful reference groups which may be either real or
imaginary, groups to which one does or does not belong, and may occupy
any dimension of time: past, present, or future. Reference group
theory explains that some individuals do fit the disengagement model by
interiorizing their sources of meaning and morale from thoughts of the
past or thoughts of an as yet unrealized future such as relating to an
idea of life after death or by remembrance of past group involvements.
Reference group theory accounts for those individuals who fit the
activity hypothesis by drawing their meaning and satisfaction from on-
going interaction.

Regardless of whether one is oriented to the disengagement hypoth-
esis or the activity hypothesis, happiness, success, and satisfaction
are thought of as fitting ends to any venture in American culture. The
course of events and culmination of human life are also thus character-
ized. The sociologist's concern with aging also reflects this value
orientation as evidenced by studies on aging.[10] The concept of satis-
faction or morale of the individual appears to be a good point of
departure for any study of the aged regardless of orientation. If one
is oriented to the disengagement hypothesis, morale can be related to
adjustment of the individual, if to the activity hypothesis, to change.[11]

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[10]See Cumming and Henry, and Robert J. Havighurst and Ruth
Albrecht, Older People (New York, 1953).

[11]Both the structural functional view and the symbolic interac-
tionism position are concerned with adjustment. However, the function-
al perspective is concerned with adjustment of the individual to the
system whereas the interactionist perspective is more concerned with
changing external circumstances. This is especially reflected in Older
People which is at once an analysis of the condition of an aging popu-
lation and a manual of suggestions for the betterment of the circum-
stances of the aging.

In the present study, satisfaction or morale is viewed not only as a fitting end, but a desirable concomitant to the life course of an individual and an adequate anchoring point for the generation of sound gero-social theory.

The Theory

Although morale is viewed as a function of the situation by both the structural functionalist and the symbolic interactionist, there are some important differences between the two. These differences provide the basis for the disagreement between the disengagement theorists and the activity theorists. By the same token, in spite of differences, the problem of morale among the aged appears to be a common point of departure for the study of the aged.

Perspectives on Aging

Perspectives on aging stem from a number of sources which include the historical in addition to more microscopic perspectives which are the biological, the psychological, and the sociological.

The historical perspective on aging is best represented by Simmons' work[12] in which he states that the presence of aged individuals as a widespread phenomena is rather recent.[13] Treatment of the aged population has varied from culture to culture and ranged widely in its manifestations. In some cultures, treatment of the aged has been with

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[12] Marvin R. Koller, _Social Gerontology_ (New York, 1968), p. 60.

[13] Leo W. Simmons, "Aging in Preindustrial Societies," in _Handbook of Social Gerontology_, ed. by Clark Tibbitts (Chicago, 1967), pp. 64-65.

great respect, whereas, in other cultures growing old has been regarded as a disaster.[14] Objective treatment of the aged has ranged from caring for their needs to indifference, to abandonment, to a violent death provided by a friend. In every case, however, provision for the aged in earlier societies is seen in relation to scarce commodities. Where it is necessary to reduce the burden to society of the non-producers, the young generally fare better than the old. The young are potential producers, the old are not seen thus. Disposal of the old is seen though as an unpleasant task in every case.[15]

The biological perspective states that variation among older people is a prominant fact. A specific time for debilitation to set in cannot be set except in terms of averages. Yet, even in terms of averages, there is more variation among the old than among younger people. In every case, though, the prospect is ultimately dismal. If other factors do not provide a quick release from life, debilitation is an inevitable consequence of aging, with no return.[16]

The psychological perspective has been related closely to the physiological or biological perspective. Psychological functioning has been seen in relation to the physical condition of the individual. The concept of "senility" has been of particular importance in the development of the psychological perspective. Psychological perspectives more closely allied to social perspectives include the

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[14]Ibid., pp. 64-67.

[15]Ibid.

[16]Leonard Z. Breen, "The Aging Individual," in Handbook of Social Gerontology, ed. by Clark Tibbitts (Chicago, 1967), pp. 150-152.

social-psychological which has focused upon attitudes of the aged.[17]

The sociological perspective on aging is varied depending upon theoretical orientation. Aging is seen as a complex phenomena, an interrelationship between the biological and the social and, depending upon perspective, dependent upon the view of the individual himself. Sociologically, aging from the vantage point of structural functionalism is a series of stages which are intimately interrelated with the social system creating a functional unit for the system and individual. The simplest formulation of these stages is conceptualized as the young, the adult, and the aged. Concomitant tasks of these groups respectively are the task of socialization or preparation for adult roles by the young, familial and work roles for the adult, and gradual disengagement for the aged.[18] The symbolic interactionist view of aging is that aging is a product of interpersonal definition of the situation dependent in part upon the biological condition of the organism but most dependent upon the definition of the organism by the aging individual and relevant others.

Morale, the Individual, and Structural Functionalism

Within the the structural functional framework, the individual is seen as a unit to fill positions and enact roles pertaining to those positions. Malfits between individual and position are seen as adjustment problems. That is, the individual is supposed to adjust to the

[17]Ibid., pp. 152-154.

[18]Ibid., pp. 154-157. Also see: Leonard D. Cain, Jr., "Life Course and Social Structure," Handbook of Modern Sociology, ed. by Robert E. L. Faris (Chicago, 1964), pp. 272-309.

system. Adjustment may take a number of forms, for example, in the
case of the aging individual, disengagement or vacating certain posi-
tions is expected, particularly the work role. Other forms of adjust-
ment include increasing competence or some type of attitudinal rear-
rangement of life view. Morale is seen as a concomitant of good
adjustment or good fit between the individual and the social system.
Relevancy of morale to the system is viewed in terms of source. Thus,
the most important source of morale to the system is the adult actively
engaged in carrying on the most important functions of the system. The
second most important source of morale are the young who are responsi-
ble in the future for continuation of the system. The aged have al-
ready made their contribution to the system. From a systems perspec-
tive, the aged are least relevant.[19] An individual adjusts to the
social system by occupying social positions and enacting social roles
that are appropriate to the other status characteristics of the indi-
vidual. In terms of the aging individual, this would mean positions
that are age appropriate.

Explanations of maladjustment in the structural functional tradi-
tion include those of anomie and alienation. Anomie, variously con-
ceived, in general refers to a social structure in which there is a
disjunction between institutional goals and institutional means of

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[19]Matilda White Riley, et al., _Aging_ _and_ _Society_ (New York, 1968),
pp. 1-11. It is pointed out here that the aged are typically politi-
cally conservative and offer no threat to the social system. Cain in
"Life Course and Social Structure" notes that the aged typically have
been politically conservative but does not preclude the possiblity that
the future may bring changes. In fact, the recent (1971) White House
Conference on Aging evidenced an increasingly militant stance of the
aged lobby.

achieving these goals.[20] In the case of the aging individual, this may

be represented by that segment of the aging population who wish to

achieve middle-age values or who need money but are unable to realize

either values or demands for money because the social structure does

not provide a means or norms for such realization. Alienation is con-

ceptualized as a negative measure of morale reflecting the individual's

relative lack of ability to control his own fate,[21] thus becoming an

indirect indicator of the social structure. The modern view of struc-

tural functional theory is a kind of pan-functionalism in which every

structure within society is seen as functional in some manner. This

includes non-institutionalized deviant structures which do not reflect

the ideal normative structure of the social system.[22] From the above

conceptualization of pan-functionalism, a formulation would include the

following.

Accelerated mortality should be expected concomitant to deviance

from the ideal normative structure, such as smoking, over-eating,

alcoholic drinking to excess and the like which can be seen as func-

tional for a social system that must find positions and roles for new

members of society in a social system that cannot expand forever.

Drinking, over-eating, and smoking can thus be seen as palliative for

the individual and functional for society in that these help clear the

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[20]Merton, p. 125.

[21]One article which provides insight into the concept "alienation"
is that of Dwight G. Dean, "Alienation: Its Meaning and Measurement,"
American Sociological Review, 26 (October, 1961), 753-759.

[22]Robert K. Merton and Robert A Nisbet, eds., Contemporary Social
Problems (2nd ed.; New York: Harcourt, Brace and World), p. 785.

way for new members in a society which has an expanding population.[23]

In terms of this formulation, morale would be characterized as belong-

ing to adjustment reflecting not simply adjustment to the ideal norma-

tive structure but any adjustment that provided a sufficient means for

life even under attenuated circumstances or with debilitating conse-

quences for the individual. If it is assumed that without some level

of morale, life cannot continue, it may be assumed that deviance pro-

duces a level of morale necessary for life, whereas, adjustment to the

ideal normative structure, where possible, produces "highest" morale.

The structural functional view is firmly rooted in psychoanalytic

theory. Parsons, a leading proponent of the structural functional

position, relies heavily upon Freud for his own formulation of the

social system.[24] Psychoanalytic views of later vintage than Freud will

serve in the better interests of the present study since nearly all

later psychoanalytic views reflect some of the better conceptualiza-

tions from Freud. Psychoanalytic theory serves as background for

understanding a number of dimensions of human behavior in structural

functional theory. One of these dimensions is the problem of determi-

nism in human behavior versus free will.

Morale and Psychoanalytic Views of the Individual

A concern running through not only structural functional theory

but through the interactionist position as well is the problem of

determinism of human behavior. The deterministic position is that the

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[23]This is reminiscent of the Malthusiasn hypothesis; see, Thomas
R. Malthus, An Essay on Population (New York, 1933).

[24]Parsons, xi.

behavior of man is determined by elements either external or internal

to the individual. In structural functional theory, the determinant of

individual behavior is the situation. On the other hand, there is a

press for a less deterministic view of man. The importance of the

psychoanalytic view in the present study is that it provides important

clues to formulations concerning determinism in human behavior and also

provides a framework within which to view the problem of adjustment.

Three important sources of modern psychoanalytic tradition include

Carl Rogers[25], Viktor Frankl[26], and Abraham Maslow.[27] Carl Rogers,

representative of perhaps the least deterministic point of view, sees

the individual as free to interpret his situation in any terms the

individual may choose. Thus freedom to control one's fate is seen by

Rogers as a problem in choosing one's perceptive frame of reference.

In terms of Rogers' theory, one could expect to find an individual in

what seems to be objectively poor conditions functioning efficiently

and with high morale depending upon the individual's choice of how to

perceive the situation. Rogers' formulation is a composite theory,

developed out of his experiences in clinical psychiatry. Rogers'

theory is highly eclectic drawing elements from all traditions, includ-

ing holistic, organismic, interactionist and others. Rogers' theory

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[25]For a summary of Rogers' position, see Calvin S. Hall and
Gardner Lindzey, Theories of Personality (New York, 1957), pp. 467-
502. An interesting article yielding insight into Rogers' position is,
John M. Shlien, "The Self-Concept in Relation to Behavior: Theoretical
and Empirical Research," in Dynamic Social Psychology, ed. Dwight Dean
(New York, 1969), pp. 14-27.

[26]See Viktor Frankl, Man's Search for Meaning (New York, 1963),
and Viktor Frankl, The Doctor and the Soul (New York, 1967, second
expanded edition).

[27]See Abraham Maslow, Motivation and Personality (New York, 1954).

assumes a tractable social system responsive to the demands of the individual. At this juncture Rogers' theory becomes almost totally interactionist in perspective because the individual is seen as creating the external conditions for himself by his perceptions of the situation.[28]

Frankl relates his life experiences in a Nazi prison camp and his clinical experience to the idea that man is free to choose how he interprets his environment. Frankl states that even under the most dehumanizing conditions some men still manage to cope with life, adjust, and find meaning. Frankl, in what can be characterized as a socio-existential position, states that statistically, it can probably be predicted that many people will not find sources of meaning in adverse circumstances which would enable them to transcend their objective conditions. Frankl sees logotherapy, which he feels goes beyond traditional psychiatry, as a solution to this problem of lack of meaning.[29]

Maslow, in his motivational theory, felt that man basically can find meaning in any environment, but this ability to find meaning apart from external circumstances is determined by previous satisfactory culmination of levels of development. Thus the capacity to be free is determined by prior circumstances generally external to and independent of the individual. The first level of development in the Maslow formulation is that of the physiological needs. The individual successfully completing this level will be the one who is later able to withstand

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[28] Hall and Lindzey, p. 478.

[29] Frankl, The Doctor and the Soul.

deprivation at this level. The next set of needs to be satisfied are the safety needs which provide a base for the individual to tolerate the novel, the strange, and the untried. The third level, dependent upon the successful completion of the first two, is the need for belongingness and love. The next level includes the esteem needs which are composed of two subsidiary sets: the need for mastery and need for reputation. The final level, which is reached only by those who have satisfied the four previous levels, is the need for self-actualization. It is at the self-actualization level that a human being is truly free to be what he can be and at this level that an individual can tolerate any set of circumstances by meeting them creatively. It can be seen from this view of the stages, that the ability to be free is largely mediated by external others over whom one has little control, at least at the first level.[30]

Maslow's system identifies those individuals most able to adjust at the highest levels. These who are able to adjust at the highest levels are the most psychologically healthy individuals of a society. It should be noted that for Maslow, the psychologically healthy were not merely conformists. Maslow's theory states that one can find both radicals and conformists among the psychologically healthy. In terms of the Maslow theory, the psychologically healthy are not bound by the external environment in their actions or in their attitudes that reflect morale and satisfaction.

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[30]Maslow, pp. 73-75, 80-92.

Morale, the Individual, and Symbolic Interactionism

Negation of the idea of social system is a key feature of symbolic interactionism. System, or any conceptualization of wholes, is felt to be inadequate for explanation. A concept like "social system" is seen as much too narrow to encompass the range of human behavior that is relevant for the understanding of man and certainly an inadequate standard by which to judge man. Another basic feature of symbolic interactionism is that the quality of man's life is determined by his interaction with his fellow man. Thus, reduced life circumstances whether imposed from without by the demands of society or imposed from within in terms of biologically debilitating changes, mitigate against the continuation of adequate human interaction. This creates problems of morale among the aged or among any group of people thus afflicted.

Among other concepts, basic to the interactionist perspective are idea of "gesture", "reflexiveness", "symbolic language", and "social organization".[31] A gesture is any stance that brings out a like stance in the observer. Reflexiveness is illustrated by the fact that a human being will have the same feeling or idea in himself that he creates in another by a gesture. Arising out of this is symbolic language which makes distinctly human interaction possible. Human interaction is characterized by the fact that the participants are able to see the other as more than an object. Social organization for the interactionist is a mental phenomenon, consisting of the way a person sees himself in relation to others and other people in relation to himself.

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[31]Herbert G. Mead, Mind Self and Society (Chicago, 1963); or for a summary statement see, Martindale, pp. 339-375.

The interactionist theory is not too clear about who or what is responsible for whose morale. From the theory it is clear that morale is a product of favorable interaction. For the interactionist perspective it is probably necessary to assume the value stance that each is his "brother's keeper" in a context where integration, cooperation, and morale are sought.

Morale, the Individual, and Attitude Theory

Attitude theory in past formulations maintained that attitudes are predispositions to behavior and that behavior is produced by attitudes. More recent formulations of attitude theory indicate that the opposite is more nearly the case. That is, behavior produces attitudes rather than the reverse.[32] Morale is an attitude and as such can be expected to conform to attitudinal theory.

Two explanations for the phenomena that behavior follows attitudes are the consistency theory and the self-perception theory. Consistency theory, in the form of Festinger's dissonance theory, maintains that if an individual is induced to engage in behavior that is inconsistent with his beliefs or attitudes, he will experience cognitive dissonance which is a state of disequilibrium and hence uncomfortable to the person. This motivates the individual to reduce the dissonance by some method. The easiest method usually is to change one's attitude toward the behavior.[33]

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[32] Daryl J. Bem, Beliefs, Attitudes and Human Affairs (Belmont, California, 1970), pp. 66-69.

[33] For the theory of cognitive dissonance see, Leon Festinger, A Theory of Cognitive Dissonance (Evanston, Illinois, 1957); for a

The self-perception theory states that a person infers his own internal states by observing his own behavior. In the most simplistic form, it should be predictable that an individual engaging in some form of behavior, voluntarily, should then determine that he "likes" that form of behavior. Thus an attitude follows the behavior.[34]

In terms of either the consistency hypothesis or the self-perception hypothesis it should be predictable that an older person who feels that he controls his own fate should exhibit lower morale when first experiencing role loss but with the passage of time should come to terms in some satisfactory manner with his reduced circumstances perhaps expressing lower morale than before but a satisfactory level of morale nevertheless. Gerontological studies seem to reflect this condition.[35] On the other hand it should be predictable that a person who already has a low opinion of himself or feels that he has no control over his fate should predictably have further depressed morale when external circumstances are reduced in valuational terms.

Morale and Measures of Morale

Webster's dictionary defines morale as: ". . . a state of individual psychological well-being based on such factors as a sense of

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general and detailed view of consistency theory see, Howard F. Taylor, Balance in Small Groups (New York, 1970), and Robert P. Abelson, et al., ed., Theories of Cognitive Consistency (Chicago: Rand McNally, 1968).

[34]Bem, pp. 57-66.

[35]Wilma Donahue, Harold L. Orbach, and Otto Pollak, "Retirement: The Emerging Social Pattern," in Handbook of Gerontology, pp. 378-381.

purpose and confidence in the future."[36] A sociological definition of morale is: ". . . the intervening variable between the social nexus and the individual act of total failure, or suicide. . . ." Another definition of morale in the sociological tradition is: ". . . a continuum of responses to life and living problems that reflect the presence or absence of satisfaction, optimism, and expanding life perspective."[38] In the present study, morale is conceptualized as reflecting either satisfaction with one's life circumstances or a willful optimistic coping with the conditions of life. This conceptualization reflects the measures of morale which are discussed below.

A number of measures of morale for various situations have been devised. The most voluminous work in this field has been done in the work setting in industrial psychology.[39] In other studies, negative measures of morale such as alienation have dominated the field. In studies on the aging, various measures have been used including Kutner's morale scale, Srole's anomia scale, and the Kutner-Srole scale (which was derived by combining items from both Kutner's morale scale and Srole's Anomia scale[40]).

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[36]Webster's Seventh New Collegiate Dictionary (Springfield, Mass., 1967).

[37]Elaine Cumming, et al., "What Is Morale?" a paper read at the annual meeting of the Society for Applied Anthropology cited by Richard H. Williams in "Changing Status, Roles, and Relationships," in Handbook of Gerontology, p. 292.

[38]Ibid., p. 280.

[39]Milton L. Blum and James C. Naylor, Industrial Psychology: Its Theoretical and Social Foundations (New York, 1968), pp. 391-402.

[40]Williams, p. 292.

Other scales include the Life Satisfaction Index (hereafter called the LSIA in the present study) by Havighurst and Neugarten.[41] LSIA is a scale which purports to measure five dimensions which are: 1) zest versus apathy; 2) resolution and fortitude; 3) congruence between desired and achieved goals; 4) self concept; and 5) mood tone. Havighurst noted that the LSIA proved to be satisfactory with the aged but expressed some doubt as to its use with younger groups.[42]

Although used with groups older than the one in the present study, the LSIA has been the subject of a number of research projects. This provided a base line for evaluation of the LSIA. The LSIA was made available by its author for the present study.[43] The LSIA also provided a means of comparison between the sample of the present study and a sample of a previous study.[44]

Another measure of morale is the Purpose in Life Test.[45] This test, hereafter called the PIL in the present study, was designed to

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[41]Bernice L. Neugarten, Robert J. Havighurst, and Sheldon S. Tobin, "The Measurement of Life Satisfaction," Journal of Gerontology, 16 (January, 1961), p. 139.

[42]Ibid., p. 141.

[43]By request of the author of the present study, Robert J. Havighurst gave permission to use the LSIA. Professor Havighurst indicated that the LSIZ, a variant of the LSIA, had been used by others but that either scale should prove useful. (The LSIZ omits two items of the LSIA.) Professor Havighurst also pointed out that the LSIA has published reports giving such valuable information as means and standard deviations.

[44]Gene Acuff, "Retirement, Meaning and Adjustment: The Emeritus Professor and Retired Clergy of a Southwestern State" (unpub. Ph.D. dissertation, University of Missouri, 1967).

[45]James C. Crumbaugh and Leonard T. Maholick, "An Experimental Study in Existentialism: The Psychometric Approach to Frankl's Concept of Noogenic Neurosis," Journal of Clinical Psychology, 20 (April, 1964), p. 201.

measure the degree to which the subject experiences a sense of meaning and purpose in life. The PIL distinguishes between normal and psychiatric groups with high significance and also between successful and indigent persons.[46] The PIL was selected for the present study because previous studies indicated that it was a reliable measure of morale[47] and because the PIL provided a further basis, in addition to the LSIA, for the cross-generational comparison of the present study.[48]

The Problem

In terms of the perspectives presented above (disengagement theory, activity theory, psychoanalytic theory, and attitudinal theory), it could be expected that one could find aging individuals whose morale had not suffered to any great extent in spite of many changing circumstances of life. On the other hand it could be expected that the level of morale to be more nearly a reflection of current circumstances in others. Additionally, it might be expected that morale would be a function of time in a situation. It could be expected that any individual's level of morale would dip concomitant to unfavorable changes in the life situation but that the low part of the dip would last only for a time, with subsequent levels of morale higher than the lowest point but not necessarily at previous peaks.

Arising out of consideration of the perspectives presented above, the problem of the present study was formulated.

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[46] James C. Crumbaugh, "Cross Validation of Purpose in Life Test Based on Frankl's Concepts," _Journal of Individual Psychology,_ 24 (1968), pp. 74-81.

[47] Ibid., pp. 74-81.

[48] Acuff.

Statement of the Problem

The central question of the present study was to ascertain the importance of life circumstances in the maintenance of morale among the aged. Two specific research objectives emerged out of the above question: (1) Are the correlates of morale the same for differing age cohorts? and (2) Is there a decline in morale among the aged as compared with the younger of a given population? Subsidiary research objectives developed and are presented below.

Character of the Present Study

Studies on aging indicate that an ideal study of the aged would be both longitudinal and cross-generational within the same population. The cross-generational study would mitigate the survivor effect of the longitudinal study while on the other hand, the longitudinal study would correct the cohort interactional effect on the other. The survivor effect means that you always have the best of the sample left at any time, thus biasing the study in favor of the better adjusted. This may yield such conclusions that age contributes to morale. The cohort interactional effect is based on the assumption that cohorts are more likely to interact internally, thus creating a gap between one cohort and another in terms of life style, cultural orientations, and the like. Thus, conclusions of reduced or increased morale among the aged may merely be the effect of a life style or cultural orientation of a particular cohort. This effect is based on a postulate of insularity between cohorts that the present study is not prepared to accept. Interactionally, it may be true that cross-generational interaction is attenuated and it may also be true that this creates gaps, culturally

and otherwise between cohorts. On the other hand, the American culture

is highly fluid with ideas penetrating both geographic and temporal

barriers to all segments of the population. Thus, while perhaps not

accepting of other orientations, few cohorts can be totally unaware of

the orientations of other cohorts. It is felt in the present study

that this contributes to a kind of homogeneity that should not be

overlooked.

Limitations of the present study, time and money, precluded the

possibility of doing a longitudinal study. Fortunately, however, a

previous study of a particular population was available from which to

construct a cross-generational study or comparison.[49] In the previous

study, retired clergymen and retired professors of a southwestern state

were measured with two measures of morale and across a number of the

most common variables used in studies of aging.[50] These variables

included such items as religious orientation, socio-economic status,

family type, family orientation, health, income, and other relevant

variables. For the present study, the same instruments were available

as well as the active population of clergymen and professors. In view

of the problem of the present study, a number of subsidiary research

objectives were formulated facilitating the analysis of the present

study. These objectives included: (1) to determine the structure of

morale among the active sample; (2) to make comparisons between profes-

sions, clergymen and professors in the active sample; (3) to make an

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[49]Ibid.

[50]For an overview of variables on aging see, Ida Harper Simpson
and John C. McKinney, eds., Social Aspects of Aging (Durham, N. C.,
1966). To the author's knowledge, the PIL was first used on a retired
population by Acuff.

assessment of the measures of morale used in the present study; (4) to make cross-generational comparisons between the active sample and the inactive sample of professors and clergymen. In view of the exploratory character of the present study, a number of hypotheses emerged out of the foregoing research objectives, theoretical perspectives, and literature on aging and morale. These hypotheses will be presented in Chapter II.

Definitions of Terms Used

Purpose. Purpose will be operationally defined by the PIL. Purpose refers to a primary motive in man as a "will to meaning."

Adjustment. Adjustment is operationally defined by the LSIA. Adjustment refers to a general feeling that one's life has yielded satisfaction.

Clergyman. A clergyman is one engaged in the occupation of pastoring a church within one of the denominations selected for the present study. A clergyman refers also to one who has in the past fulfilled the previously stated requirements but who is now retired.

Professor. The term professor refers to the encumbent of a position with a rank of Instructor to Professor in either a state college or university.

Religion. Religion is those beliefs and practices that enable individuals to adjust creatively to the limiting factors of existence.[51]

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[51]William H. Bernhardt, A Functional Philosophy of Religion (Denver, 1958); J. Milton Yinger, Religion Society and the Individual (New York, 1957); and J. Milton Yinger, The Scientific Study of Religion (New York: MacMillan, 1970).

Attitude. An attitude is certain regularities of an individual's feelings, thoughts, and predispositions to act toward some aspect of his environment.[52]

Active Professional. A professional in the present study who is still practicing his profession full time and who does not consider himself to be retired and who is not considered retired by others is an active professional.

Inactive Professional. An inactive professional is one who is considered to be retired by himself and by others.

Activity or Active Orientation. This refers to role generated activity, particularly to activity that is connected to a major source of meaning such as work, or interaction with valued others.

Summary

A controversy within social gerontology exists between the disengagement theory of aging, based on the structural functional theory, and the activity theory of aging, based on the symbolic interactionist perspective. The controversy centers around the relative contribution of external circumstances to morale among the aged and the relative importance of morale among the aged. The functionalist position is that what is good for the system is good for the individual. The interactionist position is that social system is too narrow a position, what really matters is the individual. The functionalist wants to know the effects of morale among the aged upon the system. The interactionist wants to know the effects of morale among the aged upon the aged

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[52]Paul F. Secord and Carl W. Backman, Social Psychology (New York, 1964), p. 97.

themselves as well as others.

Out of the above, the present study has been designed to study the problem of morale among the aged by comparing an active population with its retired population via a cross-generational design. This should help focus the problem more clearly and help answer the question concerning loss of morale among the aged.

The problem of the present study was to ascertain the importance of life circumstances in the maintenance of morale among the aged. Research objectives to facilitate the study of the problem were formulated. These objectives were formulated as two questions: (1) Are the correlates of morale the same for differing age cohorts? and (2) Is there a decline in morale among the aged as compared with the younger of a given generation?

CHAPTER II

METHODS, HYPOTHESES, AND ANALYTICAL TECHNIQUES

The Research Design

Although there are a number of research design alternatives, a
mailed questionnaire survey was chosen as the best for the present
study.[1] Limitations of time and money were over-riding factors in this
decision.

Advantages of the mailed questionnaire include: with careful pre-
testing, standardization ensures some uniformity of response; respond-
ents may have greater confidence in their anonymity, thus freeing them
to express themselves more candidly; and the respondent does not feel
under pressure to come up with just any answer as he might in the inter-
view, since he has time to ponder the questions. Obviously, more
respondents can be covered in the same time and for less money than
with other techniques such as the personal interview.[2]

Quantification of the data was built into the design in order that
hypothesis testing using standard statistical techniques would be

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[1]Discussion of research design alternatives may be found in Clair
Selltiz, M. Jahoda, M. Deutsch, and S. Cook, Research Methods in Social
Relations (Holt, Rinehart, and Winston, New York, 1967), pp. 49-142.
For a more detailed discussion of research design see, Fred N. Ker-
linger, Foundations of Behavioral Research (Holt, Rinehart, and Winston,
New York, 1964), pp. 275-355.

[2]Selltiz, et al., pp. 238-241.

possible. For the most part, quantification was into categories rather than through the employment of esoteric measurement devices. The two interval scales, the PIL and LSIA, were also quantified into categories.[3]

Analytically, the design was an intergenerational comparison between active and retired professionals, clergymen and professors. The design also included a comparison between the active professions. These two professions are thought to be similar in opportunity structures. Both roles require a higher than average education level. Retired professionals of both college teaching and the clergy generally have some opportunity to remain identified with their profession and frequently, especially in the case of the minister, to be actively identified with the profession.[4]

The analytical design of the present study was dependent, in part, upon the previous study with which the cross-generational comparison was made.[5] This dependency consisted in data collection instruments and the universe of the study.

The Sample

The universe of the present study consisted of those active professionals from specified protestant denominations or a state

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[3]The PIL and LSIA may be found in the appendix. For a discussion of quantification of data see, James S. Coleman, "Mathematical Models and Computer Simulation," in Handbook of Modern Sociology, ed. R. E. L. Faris (Chicago: Rand McNally, 1964), pp. 1028-1042.

[4]Acuff, pp. 8-10.

[5]Ibid.

university or state college within the confines of a southwestern

state.[6] One objective of the present study, in terms of sampling, was

to get a sample of active professionals, clergymen and professors,

representative of the universe sampled in the previous study.[7]

All samples were drawn from lists which were either compiled for

the current year by the organization in question or lists edited by

persons connected to the organization. Where it was impossible to get

an acceptable list, no sample was drawn. This meant that six institu-

tions were sampled instead of the desired eight in the case of state

colleges. All denominations were sampled and responded adequately as

did the three state universities.[8] It was assumed that among the pro-

fessors, there would be homogeneity among the faculty of the state

colleges. The clergy was considered a quasi-homogeneous population,

theologically homogenous in terms of merger proposal.[9]

The universe of active professionals included only males, either

clergyman or professor. A stratified random sample of the population

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[6]Delineation of this population may be found in its entirety in Acuff's work.

[7]In view of the fact that the retired sample was heavily skewed in favor of respondents from the two large state universities and in favor of two denominations, it is felt that the response pattern of the present study satisfactorily represents the population of the previous study. It should be noted that in the retired sample, availability of respondents was heavily skewed in the manner of the response pattern.

[8]In the retired sample, two institutions are called state univer- sities. Since that study one of the state colleges has been granted university status.

[9]Acuff, p. 11.

was drawn.[10] Stratification consisted in separation into institutions

and denominations so that a sample would be drawn from each. A minimum

of ten percent or ten respondents, whichever was greater, was set as

the minimum limit for sampling. Generally a larger number than ten was

drawn from any institution or denomination.

Data Collection

Collection of data was by mailed questionnaire. The respondents

were mailed a questionnaire booklet containing the variable items and

LSIA.[11] Included in the mailing was a PIL, professionally prepared by

Psychometric Affiliates.[12] A self-addressed and stamped return enve-

lope was enclosed in order to facilitate response and hopefully insure

a higher return.[13] Preceding the mailing of the questionnaire packet

was a cover letter signed by the author's advisor explaining the pur-

poses of the study and soliciting the cooperation of the potential

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[10] For a discussion of stratified random sampling procedures see:
Selltiz, et al., pp. 509-545. For a discussion of the statistical
theory of sampling see: Allen L. Edwards, Statistical Methods (2nd
ed.; New York: Holt, Rinehart, and Winston, 1967), p. 15.

[11] A copy of the questionnaire booklet, including LSIA, may be
found in Appendix B.

[12] The PIL may be purchased from Psychometric Affiliates, Chicago
Plaza, Brookport, Illinois.

[13] For a specific study on ministers and responses to mailed ques-
tionnaires see: William R. Catton, Jr., "Exploring Techniques for
Measuring Human Values," American Sociological Review, Vol. 19, No. 1
(February, 1954), pp. 49-55. For specific instructions on increasing
returns from a mailed questionnaire see: William M. Kephart and Marvin
Bressler, "Increasing Responses to Mail Questionnaires," Public Opinion
Quarterly, 22 (1958), pp. 123-132. For a general detailed statement of
mailed questionnaires see Selltiz, et al., pp. 241-242.

respondents.[14] A follow-up letter was mailed to all non-respondents. Questionnaire packets were mailed to 296 professors and 282 clergymen for a total of 578. For the pattern of responses see Table I.

A total of 578 questionnaire packets were mailed out; 296 professors and 282 clergymen were included in the mailing. A total of 166 professors responded adequately enough to be included in one or more tests. A total of 135 clergymen responded adequately to be so included. A total of 152 professors and 120 clergymen responded with no missing data that were relevant to the category of respondent.

The follow-up mailing was to 264 non-respondents.[15] Returns following this mailing were very poor. Of the total mailing, only 38 responded; of these, only 20 were usable. Considering the length of the questionnaires, the personal nature of many questions, and the status of the respondents, the returns on the whole were considered adequate.

Data Collection Instruments

Data collection instruments included the inventory of variable items, the LSIA, and the PIL. The variable items were categorized into ten categories for analytical purposes. For a breakdown of the variable items into categories, see Table II below. Further discussion of the variable items is continued in the present chapter in the section

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[14]F. Gene Acuff is Professor and Head, Department of Sociology, Oklahoma State University, Stillwater, Oklahoma. A copy of the letter may be found in the appendix.

[15]The pattern of responses and quality of responses on the follow-up mailing indicated that the respondents were either inclined to respond rather quickly or not at all.

TABLE I

RESPONSE PATTERN ACTIVE PROFESSORS AND CLERGY

Group	Total Mailed Out	Useable Returns	No Response	Did Not Fill Out	Useable Returns By Percent	Total Response By Percent
Professors	296	166	108	22	56	64
Clergymen	282	135	118	29	48	58
Total Sample	578	301	234	51	52	61
Follow-Up	264	20	234	18	7.5	14

Reasons Did Not Fill Out:	Too Busy	Did Not Like Questionnaire	No Reason	Lost Questionnaire	Claimed Returned	Moved	Deceased-Retired
Total	4	4	10	3	4	22	4

TABLE II

MAJOR DESCRIPTIVE CATEGORIES AND CORRESPONDING
ITEMS FROM QUESTIONNAIRE BOOKLET

Descriptive Category	Item Number	Item
Age	1	Age to nearest birthday
Professional Characteristics	2	Highest academic degree received
	3	Feeling about retirement
	4	How view retirement relative to profession
	40	Academic rank (professors)
	41	Years employed in education (professors)
	42	Years employed in Oklahoma higher education (professors)
	43	Major area of activity for clergy
	44	Size of church membership of largest church served (clergy)
	45	Years a clergyman in Oklahoma
	46	Number of years full time in Profession
	47	Membership in a professional organization
	48	Keeping up with current literature
	50	Satisfaction with profession
Community and Census Data	7	Type by size of setting where spent life up to 20 years of age
	8	State where spent most of life up to 20 years of age
	9	State where lived most of life from age 20 to the present
	10	Type of setting by size where lived from age 20 to present
	11	Length of residence in present community
	12	How rank community now live in
Familial Characteristics	13	Present living arrangement
	14	Marital status
	15	Number of living children
	19	Contact with children
	20	Personal contact with children
	21	Distance of children

TABLE II (Continued)

Descriptive Category	Item Number	Item
Familial Characteristics	22-31	Family affection score
	32-38	Family support
Bereavement	16	Number deceased children
	17	Number deaths in family
	18	Deaths of friends and relatives
Socio-economic Status	39	Father's education
	73	Income
	74	Net worth
	75	Source of income
Health	51-58	Health check list
	59-61	Smoking and alcohol consumption
Social Participation	49	How spend time
	62	Civic activities
	63	Ease of joining organizations
	64	How often entertain
	65	Number of friends preferred
	66	With whom interact most frequently
Religion	67	Importance of religion
	68	Comparative importance of religion to times past
	69	Belief in life after death
	70	Church membership
General Life Attitudes	5	Source of greatest concern
	71	Notion of what is worthwhile in life
	72	Importance of life success

on independent variables.[16]

PIL. The PIL is an attitude scale consisting of twenty items

which are intended to reflect the idea of purpose in life or "meaning"

as developed by Frankl.[17] Frankl, through his clinical experience and

personal experiences in a Nazi prison camp, developed the idea that a

great deal of what appears to be emotional or mental illness is the

result of a loss of meaning rather than an illness due to the tradi-

tional psychoanalytic causes.[18] Frankl felt that happiness, rather

than an end in itself, was a by-product of striving to achieve goals

considered worthwhile. Frankl developed what he calls "Logotheraphy"

as a method of treatment for "noogenic" neurosis, which is the result

of a loss of meaning or purpose in life. A term synonymous with

"noogenic" neurosis is "existential vacuum." "Noogenic" neurosis or

"existential vacuum" is felt to be especially prevalent in people who

through one reason or another have lost sources of meaning in life.

The relationship of this to the problems of aging people is obvious.[19]

The aging typically represent a category of people who are continually

losing sources of meaning; interactional frameworks decrease with the

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[16] For a discussion of independent variables see Kerlinger, pp. 38-
42. For every variable item see the appendix.

[17] James C. Crumbaugh and Leonard T. Maholick, "The Case for
Frankl's 'Will to Meaning'", Journal of Existential Psychiatry, 4
(Summer, 1963), pp. 43-48. For a statement about PIL and norms see
James C. Crumbaugh and Leonard T. Maholick, "Manual of Instructions for
the Purpose in Life Test" (Chicago Plaza, Brookport, Illinois:
Psychometric Affiliates, 1969).

[18] Frankl, 1963.

[19] James C. Crumbaugh, "Aging and Adjustment: The Applicability of
Logotheraphy and The Purpose-in-Life Test," mimeographed manuscript,
accepted for publication in The Gerontologist. Paper read at the S. W.
Sociological Association Annual Meeting, Mar. 25, 1971, Dallas, Texas.

loss of jobs, friends, and loved ones. Advancing knowledge may alter

irreparably frames of reference for beliefs, and the inevitable, death,

can only grow closer with each day.

The PIL was developed to measure the degree this "existential

vacuum" is experienced by an individual. Although not specifically

called a measure of morale, the PIL reflects the idea of morale pre-

sented in the present study. Morale, conceptualized as the intervening

variable between integration into society and suicide, and the PIL as

conceptualized by its authors appears to be closely related to the

central source of problems among the aged as defined by gerontologists.

The PIL seems to reflect the idea of morale quite adequately.

The PIL has been subjected to a number of empirical tests of

validity, reliability, and its relationship to a variety of variables.[20]

Tests of validity include in terms of construct validity, the correct

prediction of the order of the means for psychiatric patient popula-

tions and four normal populations. Criterion validity tests include

two measures: correlation between PIL and therapist's ratings of the

degree of purpose in life and meaning in life demonstrated by the

patient, and correlations between PIL scores and ratings by ministers

of the degree of purpose in life and meaning exhibited by their

participating parishioners.[21]

Measures of reliability of the PIL include split half reliability

using odd-even questions, with a population of 225 (105 "normals" and

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[20]See Crumbaugh and Maholick, "The Manual of Instructions for the
Purpose-in-Life Test."

[21]James C. Crumbaugh, "Cross-Validation of Purpose-in-Life Test
Based on Frankl's Concepts," Journal of Individual Psychology, 24
(1968), pp. 74-81.

120 patients), Spearman-Brown corrected to r = .90. Another sample of

120 protestant parishioners, non-patient population, produced an odd-

even Spearman-Brown corrected reliability coefficient of r = .92.[22]

In the present study, using the responses of 120 active clergymen

and 152 active professors, for a population total of 272, a reliability

coefficient of r = .97 was obtained using the Kuder-Richardson formu-

la.[23] Although reliability does not guarantee scientific results,

objective results are precluded if there is no reliability. It was

concluded that the PIL offered a satisfactory level of reliability.

The PIL has been related positively and negatively to a number of

variables. Logically, the PIL should relate negatively to variables

such as alienation, anomie, and the like. The PIL has been negatively

related with the Srole Anomie scale in a sample of 94 male college

undergraduates with a correlation coefficient of r = -.48. In a study

of 155 females, the PIL was negatively correlated with the Srole Anomie

scale with an r = -.32. The PIL has also been related to a variety of

personality factors; negatively to negatively valued factors, and posi-

tively to positively valued factors. For the relationships of the PIL

to these personality factors see Table III.

The PIL has also been related to a number of variables impinging

on the aging population. Of particular significance to the present

study is the relationship of the PIL to the variables presented in

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[22]Ibid.

[23]John T. Roscoe, _Fundamental Research Statistics for the Behav-ioral Sciences_ (New York: Holt, Rinehart, and Winston, Inc., 1969), p. 106.

[24]See Crumbaugh and Maholick, "The Manual of Instructions for the Purpose-in-Life Test."

Table IV, page 37, with a population of aging professionals, clergymen and professors.[25]

TABLE III

CORRELATION OF PIL AND PERSONALITY FACTORS

Personality Factor

Achievement via conformance	r = .63	Self-control	r = .40
Sense of well-being	r = .52	Self-acceptance	r = .40
Psychological mindedness	r = .47	Responsibility	r = .39
Emotional stability	r = .43	Depression	r = -.65

Past research indicates that the PIL is responsive to a number of variables reflecting logical concomitants of the PIL or productive of what can be called meaning in life or purpose in life.[26] Further discussion of the PIL is continued in the present chapter in the section on assessment of measures of morale.

LSIA. The LSIA is an index of life satisfaction developed specifically for the measurement of successful aging among aging populations.[27]

[25]Acuff.

[26]See for example Gene Acuff and Donald Allen, "Hiatus in 'Meaning': Disengagement for Retired Professors," Journal of Gerontology, Vol. 25, No. 2 (1970), pp. 126-128; and Gene Acuff and Benjamin Gorman, "Emeritus Professors: The Effect of Professional Activity and Religion on 'Meaning'," Sociological Quarterly, 9 (1968), pp. 112-116.

[27]"The Measurement of Life Satisfaction."

TABLE IV

ITEMS SIGNIFICANTLY RELATED TO PIL
AMONG A POPULATION OF RETIRED
CLERGY AND PROFESSORS

Item Category	Item
Profession	Academic preparation in terms of degree
	Post-retirement professional activity
	What miss most about profession
	Professional memberships and participation
	Familiarity with current professional literature
	Satisfaction with profession
Family	Marital status
	Family deaths in past ten years
	Family affection score
	Family type
Health	Health check list
	Subjective feelings of health
Interaction Patterns	Number of friends prefer
	Interact most with what age
Religion	Importance of religious philosophy
Life Attitudes	Clarity of notion of what worthwhile
	Preciseness of future plans
	Frequency of missed opportunities

The LSIA was developed as a measure of successful aging in the context of the "activity" theory of aging in order to distinguish those individuals who were experiencing aging as a successful venture from those aging individuals who were not. The LSIA was then expected to provide guide-lines for the development of a viable context for the aging individual. The LSIA was constructed purposefully as a multi-dimensional scale. The authors of the LSIA felt that aging was a multi-dimensional phenomenon and felt that any scale adequately reflecting this fact should also be multi-dimensional. The Kutner Morale scale was available but purported to be uni-dimensional. As such it was considered inadequate for the purpose of measuring successful aging.[28]

Tests of validity for the LSIA include testing against other instruments. The Cavan Adjustment Rating Scale has been used as validity criterion. The Cavan scale is a rating by judges based on an interview with the persons being rated. Consequently, it takes much more time than the simple administration of the LSIA which is a short twenty-item scale which can be completed by the respondent in a matter of a few minutes. The Cavan scale takes into account associations with family and friends and other groups as well as feelings of importance, satisfaction, and emotional stability. The Cavan scale attains the kind of multi-dimensionality desired by Havighurst and his associates.[29] The correlation between the LSIA and the Cavan Adjustment Rating Scale was $r = .73$.

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[28]Robert J. Havighurst, "Successful Aging," The Gerontologist, 1 (March, 1961), pp. 8-13, esp. p. 10.

[29]Ibid.

Another test of validity of LSIA was with the Life Satisfaction Rating in the Kansas City Study of Adult Life.[30] In this test, the correlation coefficient between the Life Satisfaction Rating and LSIA was r = .58. Havighurst reported that the LSIA was not as satisfactory as they had wished but that the LSIA seemed useful with older populations.[31]

In the present study, the basic test of reliability was a test of consistency measured by the Kuder-Richardson formula. The consistency coefficient was r = .80. The responses of 272 active professionals were used in the determination of reliability (120 active clergymen and 152 active professors).

The LSIA has been used in a number of studies and successfully related to a number of variables. In a study of perception of economic status, it was found that the LSIA was related to perceived economic security. Actual income was not necessarily related to perceived economic security or morale as measured by the LSIA.[32]

In another study, of a sample of 1551 persons, scores on the LSIA declined sharply with widowhood during the first five years and then increased moderately, although actual interaction with children, sibs

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[30]"The Measurement of Life Satisfaction."

[31]Ibid.

[32]M. Goodman, D. Dye, B. Harel, and N. Bley, "Perception of Economic Status as a Determinant of Morale in the Aged." Paper presented at the 24th annual meeting of Gerontological Society, Houston, Texas, 1971.

and others did not increase.[33] It should be noted here that this is

suggestive of attitudinal theory which would have predicted this out-

come.[34]

The LSIA was subjected to an item analysis which included a factor

analysis by Adams.[35] In this analysis, it was concluded that the LSIA

could be shortened by seven items and still retain, if not increase,

its value in assessing successful aging. The resultant scale consisted

in either 13 of the original items in its most attenuated form, or 18

of the original items in a moderately attenuated form.[36] The new scale

was called the LSIZ.

The LSIZ was used in one study to predict the impact a program for

the aging had upon those participating in it.[37] In Wylie's study, it

was found that scores on the LSIZ increased with participation in the

program and remained depressed among old people who were part of the

control group and not a part of the participating sample.

For the present study, the importance of the LSIZ is that it pro-

vides a base for assessment of the LSIA as well as further indications

of the kinds of relationships to be expected from either scale, LSIA

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[33]C. T. Pihlblad, Howard Rosencranz, and David Adams, "Widowhood,
Social Participation, and Life Satisfaction." Paper presented at the
24th annual meeting of the Gerontological Society, Houston, Texas,
1971.

[34]Bem.

[35]David L. Adams, "Analysis of a Life Satisfaction Index," Journal
of Gerontology, Vol. 24, No. 4 (1969), pp. 470-474.

[36]Adams suggests deleting seven of the twenty items. The LSIZ
sent to the author of the present study by Dr. Havighurst included
eighteen of the original items.

[37]Mary L. Wylie, "Life Satisfaction as a Program Impact Criterion,"
Journal of Gerontology, Vol. 25, No. 1 (1970), pp. 36-40.

or LSIZ.

Most important for the present study are the relationships found between the LSIA and variables important to aging among a sample of aging professionals.[38] These variables are presented in Table V, page 42.

The LSIA was related to items reflecting every category in the present study with the retired sample of professionals. Further discussion of the LSIA is continued in the succeeding section on assessment of measures of morale.

Assessment of Measures of Morale

The PIL and LSIA were the measures of morale used in the present study. Both scales, the PIL and LSIA, were subjected separately to three factor analyses and varimax rotations using the IBM 360 model 65 and a computer program developed by Veldman.[39] Each analysis included the extraction of factors by principal axis analysis and varimax rotation of the factors thus extracted for greater interpretability of factors. Basically, factor analysis is a procedure for discovering underlying factors or traits among a variety of measures or a larger number of variables. In the case of the PIL, the LSIA or similar interval scales, factor analysis should provide an assessment of how well the scale items fit together. If the scale is supposed to measure

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[38]Acuff, 1967.

[39]Donald J. Veldman, _Fortran Programming for the Behavioral Sciences_ (New York: Holt, Rinehart, and Winston, 1967), pp. 222-225. This program was modified and adapted to the computer at Oklahoma State University by Dr. Donald E. Allen, Professor of Sociology at Oklahoma State University.

TABLE V

ITEMS SIGNIFICANTLY RELATED TO LSIA
AMONG A POPULATION OF RETIRED
CLERGY AND PROFESSORS

Item Category	Item
Profession	Post-retirement professional activity
	Present professional activity
	Satisfaction with profession
Family	Deceased children
	Living arrangement
	Distance of children
Health	Health index
Interaction Patterns	Civic participation
	Entertainment with friends
	Number of friends preferred
Religion	Belief in life after death
Life Attitudes	Clarity of notion of what worthwhile in life
	Preciseness of future plans
Socio-economic	Relative income at time of retirement
	Most important source of income
	Yearly income
Community	Evaluation of community
Age	Age nearest birthday

one major dimension with perhaps underlying separate dimensions, it would be expected that in a principal axis analysis all items would "load" well on a single factor. Subsequent varimax rotation should then provide an assessment of underlying dimensions or factors.[40]

In the behavioral sciences at least two basic ideas concerning the construction of interval scales exists. One of these ideas, identified with Louis Guttman, is analogous to the idea of the measurement of weight on a pound scale. For example, it is known that if an object weighs ten pounds on a pound scale, the object has already registered on all the points intervening between zero and ten. Likewise, with a scale of responses in the social sciences we should be able to predict from the last item responded to in terms of the scale, the responses to all previous items that come before the last point thus answered according to the scale prescription.[41] (Actually in scale construction of this kind, the items could be mixed but sorted out for the analysis only so that the presentation order of the scale need not be analogous to the item's position on the scale.) This idea of scale construction is the basic idea of uni-dimensionality.

Another idea is that scales need not be uni-dimensional but may contain a number of dimensions. There is precedent for this in the physical sciences where two diverse measures such as inches and pounds are multiplied together and form a product known as "moment". (Moment is defined as weight times distance from a reference datum.) Social

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[40]Kerlinger, p. 667.

[41]Louis Guttman, "The Principal Components of Scale Analysis," in Samuel Stouffer, et al., Measurement and Prediction (Princeton, N. J.: Princeton University Press, 1950), pp. 312-361.

scientists do not always seem to understand this idea of multi-dimensionality. In the social sciences, to have a multi-dimensioned scale fitting the criteria above, the dimensions should be related in some manner basically invariant. If a multi-dimensional scale in the social sciences is composed of a congeries of items, the result is probably worthless or at best serendipitous. In the present study it is felt that multi-dimensional scales should assume all that the Guttman idea assumes plus the idea that there should be a spceifiable relationship between the various dimensions used in the scale.[42]

In assessing the scales used in the present study, the PIL and LSIA, the author's intentions provided analytical guidelines which are reflected in the analytical hypotheses presented directly below.

AH_1) A factor analysis of the PIL will produce a uni-dimensional scale. The scale will be considered uni-dimensional if all items load significantly at the .01 level or lower on the first factor extracted by principal axis analysis.

AH_2) A factor analysis of the LSIA will not produce a uni-dimensional scale. Specifically, some items will not load at the .01

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[42]For a discussion of interval scales see Kerlinger, pp. 424-428. For a number of articles concerning scale construction and attitude measurement see Martin Fishbein, ed., Readings in Attitude Theory and Measurement (John Wiley and Sons, 1967). Parts I and II contain a number of excellent articles concerned with scale construction and attitude measurement. Some specific instructions in scaling techniques may be found in Pauline V. Young and Calvin F. Schmid, "Scaling Techniques in Sociological Research," Scientific Social Surveys and Research (4th ed.; Englewood Cliffs, N. J.: Prentice-Hall, 1966), pp. 348-380. For a brief summary of a number of scaling techniques see: James William Gibson, "Direct and Indirect Attitude Scale Measurements of Positive and Negative Argumentative Communications," Ph.D. dissertation, The Ohio State University, 1962 (Ann Arbor, Michigan: University Microfilms, Inc.), pp. 16-39.

level of significance or lower on the first factor extracted by princi-

pal axis analysis. (This is in accordance with Havighurst's original

intentions.[43])

Factor Analyses of PIL

Three factor analyses of PIL were made. One analysis was made

using the responses of 120 active clergymen only. One was made using

the responses of 152 active professors only and another factor analysis

was made using the responses of both the 120 clergymen and the 152

professors for a combined total of 272 active professionals.

With the exception of the .01 limitation specified above, conven-

tions concerning the interpretation of factor analysis are varied in

the present study. Frequently, loadings of less than .30 are consid-

ered insigificant in interpretation of factor analyses in spite of the

fact that with a population of 272 a loading of .30 represents a sig-

nificance of $p < .001$ (t = 15.588, df = 270). This is because with a

large number of correlations, it can be expected that about 5 per cent

of these will be significant at the .05 level simply as an artifact of

the statistical process.[44] Some factor analysts insist upon using a

loading of .40 or better. Using higher loadings, however, it is possi-

ble to make another kind of mistake. Using higher loadings as criteria

makes it a relatively simple matter in the better scale to rotate off

"insignificant" loadings and have what appears to be a scale or a con-

cept with very clear underlying dimensions. In fact, in such cases the

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[43]"Analysis of a Life Satisfaction Index."

[44]Roscoe, p. 206, provides the statistic for conversion and evalu-
ation of r by t.

dimensions are highly inter-related and not so clear as the interpretation supposes.[45]

Interpretation of factor analysis must be carefully guarded and is dependent upon insight and theoretical formulations independent of the analysis for validity. In the present study, various levels of significance have been selected in order to demonstrate possible interpretations of the results with full recognition that there is this problem of interpretation and that factor analysis depends upon the integrity of the user as much or more than it does the mathematics of the analysis. Factor analysis is viewed as an aid to thinking and not a substitute for thinking in the present study.

In a test of analytical H_1) the results of the three principal axis analyses in the form of factor I can be seen in Table VI, page 47. The lowest loading for any item was .23 for the sample of 152 active professors. This represents a significance of $p < .001$ (t = 12.978, df = 150). The only item failing to load .30 or better on the analysis including both clergy and professors was item 16 pertaining to suicide.

The amount of variance extracted by a factor is a useful measure in assessing the quality of a factor in terms of its use as a predictor. The variance extracted by factor I was 32 per cent. This can be seen in Table VII, page 48.

In view of the loadings of all three analyses on factor one in principal axis analysis and in view of the amount of variance extracted by this factor one, analytical H_1) was accepted. The PIL, in the

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[45]Kerlinger, p. 654, provides discussion of interpretation of correlational coefficients and loadings on factor analyses (in footnotes).

TABLE VI

FACTOR ANALYSES OF PIL PRINCIPAL
AXIS ANALYSIS FACTOR I

Item	Professors n=152	Clergy n=120	Both n=272
1. Enthusiasm	.64	.67	.65
2. Exciting life	.60	.67	.65
3. Clear goals	.55	.62	.58
4. Purposeful existence	.73	.68	.70
5. Every day new	.66	.66	.66
6. Want nine more lives same	.50	.48	.49
7. After retiring want activity	.23	.47	.34
8. Progress toward life goals	.52	.58	.53
9. Life is full	.76	.77	.76
10. Life worthwhile	.59	.68	.63
11. Reason for existence	.57	.69	.62
12. World fits meaningfully	.45	.50	.48
13. Responsible	.42	.45	.42
14. Freedom	.29	.44	.37
15. Unafraid of death	.33	.50	.39
16. Suicide (negative)	.29	.26	.27
17. Ability to find meaning	.63	.71	.66
18. In control of life	.47	.46	.46
19. Daily tasks satisfying	.60	.70	.63
20. Discovered clear goals	.74	.67	.69

Underscoring of an item indicates that the item fails to meet
criteria of .30 loading or better. Item 7 under "Professors" represents
lowest loading of any item. This represents a significance of p <.001.

present study, is considered to be a satisfactorily uni-dimensional

scale. This is not according to the Guttman formulation but in terms

of the inter-relatedness of items only.

TABLE VII

FACTOR ANALYSES PIL PER CENT OF VARIANCE
EXTRACTED BY FACTOR

| | Principal Axis Analysis | | | |
| | | Factor | | |
Group	I	II	III	IV
Professors	30	9	7	7
Clergy	35	8	7	6
Both	32	8	7	6

As indicated above in Table VII, three other factors were extract-

ed by principal axis analysis. These factors may be found in Appendix

C of the present study. Interpretation of factors following factor one

in a principal axis analysis become more interpretable with rotation.[46]

Discussion of the rotation follows. Varimax rotation produced a redis-

tribution of variance along the rotated factors as exhibited in Table

in Table VIII, page 49. Except among active professors, factor I still

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[46]Leon Thurstone, Multiple Factor Analysis (Chicago: University
of Chicago Press, 1947), pp. 508-509.

retains its dominance. In the case of the professors, factor I and factor II share the primary position. Rotation produced quite a bit of divergence between clergy and professors in the items significantly loading on the factors. This difference is measured by biserial correlation coefficient and is included in Appendix D.

TABLE VIII

FACTOR ANALYSES PIL PER CENT OF
VARIANCE EXTRACTED BY FACTOR

| | Varimax Rotation Analysis | | | |
| | Factor | | | |
Group	I	II	III	IV
Professors	17	17	10	8
Clergy	21	12	8	10
Both	19	11	9	13

Since there was so much divergence between the two groups, and greater confidence can be placed in an analysis with a higher n, remaining interpretation is continued only with the analysis of both clergy and professors. In Table IX are rotated factors I, II, III, and IV with loadings less than .30 deleted. The items are arranged in order to demonstrate the approximation to simple structure the scale obtains upon rotation. Simple structure means basically that there will be a number of significant loadings on any factor and that these

TABLE IX

FACTOR ANALYSIS OF PIL VARIMAX ROTATION OF ALL
FACTORS WITH ACTIVE CLERGY AND PROFESSORS
(N=272)

Factor Item	I	II	III	IV
1.	.66			
2.	.73			
3.	.54			
4.	.59			.47
5.	.72			
9.	.62			
19.	.65			
20.	.64			
8.		.48		
13.		.76		
14.		.48		
18.		.67		
6.			.53	
7.			.56	
16.			.52	
10.				.52
11.				.75
12.			.42	.58
15.				.66
17.	.40			.61

Underscoring of an item indicates an item mathematically retained
on a rotated factor because of a loading of .40 or better but excluded
from that factor by interpretation because of greater loading on
another factor.

items loading significantly on one factor will not load significantly on other factors.[47] Tables of each factor giving the significant loadings of all three analyses, professors, clergy, and both groups combined are found in Appendix C.

The four factors appearing upon rotation seem logically to be identifiable and are labeled in the present study as follows: Factor I, Excitement in Life; Factor II, Non-alienation; Factor III, Love of Life; Factor IV, Reason for Existence. These factors and associated item statement in positive forms are given in Table X, page 52.

In Table X it should be noted that the factors meet the criteria of acceptance in the case of analytical H_1). The factors do appear to have inter-relationships with one another in addition to having a core of items clustering together. In the present study, the PIL appears to be a fairly well constructed scale. It yields a suitable one factor scale which is composed of four underlying traits or dimensions which are also inter-related. One item, item 16 pertaining to suicide, could be deleted. The expense of keeping the item on the scale is neglibible, both in terms of intellectual risk and analytical risk. Item 16, however, does load significantly at the .001 level and also shares in item communality which is a measure of item reliability. For item communality see Table XI, page 53.

The communality of an item represents the lowest coefficient of reliability to be expected from that item.[48] The communality of an

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[47]Paul Horst, Factor Analysis of Data Matrices (New York: Holt, Rinehart, and Winston, Inc., 1965), p. 385.

[48]Kerlinger, p. 656.

TABLE X

FACTOR ANALYSES OF PIL DELINEATION OF FACTORS
PRODUCED BY ROTATION ALL SAMPLE ACTIVE
CLERGY AND ACTIVE PROFESSORS
(N=272)

Item*	Factor

Factor I - Excitement in Life

1. I am usually enthusiastic
2. Life to me seems always exciting
3. In life I have very clear-cut goals and aims
4. My personal existence is very purposeful and meaningful
5. Every day in constantly new and different
9. My life is running over with exciting good things
19. Facing my daily taks is a source of pleasure and satisfaction
20. I have discovered clear-cut goals and a satisfying life purpose

Factor II - Non-Alienation

8. In achieving life goals, I have progressed to complete fulfillment
13. I am a very responsible person
14. Concerning man's freedom to make his own choices, I believe man is absolutely free to make all life choices
18. My life is in my hands and I am in control of it

Factor III - Love of Life

6. If I could choose, I would like nine more lives just like this one
7. After retiring, I would do some of the exciting things I have always wanted to do
16. With regard to suicide, I have never given it a second thought

Factor IV - Reason for Existence

10. If I should die today, I would feel that my life has been very worthwhile
11. In thinking of my life, I always see a reason for my being here
12. As I view the world in relation to my life, the world fits meaningfully with my life
15. With regard to death, I am prepared and unafraid
17. I regard my ability to find a meaning, purpose of mission in life as very great

*Only positive statements for the item are included in the present table.

item is the sum of the squares of the factor loadings for that item. The communality represents the amount of variance explained across all factors for an item. This is called the common factor variance.[49]

TABLE XI

FACTOR ANALYSES PIL COMMUNALITY OF ITEMS
ACTIVE CLERGY AND PROFESSORS
(N=272)

Item	Per Cent Communality	Item	Per Cent Communality
1.	54	11.	68
2.	67	12.	53
3.	59	13.	59
4.	61	14.	31
5.	61	15.	51
6.	42	16.	28
7.	37	17.	56
8.	39	18.	60
9.	60	19.	52
10.	48	20.	63

[49] Ibid., p. 654.

In the assessment of PIL, H_1) was accepted. The PIL is suffi-
ciently coherent to be considered a uni-dimensional scale with four
underlying dimensions.

Factor Analyses of LSIA

LSIA was subjected to three factor analyses. One of these used
only the responses of 120 active clergy, another the responses of 152
active professors, and the last, the combined responses of the active
clergy and the active professors with an n = 272. Each analysis was
first a principal axis analysis, then varimax rotation of the principal
axis analysis was made for greater interpretability of the factors
extracted. Discussion in the present chapter is centered around the
analysis produced by combining the active clergy and active professors.
Tables giving all comparative loadings are found in the appendix.

As in the case of the PIL, the factors extracted by the principal
axis analysis were not so interesting except for factor one. Factor
loadings on factor one, via principal axis analysis, indicated that
only two items did not load sufficiently high to be retained. One of
these items was an item which was deleted in the analysis which pro-
duced the LSIZ.[50] If the criteria of .01 level of significance is
accepted for an item, then in the present study, all items but items
11 and 17 are acceptable for a one factor scale or a scale with one
major factor. For the principal axis analysis factor one, see Table
XII, page 55.

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[50]"Analysis of a Life Satisfaction Index."

TABLE XII

FACTOR ANALYSES OF LSIA PRINCIPAL
AXIS ANALYSIS FACTOR I

Item	Professors n=152	Clergy n=120	Both n=272
1. As grow older things better	.49	.60	.53
2. More breaks than others	.26	.41	.31
3. Dreariest time of life	.37	.28	.33
4. Happy as when younger	.66	.41	.58
5. Life could be happier	.43	.47	.44
6. Best years of life	.54	.43	.48
7. Things done boring	.49	.43	.46
8. Expect interesting future	.34	.32	.33
9. Things done are as interesting	.52	.50	.50
10. Feel old and tired	.47	.41	.44
11. Feel my age but no bother	.06	.18	.10
12. Retrospectively satisfied	.38	.29	.35
13. Would not change past life	.34	.19	.28
14. Foolish decisions	.31	.24	.29
15. Good appearance	.29	.35	.32
16. Plans for future	.58	.33	.50
17. Didn't get most of important	.07	-.08	.05
18. Get down in dumps	.20	.32	.27
19. Gotten expectations	.41	.42	.42
20. Lot of average man	.20	.40	.29

Underscoring an item indicates that the item fails to meet criteria of .30 loading or better. Items loading .18 or better still represent a significance of p<.01.

Considering the fact that the LSIA was not designed for younger non-retired populations, the principal axis analysis of the present study indicates that the scale is fairly acceptable. However, Analytical H_2) was considered sustained because of the following: items 11 and 17 do not load on the first factor, the low loadings on factor one of other items, and the low percentage variance (15%) explained by factor one. The LSIA is not a one dimensional scale. For the percentages of variance explained by factor see Table XIII, page 57. For tables giving the loadings on factors extracted by principal axis analysis, see Appendix C.

Seven factors were extracted by principal axis analysis. This was in contrast to the analysis by Adams which resulted in four or five factors.[51] If Havighurst's categories of zest-apathy and resolution-fortitude are assumed to be mathematically separate, then it is possible that there are seven underlying dimensions to the LSIA because that separation would bring to seven the number of categories or underlying factors. Table XIV, page 58, presents the seven rotated factors produced by the total sample of active clergy and professors. These factors are delineated in Table XV, page 59. Although these factors seem to have some logical consistency, it appears difficult to label them.

There is little correspondence of the factor analysis of the present study and that by Adams.[52] Extracted variance is approximately half that claimed by Adams for factor one. A comparison of rotated

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[51]Ibid.

[52]Ibid.

TABLE XIII

FACTOR ANALYSES OF LSIA, PERCENT OF
VARIANCE EXTRACTED BY FACTOR

Group	Factor						
	I	II	III	IV	V	VI	VII
Principal Axis Analysis							
Professors	16	10	8	7	6	6	5
Clergy	14	9	9	8	6	6	6
Both	15	9	7	7	6	6	6
Varimax Rotation							
Professors	12	9	7	7	7	7	6
Clergy	8	8	9	8	8	9	6
Both	10	7	8	7	7	9	8

Professors   n = 152

Clergy   n = 120

Both   n = 272

TABLE XIV

FACTOR ANALYSES OF LSIA VARIMAX ROTATION OF
ALL FACTORS WITH CLERGY AND PROFESSORS
(N=272)

Factor Item	I	II	III	IV	V	VI	VII
4.	.64						
9.	.77						
6.	.48						
7.	.62						
18.		.70					
20.		.74					
1.			-.59				
2.			-.68				
15.			-.57				
17.			.42				
5.				-.56			
8.				.71			
11.					.62		
14.					-.65		
12.						-.67	
13.						-.63	
16.						-.51	
19.						-.64	
3.							-.68
10.							-.72

TABLE XV

FACTOR ANALYSES OF LSIA DELINEATION OF FACTORS
PRODUCED BY ROTATION ALL SAMPLE ACTIVE
CLERGY AND ACTIVE PROFESSORS
(N=272)

Item	Direction of Loading	Factor

Factor I

4.	+	I am just as happy as when I was younger
9.	+	The things I do are as interesting to me as they ever were
6.	+	These are the best years of my life
7.	+	Most of the things I do are boring or monotonous

Factor II

18.	+	Compared to other people, I get down in the dumps too often
20.	+	In spite of what people say, the lot of the average man is getting worse, not better

Factor III

1.	-	As I grow older, things seem better than I thought they would be
2.	-	I have gotten more of the breaks in life than most of the people I know
15.	-	Compared to other people my age, I make a good appearance
17.	+	When I think back over my life, I didn't get most of the important things I wanted

Factor IV

5.	-	My life could be happier than it is now
8.	+	I expect some interesting and pleasant things to happen to me in the future

Factor V

11.	+	I feel my age but it does not bother me
14.	-	Compared to other people my age, I've made a lot of foolish decisions

Factor VI

12.	-	As I look back on my life I am fairly well satisfied
13.	-	I would not change my past life even if I could
16.	-	I have made plans for things I'll be doing a month or a year from now
19.	-	I've gotten pretty much what I expected out of life

Factor VII

3.	-	This is the dreariest time of my life
10.	-	I feel old and somewhat tired

factor one in the present study and rotated factor one of the Adams'

study is presented below in Table XVI.

TABLE XVI

A COMPARISON OF FACTOR I BETWEEN THE
PRESENT STUDY AND LSIZ STUDY

Item	The Present Study	LSIZ
1.	1	0
3.	0	1
4.	1	1
5.	0	1
6.	1	1
7.	1	1
9.	1	0
17.	1	0
18.	0	1

1 = factor significantly loaded on item
0 = factor failed to significantly load on item
rbi = -.50
t = 1.775
df = 7
p < .20

Further comparison between the present study and LSIZ study

includes that in the present study biserial correlation between items

ranged from -.0726 to .0019 to .3990. Adams' study yielded rbi of

.11 to .55.[53]

Reliability of items as reflected in the communalities of the items appeared satisfactory in the present study. The item with the lowest communality was item 15 with a communality of 43 per cent. Table XVII below presents item communalities of the analysis of both active clergy and active professors.

TABLE XVII

FACTOR ANALYSES LSIA COMMUNALITY OF ITEMS
ACTIVE CLERGY AND PROFESSORS
(N=272)

Item	Per Cent Communality	Item	Per Cent Communality
1.	57	11.	53
2.	55	12.	53
3.	58	13.	59
4.	49	14.	51
5.	60	15.	43
6.	57	16.	63
7.	58	17.	43
8.	68	18.	59
9.	65	19.	48
10.	58	20.	61

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[53]Ibid.

Item communalities and the simple structure appearance of the
rotated factors lend a positive assessment to the LSIA. Low loadings
on principal axis analysis factor one and low inter-correlations in the
correlation matrix suggest that the LSIA needs to be used with caution,
especially with groups such as the non-retired group of the present
study.

Comparison of PIL and LSIA

If PIL and LSIA are both measures of something called "morale",
then logically there should be a great deal of positive correlation
between the two measures. Pearson Product-Moment correlations between
the two scales yield results not completely consistent with this
assumption. In a previous study of retired professionals, results
consistent with these of the present study were obtained.[54] Correla-
tion coefficients between the PIL and LSIA can be seen in Table XVIII.

TABLE XVIII

PEARSON PRODUCT-MOMENT CORRELATION COEFFICIENTS
BETWEEN PIL AND LSIA

Sample	N	r	t	df	Level of Significance of t-test (one tail)
Professors	152	.39	3.24	150	.005
Clergy	120	-.22	-3.33	118	.005
Both	272	.18	3.60	270	.0005

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[54]Acuff, p. 112.

The attenuated correlation coefficient between PIL and LSIA with both samples combined is the result of a negative coefficient and a positive coefficient. This makes the interpretation of the correlation between the LSIA and PIL difficult at best. In the present study it is felt that clergymen and professors· do not share the same "constitutive accent" concerning the verbalizations present on the scales.[55] This leads to the following tentative conclusion: Scales which measure the verbal report of individuals are measuring, to some extent, the degree to which scale constructor and respondent share the same cultural orientation. Apparently, in the case of the present study, clergymen discriminate between statements of the kinds found on the PIL and LSIA in ways professors do not. This could be expected since clergy deal with the kind of thing found on the PIL and LSIA frequently. Impressionistically, the LSIA reflects a more materially oriented concern than does the PIL. It could be expected that professors may not distinguish between "material" and "spiritual" concerns as related to morale to the extent that clergymen do. Support for this impression may be found in inspection of the difference between amount of variance extracted by rotated factors I and II on the PIL between clergymen and professors (see Table VIII, page 49). Professors load equally on "Excitement in Life" and "Non-alienation", in terms of variance extracted. Clergymen on the other hand lean much more to the factor "Excitement in Life" with only about half as much variance extracted than by "Non-alienation" by clergymen. "Excitement in Life" probably

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[55]Aaron V. Cicourel, Methods and Measurement in Sociology (New York: The Free Press, 1964). Also see Harold Garfinkel, Studies in Ethnomethodology (Englewood Cliffs, N. J.: Prentice-Hall, 1967).

reflects a more "spiritual" type of concern with "Non-alienation" reflecting successful coping at the more materially successful level.

The above analysis leads to the opinion that "morale" may be reflected in a number and variety of cultural orientations. Any interpretation based on the administration of scales such as PIL and LSIA must be done with due caution.[56]

The Independent Variables

The independent variables are from a variety of sources or categories. These categories have been identified in Table II (pages 31-32). The present section is a discussion of the independent variables and the findings of previous studies relating them to measures of satisfaction, adjustment, or morale.

Basic Theoretical Orientation

The importance of the independent variables for the present study is that those aspects of life which either provide a base for living or add to the quality of life are thought to be determinative of the morale of an individual. Determinants of morale can include then such diverse items as food, interactional patterns and friends, and attitudinal orientations.

The basic theoretical model is that the presence or absence, or differential quantity or quality, of an independent variable in the

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[56]Crumbaugh stresses the concurrent validation of diagnosis by a competent clinical psychologist when PIL is used as a diagnostic tool. Social scientists should similarly be careful when drawing conclusions from an analysis of their data regardless of the apparent immediate lack of effect upon people.

life of an individual can and will affect the quantity of morale expressed by an individual. The literature about the independent variable affecting morale lends credence to the impression that these independent variables are closely and complexly inter-related. This will become apparent in the discussion below.

Occupation. A man's most definitive status characteristic apart from ascribed statuses is his occupation, profession, or job. In a society such as the American society, how one lives, where one lives, how one spends his time, and how his fellow men look upon him in terms of positive or negative evaluation, is highly conditioned if not determined by one's occupation.[57] A man spends more of his waking hours in his occupational status than any similar status. It would be logical to assume, then, that one's profession or job is an important source of meaning or morale.

The basic assumption in its grossest form is that loss of occupational status by retirement is accompanied by a loss of morale particularly in an "activity" theoretical framework. Pursuit of this hypothesis indicates that in general, morale is apparently depressed among the retired as compared to the non-retired or active.[58] However, in looking for the reasons for depressed morale among the retired, previous research has found the following complex inter-relationships. The effect of loss of job upon morale was viewed as a consequence of degree of involvement in the job. Degree of involvement in job should then determine relative deprivation of job when retired. Length of time in

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[57]Chinoy, p. 172.

[58]Riley, p. 350.

job and status of job were thought to be determinants of involvement in

job. These findings however, for the original researchers, were not

expected. Job deprivation was found to be a function of involvement in

job and involvement was found to be dependent upon status of job and

time on the job. Morale was not necessarily related to relative job

deprivation, however. Morale was found to be contingent upon an order-

ly work history. An orderly work history indicated that the individual

had been able to provide social anchorages for himself and a continuing

source of an adequate income without the stigma of blatant dependency.

This indicates that morale in retirement is more dependent upon other

sources of meaning than one's work or loss of work.[59]

Health. The objective quality of an individual's life is depend-

ent upon health. Subjectively, however, an individual's attitude

toward the health he does have may be more important as a determinant

of morale than objective health. Studies have found that the self-

rating of health is more important as a determiner of morale than an

objective assessment of an individual's health.[60] Attitudinal theory

would lead to the conclusion that objective health and subjective self-

evaluation of health would not be too divergent for long periods of

time.[61]

Health is the kind of variable upon which everything else

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[59]Ida H. Simpson, K. W. Back, and John C. McKinney, "Attributes of
Work, Involvement in Society, and Self-Evaluation in Retirement," in
Social Aspects of Aging (Durham: Duke University Press, 1966), pp. 55-
74.

[60]Riley, p. 345; see George L. Maddox, "Some Correlates of Differ-
ences in Self-Assessment of Health Status Among the Elderly," Journal
of Gerontology, Vol. 17, pp. 180-185.

[61]Bem, 1970.

ultimately depends. Without health in some satisfactory measure, the

activities of life and the act of living itself are not likely to con-

tinue for long. In the present study, health is considered a basic

variable for the assessment of any human behavior or attitude.

Socio-economic Status. One's quality of life in a complex society

is dependent upon the social and economic support an individual can

muster. This is especially true if quality of life is measured in

terms of correspondence with the values of society.[62] Higher socio-

economic status in American society means that an individual is more

fluid and free to divert his energies in ways considered meaningful not

only to the individual but to society as a whole. Socio-economic

status has been found to be related positively to morale.[63] This is

not unexpected at all since material sources of meaning are so depend-

ent upon socio-economic status and even attitudes are generated within

the context of one's socio-economic status. It is inconceivable to

think that in an age of mass communications a set of highly favorable

attitudes will develop within each socio-economic strata.[64]

The data from a previous study were subjected to a dichotomous

multi-variate analysis in the present study to determine the various

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[62]This position reflects the functionalist position as given by
George Homans, in The Human Group (New York: Harcourt and Brace,
1950), e.g., the hypothesis that rank and degree to which an individual
exhibits the norms of the group are positively related.

[63]Riley, p. 348; Gordon Streib, "Morale of the Retired," Social
Problems, Vol. 3, pp. 270-276.

[64]This is especially true if one accepts the hypothesis that
television presents an unattainable life style as the norm for all
Americans.

contributions of employment, health, and socio-economic status upon the morale of old people.[65] Riley's data are presented in Table XIX.

TABLE XIX

THE EFFECT OF EMPLOYMENT, HEALTH, AND SOCIO-
ECONOMIC STATUS ON THE MORALE OF OLD PEOPLE

Retired Low Health High Socio-economic Status				Employed Low Health High Socio-economic Status			
Low	High	Low	High	Low	High	Low	High
29%	29%	33%	63%	31%	51%	61%	75%

EFFECTS PARAMETERS:

Effect of Employment	.16	Random shocks toward high morale	.19
Effect of Health	.23		
Effect of Socio-Economic Status	.185	Random shock away from high morale	.235
Explained variance = 57.5%		Unexplained variance = 42.5%	

From Table XIX it can be seen that the effect of health upon morale of old people is greater than either employment or socio-economic status. The ordering of these variables in terms of amount of variance explained, health, socio-economic status, and then employment, is congruent with the formulation that health is basic and that

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[65]Riley, p. 351.

money and friends are more important than employment. It is suspected

in the present study that employment is seen or used frequently as a

means to an end. This seems to be born out the lower the status of an

occupation.[66]

The Family. The family is seen as the context for the expression

and realization of values in American society. Generally speaking, the

family as an ambivalent source of value is negated. In terms of ex-

change theory, the assumption is that no exchange lasts for long

without all participants showing a profit.[67] It would be expected

that the family is a source of positive elements of morale.

The American family has long been identified as basically nucle-

ar.[68] In a more recent study of the family, three types of family

orientations were posited: the nuclear, the extended, and the modified

which means that a family has an extended orientation with disregard

for propinquity.[69] The nuclear family orientation does not stress the

obligations of parents and grown children to one another and accepts

mobility as inevitable in a technologically oriented society. The

extended family, on the other hand, stresses obligations of parent and

grown children to one another. People of the modified orientation are

likely to be from rural environments or lower occupational strata than

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[66] Simpson, et al., chapters 2-7.

[67] George C. Homans, Social Behavior: Its Elementary Forms (New York: Harcourt, Brace, and World, 1961).

[68] Talcott Parsons, "The Kinship System of the Contemporary United States," American Anthropologist, 45 (January-March, 1943), 22-38.

[69] Alan C. Kerckhoff, "Norm-Value Clusters and the 'Strain Toward Consistency' Among Older Married Couples" in Social Aspects of Aging, pp. 140-142.

the nuclear oriented. In Kerckhoff's study, it was found that families which were nuclear oriented were more likely to have intergenerational understanding between old and young. This corresponded to the hypothesis that conformity to the major societal thrust, the nuclear family, was more likely to produce satisfaction.[70]

The morale of husband and wife and the husband's adjustment to retirement tends to depend upon the aged couple making few demands on their children, having low levels of intergenerational support, and living far away from children.[71] Another source states that morale is higher among old people, regardless of socio-economic level, who see their children seldom rather than often.[72]

There appears to be a _ceteris paribus_ quality to the above formulations that is assumed. Other research tends to substantiate the hypothesis that morale is dependent upon intergenerational contact and propinquity.[73]

Bereavement. It would be expected that the loss of friends and family through death would mean loss of possibly irreplaceable relationships.

Most old people report decreased patterns of interaction with friends due to loss by death or moving away. Many old people, however,

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[70]Ibid.

[71]Ibid.

[72]Riley, p. 353; see Bernard Kutner, et al., _Five Hundred Over Sixty: A Community Survey on Aging_ (New York: Russell Sage Foundation, 1956).

[73]Acuff, 1967.

seem to find new friends.[74] Friendship seems to be more associated

with middle class people than lower class people. For lower classes,

relatives tend to take the place of other outside friends, although

interaction with relatives is high in the middle classes too. The

relationship of bereavement to morale is not completely specified. In

general, however, the loss of a mate is associated with concomitant

loss of morale.[75]

The Community. The community is the context of the social anchor-

ages of an individual. A positive evaluation of one's present communi-

ty could be considered an index of one's morale.[76] The aged citizen

belongs to a rather amorphous and negatively evaluated aggregate. He

suffers to the extent that his status characteristics do not provide

positive valuation of him by other members of the community. To the

extent, then, that an older person is viewed as merely an old person

it would be expected that the old person would negatively evaluate his

community and suffer loss of morale.

The aged tend to be concentrated in the urban areas. Not neces-

sarily because they are moving in, but because the young are moving

out.[77] Old people tend to become more reliant upon agencies for the

satisfaction of their needs. Agencies tend to be available in concen-

trated areas of population. On the other hand, social interaction

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[74]Mark Zborowski and Lorraine D. Eyde, "Aging and Social Partici-
pation," Journal of Gerontology, Vol. 17, pp. 424-430.

[75]Kutner, et al., 1956.

[76]Riley, pp. 151-153.

[77]Eugene A. Friedmann, "The Impact of Aging on the Social Struc-
ture," Handbook of Social Gerontology (Chicago: The University of
Chicago Press, 1967), p. 141.

tends to be associated with smaller communities which frequently do not have the agencies available to the old person in the city. The old person appears to be in something of a dilemma. On the one hand, value is experienced from social interaction which is more likely to be available in a smaller community, and on the other hand, needed social agencies are available in the larger community.

From the perspective of the disengagement hypothesis, it would be expected that morale would be associated positively with community size particularly with communities large enough to provide all needed services. From the activity theory perspective, it would be expected that the individual would express higher morale if he lived where social interaction was available to him. Again, from the functionalist perspective, it would be expected that the old person who is agency oriented and whose attitudes reflect the larger culture would have higher morale. From the symbolic interactionist perspective it would be expected that those who are oriented toward social participation or who are in an environment which is familiar to them would have higher morale.

Religion. Religion conceived of as a source of strength or morale beyond the every day world and not necessarily contingent upon present interaction should be related to morale in a positive way. Measures of religiosity have included counting attendance at religious institutions, counting membership, and other overt behavioral variables. These have not generally led to strong relationships with morale. Old people in general tend to score lower than younger people on

religiosity when measured this way.[78] On the other hand, self report

measures of the importance of religion tend to be strongly related to

measures of morale among old people. Although old people state in

general that religion is very important to them, they seldom name

religion as being an important source of satisfaction to them.[79]

Religion could possibly be characterized for many people as more of

a buffer in case of trouble that a conscious source of satisfaction.

In Table XX below is a summary comparison between young people and

old people on measures of morale.

TABLE XX

DIFFERENCES BETWEEN OLD PEOPLE AND YOUNGER
PEOPLE ON MEASURES OF MORALE

Component of Morale	Direction of Difference Old Vs. Young
Over-all satisfaction	Negative
Happiness	Negative
Morale	Negative
Fantasy behavior	Positive
Worry	Similar

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[78]Riley, p. 489.

[79]Milton J. Barron, The Aging Americans: An Introduction to Social Gerontology and Geriatrics (New York: Thomas Y. Crowell and Co., 1961).

In terms of over-all satisfaction, happiness, and morale, old people have depressed scores compared to younger people. Fantasy behavior, or internalizagion of cathexis increases among the old. Worry appears to be more related to the problems of life and does not necessarily increase or decrease in old people.

Table XXI, page 75, presents in summary form various correlates of morale.[80] Table XXI reflects correlates of morale among old people in general and does not necessarily reflect the correlates of morale among the sample of retired professionals.[81]

<center>The Hypotheses and Operational Specification</center>

<center>of the Variables</center>

In the present study, variables are from three sources: the PIL, LSIA, and the variable inventory of variable items. Items in the inventory are considered as "pure variables." These items have been considered important to the phenomena of aging in other studies and generally important to the morale of an aging individual. Embedded in the inventory are several scales, including a family type scale, family affection scale, and a health self report scale. These scales are treated item by item as pure variables. It is felt that if the items do not correlate with measures of morale, then significance derived from over-all correlation of the scale would be minimal.

The PIL was operationalized into categories of high, medium, and low in terms of the score of the respondents relative to the other

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[80]These correlates of morale among old people represent correlates from a variety of sources.

[81]Acuff, 1967.

TABLE XXI

CORRELATES OF MORALE AMONG OLD PEOPLE

Correlate	Direction of Relation
Health	
Clinical evaluation	Dependent upon self-rating
Self rating	Positive
Socio-economic Status	Positive
Economic deprivation	Negative
Retirement from Work	Negative
Family	
Marital problems	Fewer among older
Husband wife relationship (structure of)	No relationship
Widowed	Negative
Parenthood	No difference with age
Demands on children	Negative
Intergenerational support	Negative
Living far away from children	Positive
Housing	No effect
Activity in General	
High rates of interaction	Positive
Number of roles played	Positive
Nonsocial activity (hobbies)	Positive
High disengagement	Positive
Low disengagement	Positive
Middle disengagement	Negative
Self Image	Positive

respondents. High PIL means that the respondent scored in approximately the upper one-third of the sample; medium PIL means that the individual scored in approximately the middle third of the sample of PIL; and low PIL means that the individual scored in approximately the lower third of the sample on PIL. The possible score on PIL ranged from a low of 20 to a high of 140. In the present study 123 and higher was high, 112-122 was medium, and less than 112 was low. The present study produced the same cutting points established by the previous study of retired professionals.[82]

The LSIA was similarly trichotomized into high, medium, and low based upon the respondents' relative rankings within the sample of the present study. The possible range of scores on LSIA was from 0 to 20. In the present study 16 or higher was high LSIA, 14-15 was medium LSIA, and 13 or less was low LSIA. These scores are nearly all higher than the mean established by Havighurst. Thus, the sample in the present study represents for the most part a rather high satisfaction group as measured by LSIA.[83] The earlier research in the same state with the same professional groups found these aggregates scoring significantly higher on the LSIA than the Kansas City sample.

Hypotheses were developed in terms of the demands of the design and in consideration of previous correlates of morale among old people.

H_1) There will be significant differences between active professors and active clergymen in rank on LSIA as they are distributed with

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[82]Ibid. The cutting point in the present study was produced by trial of various cutting points. The one selected was the most satisfactory in that it yielded the most equal distribution between high, medium, and low PIL.

[83]Havighurst, 1961.

respect to the variable items.

H_2) There will be significant differences between active professors and active clergymen in rank on PIL as they are distributed with respect to the variable items.

H_3) There will be significant differences between the active clergymen in rank on LSIA as they are distributed with respect to the variable items.

H_4) There will be significant differences between active professors in rank on LSIA as they are distributed with respect to the variable items.

H_5) There will be significant differences between active clergymen in rank on PIL as they are distributed with respect to the variable items.

H_6) There will be significant differences between active professors in rank on PIL as they are distributed with respect to the variable items.

H_7) There will be no differences between active clergy and active professors in means on LSIA.

H_8) There will be no difference between active clergy and active professors in means on PIL.

Tests of H_1 through H_6 will be made through the use of the chi square statistic. The variable items include from two choices per item to nine choices per item in the case of some items. LSIA and PIL are operationalized as specified above. The data were distributed along a variable item into morale categories as specified by a computer program

program developed by Dr. Donald Allen for this purpose.[84]   The computer

program included a collapsing routine so that the chi square test could

be made where relevant.   In the case where there is no differentiation

in item choice among the respondents the program merely prints out the

number of high, medium, and low PIL or LSIA respondents answering the

item.   No chi square is possible in this case.   The chi square statis-

tic is expected to locate significant correlates of the measures of

morale.   Acceptance of the chi square statistic will depend upon it

attaining the .05 level of significance or lower.   The hypotheses will

be evaluated also in terms of more or less than five percent of items

demonstrating significance to the measures of morale.   Where more than

five percent of the items are significant, the hypothesis will be con-

sidered sustained.   Where there are fewer than five percent of the

items significantly related to morale the hypothesis will be rejected.

The base for this test will consist in those items distributing them-

selves into a sufficient number of categories to be tested with the chi

square statistic.   Those items reflecting a single response pattern for

all the sample will not be included in the base.

H_7 and H_8 will be tested by the "t" statistic.   A one-tailed test

of significance of .05 or lower will be considered a significant dif-

ference.

All items which are significant in the above tests will be includ-

ed in the cross generational test where data exist for comparison.

H_9)   The correlates of measures of morale between active profes-

sionals and retired professionals will be the same.

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[84]Dr. Donald E. Allen is Professor of Sociology at Oklahoma State
University, Stillwater, Oklahoma.

H_{10}) Active professionals will have a higher mean on LSIA than retired professionals.

H_{11}) Active professionals will have a higher mean on PIL than retired professionals.

H_{12}) Active employment will contribute significantly to high morale as measured by PIL or LSIA

The binomial probability distribution will be used in the test of H_9). In order to be accepted, the distribution must meet the criteria of chance at the .05 level or lower.

H_{10}) will be tested using the "t" statistic. A one-tailed test at .05 level or lower will be acceptable criteria for acceptance.

H_{11}) will be tested using the "t" statistic with a one-tailed test at the .05 level of significance or lower as acceptable criteria for acceptance.

H_{12}) will be tested by taking the items significantly related to the respective measures of morale, PIL or LSIA, among both active and retired professionals and determining then the relative contribution of profession and active employment on high morale using dichotomous multi-variate analysis as the test statistic.

Specific Analytical Techniques

Chi Square Statistic

The chi square statistic assumes that the data are cast in nominal form into mutually exclusive and exhaustive categories. The structure of the variable items automatically qualified the data for this form of test. Interval scales such as the PIL and LSIA are easily arranged into categories for the chi square test since it is legitimate to

recast higher order data such as interval data into lower order data such as nominal data. The chi square statistic basically gives the probability that the distribution of the data could have occurred by chance.[85]

The "t" Statistic

The "t" test is used to test for a difference between the means of two groups on some variable. The t-statistic assumes that one has two independent random samples. The assumptions of randomness and independence are met if one assigns the respondents at random to two groups. If this assumption is met, then other assumptions are relatively unimportant even if violated. Other assumptions of lesser importance include the assumptions of normality of distribution of sample and homogeneity of variances.[86]

Dichotomous Multi-variate Analysis

This method was devised by Coleman. The purpose of the test is to provide a measure of the effects of several independent variables upon a dependent variable where the data is dichotomous. Multi-variate statistics generally have assumed continuously ordered variables overlooking the possibility that dichotomous variables are much more likely to correspond to the categories assigned and the fact that many variables are so classed. This test demonstrates the relationship of the

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[85]Discussion of the chi square statistic may be found in nearly any text on social statistics. See for example: Hubert M. Blalock, Social Statistics (New York: McGraw-Hill, 1960).

[86]Discussion of the "t" statistic may be found in nearly any text on social statistics. See Blalock, 1960.

variables in terms of effect parameters and random shocks. The effects parameters are the explained variance of each of the independent variables upon the dependent variable. Random shocks are unexplained variance components toward the dependent variable and away from the dependent variable.[87]

Factor Analysis

Factor analysis is an inter-correlation technique used to provide a way of determining the number and nature of underlying traits or dimensions among a variety of measures or variables.[88]

Pearson Product-Moment Correlation Coefficient

This statistic is a test of concomitant variation of two variables. The assumption of continuously distributed data should be met for use of this statistic. However, it has been demonstrated that other correlation coefficients such as phi are directly deriveable from the Pearson statistic. Tests of significance of the correlation coefficient are not all agreed upon. In the present study, however, the "t" conversion formula for the test of the significance of the correlation coefficient is accepted.[89]

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[87]See James S. Coleman, _Introduction to Mathematical Sociology_ (London: The Free Press, 1964), chapter 6.

[88]See Horst's work for a rigorous exposition of factor analysis. For a useful summary of factor analysis see Kerlinger, chapter 36.

[89]See Blalock.

Summary

A mailed questionnaire survey was made with a population of active professionals, clergy and professors, of a southwestern state. There were 578 questionnaire packets mailed out, 296 professors, and 282 clergymen. Returns which were usable in one or more tests included the responses from 166 professors and 135 clergymen.

The purpose of the survey was to collect data relating a variety of independent variables to two dependent variables, measures of morale. The assessment of the relationships between the independent and dependent variables were then to be used to make a cross-generational comparison between the active sample of clergymen and professors, which was the sample of the present study, with similar data from a sample of retired professionals, clergy and professors, from the same population.

The measures of morale were two recognized measures, the LSIA and the PIL. The PIL and LSIA were subjected to factor analyses separately. Results indicated that the PIL was a reliable instrument suitable for use with the population of the present study. The LSIA was reliable enough and did measure up to its author's intentions of multidimensionality. There was some question of the suitability of the LSIA for use with the present study. It was concluded that the LSIA and PIL probably had some different implications for the respective populations of clergy versus professors.

The independent variables included a variety of measures from a variety of categories which included: profession, family, health, interaction patterns, religion, life attitudes, socio-economic, and community.

A number of hypotheses were developed and stated. This included hypotheses developed for the analysis of data with the active group of professionals and hypotheses designed to test similarities and differences between active and retired professionals.

Specific analytical techniques were discussed. In general, the .05 level was determined to be the level of acceptance of hypotheses. Specific techniques discussed were factor analysis, Pearson Product-Moment correlation technique, the "t" statistic, chi square, and dichotomous multi-variate analysis.

CHAPTER III

HYPOTHESIS TESTING

In the present study, six hypotheses were developed for the pur-
pose of determining the correlates of the two measures of morale, the

Purpose in Life Test (PIL) and Life Satisfaction Index A (LSIA). The

correlates to PIL and LSIA for the active professionals were compared

with the retired counterparts of the same population. For the purpose

of comparing the active and retired samples, six subsequent hypotheses

were developed. This made a total of twelve hypotheses to be tested in

the present chapter.

Tests of Hypotheses With the Active Professionals

Test of Hypothesis One

H_1) There will be significant differences between active profes-

sors and active clergymen in rank on LSIA as they are distributed with

respect to the variable items.

Tests of this hypothesis consisted in separating the sample of

active professionals into high, medium, and low on LSIA then distribut-

ing them as they responded to the variable items. In this test a total

of eight items distributed significantly in terms of the Chi Square

test at the .05 level or better. These items are discussed below.

How professionals ranked their present community was the first

item along which professionals distributed significantly in terms of

rank on LSIA. There were 264 active professionals involved in the test of this item which achieved a significance level of .004. Professionals who rated their community favorably tended to score higher on LSIA. This can be seen in Table XXII, page 86.

The next significant item was in regard to how well the respondent kept up with the current literature in his field. In the test of this item 266 active professionals responded. The statistical test was significant at the .012 level in the direction expected. Those with higher LSIA scores tended to keep up with the current literature of their profession. This can be seen in Table XXIII, page 87.

Satisfaction with profession was the next significant item. It was significant at the .008 level in the direction expected. Those reporting greater satisfaction with profession also tended to score higher on LSIA. In the test of this item the responses of 261 active professionals were used. Table XXIV, page 88, presents this item.

Self reported health was the next significant item. This item reflected how the respondent rated his own health as good, fair, or poor. The item tested significantly at the .006 level. It was heavily skewed in favor of good health. Relatively few active professionals reported less than good health. Table XXV, page 89, demonstrated this skewness.

Another health item, agreement or disagreement with the statement of "never felt better" produced a significant relationship along LSIA at the .031 level. The tendency of those disagreeing with the statement to have corresponding lower scores on LSIA is cleas as can be seen from Table XXVI, page 90.

TABLE XXII

HOW RANK COMMUNITY AND LSIA BY ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

| LSIA | How Rank Community | | | |
	Excellent	Good	Fair or Poor	Total
Low	18	34	18	70
Medium	22	41	8	71
High	51	63	9	123
Total	91	138	35	264

Chi Square = 15.8;   df = 4, significant at .004 level

Item 12:   Would you rank the community you now live in as:
(1)   An excellent place to live
(2)   A good place to live
(3)   A fair place to live
(4)   A poor place to live

TABLE XXIII

CURRENT LITERATURE AND LSIA BY ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

| LSIA | How Well Keeps Up With the Current Literature in Own Field | | | |
	Very Well	Quite Well	Slightly or Not at All	Total
Low	13	34	23	70
Medium	9	49	14	72
High	18	89	17	124
Total	40	172	54	266

Chi Square = 12.9;　df = 4, significant at the .012 level

Item 48:　With regard to the current literature in your field: how well do you keep up?
(1) Very well
(2) Quite well
(3) Slightly
(4) Not at all

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TABLE XXIV

SATISFACTION WITH PROFESSION BY ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

LSIA	Satisfaction With Profession		Total
	Very Satisfied	Less Than Very Satisfied	
Low	92	39	66
Medium	38	33	71
High	80	44	124
Total	145	116	261

Chi Square = 9.9;   df = 2, significant at the .008 level

Item 50: To what extent do you feel satisfied with your profession?
          (1) Very satisfied, would pick same profession again
          (2) Generally satisfied, would pick same profession again
          (3) Mildly dissatisfied, would not pick same profession again
          (4) Very dissatisfied, would not pick same profession again

TABLE XXV

SELF REPORTED HEALTH BY ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

	Health		
LSIA	Good	Less Than Good	Total
Low	56	14	70
Medium	66	6	72
High	117	7	124
Total	239	27	266

Chi Square = 10.4;   df = 2, significant at the .006 level

Item 51: In general, would you say your health is good, fair, or poor?
      (1) Good
      (2) Fair
      (3) Poor

TABLE XXVI

SUBJECTIVE FEELINGS OF RELATIVE HEALTH BY ACTIVE
PROFESSIONALS, CLERGYMEN AND PROFESSORS

| LSIA | Positive Feelings of Health | | Total |
	Agree	Disagree	
Low	25	42	67
Medium	30	41	71
High	68	54	122
Total	123	137	260

Chi Square = 6.9;   df = 2, significant at the .031 level

Item 53: I have never felt better in my life
(1) Agree
(2) Disagree

The item concerning smoking cigarettes did not appear on the schedule of the retired professionals. In the present study the majority did not smoke cigarettes at all, and of those who did the tendency was to score lower on LSIA. This was expected. The item obtained a significance of .008 on the Chi Square test. This is seen in Table XXVII, page 92.

A seventh item, clarity of notion about what is worthwhile in life, had a significance level of .03. This reflected a positive relationship to LSIA among those who had a clear notion. A total of 261 active professionals were included in this test. Table XXVIII, page 93, presents this item.

Income category of professionals and LSIA was the last significant item in this test. A total of 261 professionals responded to this item which was significant at the .041 level. The sample was skewed toward higher income and higher LSIA which could have influenced the results. Nevertheless, amount of income was significantly related to LSIA. This can be seen in Table XXIX, page 94.

The test of H_1) yielded a total of eight significant items. Out of a total base of 74 this is a total of 10.8 percent significant items. If 5 percent could be expected by chance at the .05 level, then this figure (10.8%) clearly exceeds the 5 percent criteria. If the base is narrowed to those items yielding distribution across two or more categories then the base is narrowed to 63 items. The figure then is 12.7 percent significant items. In any case, the hypothesis is sustained. There are significant differences between active professionals in rank on LSIA as they are distributed with respect to the variable items. A summary of these items is found in Table XXX below.

TABLE XXVII

CIGARETTE SMOKING BY ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

| LSIA | Cigarette Smoking | | Total |
	Yes	No	
Low	21	49	70
Medium	17	55	72
High	15	109	124
Total	53	213	266

Chi Square = 9.8;   df = 2, significant at .008 level

Item 60: Do you smoke cigarettes?
          (1) Yes
          (2) No

TABLE XXVIII

CLEAR NOTION OF WHAT IS WORTHWHILE IN LIFE BY ACTIVE
PROFESSIONALS, CLERGYMEN AND PROFESSORS

	Notion of What Is Worthwhile in Life		
LSIA	Clear Notion	Less Than Clear	Total
Low	33	32	65
Medium	50	22	72
High	85	39	124
Total	168	93	261

Chi Square = 6.9;   df = 2, significant at the .03 level

Item 71: Nowadays there seems to be a great deal of discussion about what is
worthwhile in life. How do you feel about this? Do you have a clear
notion about what is worthwhile in life or a very uncertain notion
about what is worthwhile in life?
(1) Clear notion
(2) Fairly clear
(3) Uncertain
(4) Very uncertain

TABLE XXIX

INCOME BRACKET OF ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

	Income				
LSIA	$7,500 and Under	$ 7,600- 10,000	$10,000- 15,000	Over $15,000	Total
Low	11	16	26	12	65
Medium	5	18	23	26	72
High	10	26	36	52	124
Total	26	60	85	90	261

Chi Square = 13.1; df = 6, significant at the .041 level

Item 73: What is your income bracket?
    (1) Under $5,000 per year
    (2) 5,000-7,500 per year
    (3) 7,600-10,000 per year
    (4) 10,000-15,000 per year
    (5) Over 15,000 per year

The direction of the responses indicated that positively valued re-
sponses tended to be positively related to higher LSIA. For example,
cigarette smokers tended toward lower LSIA scores and persons with
higher income tended toward higher LSIA scores.

TABLE XXX

SIGNIFICANT DIFFERENCES BETWEEN ACTIVE PROFESSIONALS
IN RANK ON LSIA AND DISTRIBUTION
ALONG THE VARIABLE ITEMS

Item	Statement
12.	How you rank the community you now live in.
48.	With regard to the current literature in your field, how well do you keep up?
50.	To what extent do you feel satisfied with your profession?
51.	In general, would you say your health is good, fair, or poor?
53.	(agree or disagree) I have never felt better in my life.
60.	Do you smoke cigarettes?
71.	Do you have a clear notion about what is worthwhile in life?
73.	What is your income bracket?

Test of Hypothesis Two

H_2) There will be significant differences between active
professors and active clergymen in rank on PIL as they are distributed

with respect to the variable items.

Tests similar to that for H_1 were made with the exception that PIL was the relevant measure of morale. This test consisted in using the responses from both groups of active professionals, clergymen and professors. In the test of H_2) a total of 16 items tested at the .05 level of significance or lower.

The first item to test significantly was age nearest birthday. A total of 264 professionals responded to this item which tested significantly at the .02 level. It appeared that as age increased so did score on PIL. This item is presented in Table XXXI, page 97.

The next significant item was how would you rank the community you now live in? This item tested significant at the .004 level with a total of 264 respondents. More favorable evaluation of community tended to be associated with higher PIL scores. This is presented in Table XXXII, page 98.

Item 18, how many close relatives and friends have died in the last ten years, tested significant at the .03 level with 266 respondents. Fewer deaths tended to be associated with higher PIL scores. (See Table XXXIII, page 99)

Items from family type and family affection score tended to be relatively insensitive to PIL or LSIA. However, two items did relate significantly to PIL. One of these, if you have grown children, how willing would you say they would be to make sacrifices for you, tested significant at the .039 level. There were 108 respondents to this question. The nature of the sample in terms of age precluded many respondents from answering this and other similar questions. This item is presented in Table XXXIV, page 100.

TABLE XXXI

AGE AND PIL OF ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

PIL	Age					Total
	29 and Under	30-39	40-49	50-59	60 and Over	
Low	13	22	20	12	4	71
Medium	26	42	13	14	6	101
High	9	30	28	15	10	92
Total	48	94	61	41	20	264

Chi Square = 18.2;   df = 8, significant at the .02 level

Item 1: Age nearest birthday.

TABLE XXXII

HOW RANK COMMUNITY AND PIL BY ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

	How Rank Community			
PIL	Excellent	Good	Fair to Poor	Total
Low	18	42	11	71
Medium	28	55	18	101
High	45	41	6	92
Total	91	138	35	264

Chi Square = 15.4;   df = 4, significant at the .004 level

Item 12: Would you rank the community you live in as:
(1) An excellent place to live
(2) A good place to live
(3) A fair place to live
(4) A poor place to live

TABLE XXXIII

DEATH OF CLOSE FRIENDS AND RELATIVES AND PIL, ACTIVE
PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Number of Deaths | | | | | |
	None	One	Two	Three	More Than Three	Total
Low	28	12	13	12	6	71
Medium	38	18	24	14	8	102
High	38	9	10	15	21	93
Total	104	39	47	41	35	266

Chi Square = 17.1;   df = 8, significant at the .03 level

Item 18: About how many other close relatives * and close friends have died in the last
          ten years?

       *other than immediate family

TABLE XXXIV

ADULT CHILDREN'S WILLINGNESS TO MAKE SACRIFICES FOR PARENTS AND PIL
REPORTED BY ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Reported Willingness | | |
	Less Than Very Willing	Very Willing	Total
Low	15	13	28
Medium	13	19	32
High	12	36	48
Total	40	68	108

Chi Square = 6.4;   df = 2, significant at the .039 level

Item 36: If you have grown children, how willing would you say they would be to
make sacrifices for you?
(1) Moderately willing
(2) Very willing
(3) Not willing

Distance of married children to parents tested significantly among active professionals. Most of the respondents tended to disagree with the item in that they felt that distance of married children should not necessarily be close. This reflects the modern technological orientation which could be expected of professional people in the American society. The item tested significantly at the .047 level with a total of 236 respondents. (See Table XXXV, page 102.)

A total of 266 active professionals responded to the item concerning keeping up with the current literature. This item related positively to PIL at the .005 level of significance. The distributional trend clearly illustrates this. (See Table XXXVI, page 103.) While the majority responded that they kept up "quite well" rather than the more positive or negative categories available, the direction of the relationship is clear.

Another clear cut relationship existed between the item concerned with satisfaction with profession and PIL. Those reporting that they were very satisfied with their profession tended to relate positively on PIL while those who reported less than very satisfied tended toward lower scores on PIL. This was significant at the .001 level and in the direction expected. A total of 261 active professionals were included in this test. (See Table XXXVII, page 104.)

PIL seemed to be sensitive to self reported health measures. Respondents in comparing their own health with that of imagined peers in terms of age, tended to score more highly on PIL when comparing themselves favorably and tended to score significantly lower on PIL when giving themselves less than a positive comparison. This item included the responses of 265 active professionals and tested

TABLE XXXV

DISTANCE DESIRABLE OF MARRIED CHILDREN TO PARENTS EXPRESSED
BY ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Should Be No More Than Day's Drive | | Total |
	Agree	Disagree	
Low	3	57	60
Medium	7	84	91
High	14	71	85
Total	24	212	236

Chi Square = 6.1;   df = 2, significant at the .047 level

Item 38: Married children, when possible, should live close (within a day's
drive or less) to their parents.
(1) Agree
(2) Disagree

TABLE XXXVI

CURRENT LITERATURE AND PIL BY ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

	How Well Keeps Up With the Current Literature in Own Field			
PIL	Very Well	Quite Well	Slightly or Not at All	Total
Low	4	43	24	71
Medium	18	67	17	102
High	18	62	13	93
Total	40	172	54	266

Chi Square = 14.9;   df = 4, significant at the .005 level

Item 48: With regard to the current literature in your field: how well do you keep up?
(1) Very well
(2) Quite well
(3) Slightly
(4) Not at all

TABLE XXXVII

SATISFACTION WITH PROFESSION AND PIL BY ACTIVE
PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Satisfaction With Profession | | Total |
	Very Satisfied	Less Than Very Satisfied	
Low	20	48	68
Medium	54	47	101
High	71	21	92
Total	145	116	261

Chi Square = 36.4; df = 2, significant at the .0001 level

Item 50: To what extent do you feel satisfied with your profession?
(1) Very satisfied, would pick same profession again
(2) Generally satisfied, would pick same profession again
(3) Mildly dissatisfied, would not pick same profession again
(4) Very dissatisfied, would not pick same profession again

significantly at the .001 level. (See Table XXXVIII, page 106.)

Positive feelings of health among active professionals related significantly to PIL at the .017 level. Positive feelings of health tended to reflect higher scores on PIL. The responses of 260 professionals were included in the test of this item. The convincing distribution can be seen in Table XXXIX, page 107.

Subjective feelings of age tended to also reflect PIL scores with those feeling younger than their years tending toward higher PIL scores. The responses of 263 active professionals yielded a relationship significant at the .008 level. This item and the preceding two items on health lend support to the idea that PIL is sensitive to health items. Table XL, page 108, presents the distribution of subjective feelings of age on PIL.

Ease of joining a community organization and PIL among active professionals produced a relationship significant at the .0001 level. The responses of 262 clergymen and professors were used in the test of this item. The distribution of responses seen in Table XLI, page 109, leaves little doubt of the direction of the relationship. Those reporting ease of joining an organization clearly tend toward higher scores on PIL than those who report average ease or difficulty in joining.

Respondents stating that personally believing in some religious philosophy is very important tend toward higher scores on PIL than others. This item was tested with the responses of 262 active professionals and was significant at the .014 level. Table XLII, page 110, presents this item.

TABLE XXXVIII

COMPARATIVE HEALTH AND PIL OF ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

	Comparative Health		
PIL	Better	Same or Worse	Total
Low	31	39	70
Medium	47	55	102
High	65	28	93
Total	143	122	265

Chi Square = 14.7;   df = 2, significant at the .001 level

Item 52: Would you say your health is better or worse than the health of other
people the same age?
(1) Better
(2) Same
(3) Worse

TABLE XXXIX

SUBJECTIVE FEELINGS OF RELATIVE HEALTH AND PIL OF
ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Positive Feelings of Health | | |
	Agree	Disagree	Total
Low	28	41	69
Medium	40	58	98
High	55	38	93
Total	123	137	260

Chi Square = 8.1;   df = 2, significant at the .017 level

Item 52: I have never felt better in my life.
          (1) Agree
          (2) Disagree

TABLE XL

SUBJECTIVE FEELINGS OF AGE AND PIL OF ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

| PIL | Feelings of Age | | Total |
	Younger	Other Than Younger	
Low	40	30	70
Medium	57	45	102
High	69	22	91
Total	166	97	263

Chi Square = 9.7;   df = 2, significant at the .008 level

Item 54: Do you feel older or younger than your years?
    (1) Older
    (2) Younger
    (3) Same

TABLE XLI

EASE OF JOINING A COMMUNITY ORGANIZATION AND PIL OF
ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

PIL	Ease of Joining			
	Easy	Difficult	Average	Total
Low	12	19	38	69
Medium	37	15	48	100
High	57	7	29	93
Total	106	41	117	262

Chi Square = 35.3;   df = 4, significant at the .0001 level

Item 63: Are you the sort of person who finds it easy or difficult to join an
organization in the community?
(1) Easy
(2) Difficult
(3) About average

TABLE XLII

IMPORTANCE OF BELIEVING IN SOME RELIGIOUS PHILOSOPHY AND PIL
OF ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

PIL	Importance of Believing in Religious Philosophy			
	Very Important	Moderately Important	Not Very Important	Total
Low	40	13	17	70
Medium	61	18	20	99
High	74	12	7	93
Total	175	43	44	262

Chi Square = 12.5;   df = 4, significant at the .014 level

Item 67: How important is it to you personally to believe in some religious philosophy?
    (1) Very important
    (2) Moderately important
    (3) Not particularly important
    (4) Definitely not important

Respondents comparing the relative importance of religion today as greater than the importance of religion to them five or ten years ago tend toward higher PIL scores. This item tested significant at the .054 level with the responses of 264 active professionals. Table XLIII (page 112) presents this distribution.

Belief in life after death was positively related to PIL. The small number not believing in life after death made the interpretation more difficult. The relationship was significant at the .043 level. This item was tested with the responses of 252 active professionals. The distribution of responses may be seen in Table XLIV, page 113.

A clear relationship between clarity of notion of what is worthwhile in life and higher PIL scores was evident in the distribution of responses from 261 active professionals. This distribution may be seen in Table XLV, page 114. The relationship was significant at the .0001 level.

Ambition as measured by response to the statement of how important it has been to get ahead in life proved to be significantly related at the .046 level to higher PIL. The responses of 254 active professionals provided the test of this item. Table XLVI, page 115, presents the distribution.

In the summary table, Table XLVII, page 116, items significantly related to PIL in testing H_2 are listed. Sixteen of the variable items were related to PIL compared to eight in H_1 with the LSIA.

Tests for H_2 were similar to H_1. The exception consisted in the measure of morale. PIL was the measure of morale in test for H_2. In the test of H_2 a total of sixteen items related significantly. Out of the total base of 74 this gives a figure of approximately 22 percent of

TABLE XLIII

RELATIVE IMPORTANCE OF RELIGION AND PIL TO ACTIVE PROFESSIONALS,
CLERGYMEN AND PROFESSORS

| PIL | Importance of Religion | | | |
	More Important	Less Important	About the Same	Total
Low	26	11	33	70
Medium	35	16	50	101
High	51	9	33	93
Total	112	36	116	264

Chi Square = 9.3;   df = 4, significant at the .054 level

Item 67: Is religion more important to you now or less important than it was five to
ten years ago?
(1) More important
(2) Less important
(3) About the same

TABLE XLIV

BELIEF IN LIFE AFTER DEATH AND PIL OF ACTIVE
PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Belief in Life After Death | | |
	Yes	No	Total
Low	50	15	65
Medium	79	16	95
High	84	8	92
Total	213	39	252

Chi Square = 6.2;   df = 2, significant at the .043 level

Item 69: Do you believe in life after death?
          (1) Yes
          (2) No

TABLE XLV

NOTION OF WHAT IS WORTHWHILE IN LIFE AND PIL BY
ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

| PIL | Notion of What Is Worthwhile in Life | | |
	Clear Notion	Less Than Clear Notion	Total
Low	23	46	69
Medium	68	32	100
High	77	15	92
Total	168	93	261

Chi Square = 44.5;   df = 2, significant at less than .001 level

Item 71:   Nowadays there seems to be a greal deal of discussion about what is worthwhile
in life. How do you feel about this? Do you have a clear notion about what is
worthwhile in life or a very uncertain notion about what is worthwhile in life?
(1) Clear notion
(2) Fairly clear
(3) Uncertain
(4) Very uncertain

TABLE XLVI

AMBITION AND PIL OF ACTIVE PROFESSIONALS, CLERGYMEN AND PROFESSORS

PIL	Importance of Getting Ahead			
	Very Important	Fairly Important	Not Very Important	Total
Low	13	34	19	66
Medium	33	51	15	99
High	34	35	20	89
Total	80	120	54	254

Chi Square = 9.7; df = 4, significant at the .046 level

Item 72: How important, to you personally, has it been to get ahead in life?
(1) Very important
(2) Fairly important
(3) Not very important
(4) Definitely not important

TABLE XLVII

SIGNIFICANT DIFFERENCES BETWEEN ACTIVE PROFESSIONALS
IN RANK ON PIL AND DISTRIBUTION
ALONG THE VARIABLE ITEMS

Item Number	Item Statement
1.	Age nearest birthday
12.	How would you rank the community you now live in?
18.	How many close relatives and friends have died in the last 10 years?
36.	If you have grown children, how willing would you say they would be to make sacrifices for you?
38.	Married children, when possible, should live close, within a day's drive or less to their parents
48.	With regard to the current literature in your field, how well do you keep up?
50.	To what extent do you feel satisfied with your profession?
52.	Would you say that your health is better or worse than the health of other people your same age?
53.	I have never felt better in my life.
54.	Do you feel older or younger than your years?
63.	Are you the sort of person who finds it easy or difficult to join an organization in the community?
67.	How important is it to you personally to believe in some religious philosophy?
68.	Is religion more important to you now or less important than it was five or ten years ago?
69.	Do you believe in life after death?
71.	Do you have a clear notion of what is worthwhile in life?
72.	How important to you personally has it been to get ahead in life?

the items testing significantly. A narrowed base of 63 items along

which distributional differences were great enough for a Chi Square

test yields a figure of approximately 25 percent significant items. In

either case more than 5 percent of the items were significant. H_2 was

considered sustained.

Test of Hypothesis Three

H_3) There will be significant differences between the active

clergymen in rank on LSIA as they are distributed with respect to the

variable items.

In the test of this hypothesis, only four items yielded signifi-

cant distributions along LSIA. These are presented below.

Type of setting lived in from age 20 to the present was signifi-

cantly related to LSIA with the rural being positively related to LSIA

and the most urban setting being negatively related to LSIA. The

responses of 102 clergymen were used in the test of this item. Proba-

bility level was .053. Table XLVIII, page 118, presents this distribu-

tion.

How well the active clergyman kept up with the current literature

in his field related positively to LSIA. The distribution presents a

clear relationship although the number of respondents in the "less than

very well" category is depressed. This item related significantly at

the .001 level with the responses of 105. Table XLIX presents this

distribution.

Ease of joining a community organization produced a positive rela-

tionship with LSIA probability level of .059. The distribution pre-

sents a relationship clearly in the direction of a positive

TABLE XLVIII

TYPE OF SETTING LIVED IN FROM AGE TWENTY TO THE PRESENT
AND LSIA, ACTIVE CLERGYMEN

| LSIA | Type of Setting | | | Total |
	Rural	Town Under 50,000	City Over 50,000	
Low	6	11	11	28
Medium	9	10	10	29
High	22	17	6	45
Total	37	38	27	102

Chi Square = 9.4; df = 4, probability level .053

Item 10: In which type of setting have you lived most of your life from age 20 to the present?
(1) Rural
(2) Town under 10,000
(3) City under 50,000
(4) City 50,000 to 100,000
(5) City 100,000 and over

TABLE XLIX

CURRENT LITERATURE AND LSIA, ACTIVE CLERGYMEN

| LSIA | How Well Keep Up With Current Literature | | |
	Very Well	Less Than Very Well	Total
Low	15	13	28
Medium	24	7	31
High	42	4	46
Total	81	24	105

Chi Square = 14.1;   df = 2, significant at the .001 level

Item 48: With regard to the current literature in your field: how well do you keep up?
    (1) Very well
    (2) Quite well
    (3) Slightly
    (4) Not at all

relationship. A total of 105 active clergymen responded to this item. Table L, page 121, presents this distribution.

The last item in the test of this hypothesis related notion of what is worthwhile positively to LSIA. The 103 active clergymen who responded to this item tended to have higher LSIA scores when stating that they had a clear notion of what was worthwhile in life. This item was significant at the .024 level. Table LI, page 122, presents this distribution.

Table LII, page 123, presents a summary of the items which yielded significant or near significant differences among active clergymen along LSIA. There were only four items which tested significantly or near significance. Out of a total of 74 items this is 5.4 percent. With a narrowed base of 43 the percentage significant level rises to 9.3 percent. Since there are two questionable items, the hypothesis was not accepted.

Test of Hypothesis Four

H_4) There will be significant differences between active professors in rank on LSIA as they are distributed with respect to the variable items.

In the test of this hypothesis seven items distributed significantly. These are presented below.

Cause of greatest concern reflected the tendency for those scoring higher on LSIA to be more concerned with their children or a lack of being useful while lower scores on LSIA tended to reflect concern with finances and health. Although these were only tendencies, the item was significant at the .036 level with the responses of 155 active

TABLE L

EASE OF JOINING A COMMUNITY ORGANIZATION
AND LSIA, ACTIVE CLERGYMEN

| LSIA | Ease of Joining | | |
	Easy	Difficult or Average	Total
Low	11	17	28
Medium	18	13	31
High	31	15	46
Total	60	45	105

Chi Square = 5.6; df = 2, probability level .059

Item 63: Are you the sort of person who finds it easy or difficult to join an
organization in the community?
(1) Easy
(2) Difficult
(3) About average

TABLE LI

NOTION OF WHAT IS WORTHWHILE IN LIFE
AND LSIA, ACTIVE CLERGYMEN

| LSIA | Notion of What Is Worthwhile in Life | | Total |
	Very Clear Notion	Less Than Very Clear	
Low	14	12	26
Medium	24	7	31
High	38	8	46
Total	76	27	103

Chi Square = 7.4; df = 2, significant at the .024 level

Item 71: Nowadays there seems to be a great deal of discussion about what is worthwhile in life. How do you feel about this? Do you have a clear notion about what is worthwhile in life or a very uncertain notion about what is worthwhile in life?
(1) Clear notion
(2) Fairly clear
(3) Uncertain
(4) Very uncertain

professors used in the test. This distribution may be seen in Table

LIII, page 124.

TABLE LII

DIFFERENCES BETWEEN ACTIVE CLERGYMEN IN RANK ON LSIA
AND DISTRIBUTION ALONG THE VARIABLE ITEMS

Item	Statement
10.	Type of setting lived most of life from age 20 to the present
48.	With regard to the current literature, in your field, how well do you keep up?
63.	Ease of joining a community organization
71.	Do you have a clear notion of what is worthwhile in life?

How one ranks the community lived in presently related signifi-

cantly along LSIA at the .054 level. Those ranking community excellent

tended twoard higher scores on LSIA than those ranking their community

fair to poor. The responses of 162 active professors were used in the

test of this item. Table LIV, page 125, presents this distribution.

Number of living children related significantly to LSIA at the

.028 level. Active professors who had one or less or three or more

tended to score higher on LSIA than those with two children. This item

is difficult to interpret as there appears to be no clear cut distribu-

tion. Responses from a total of 144 active professors were used in the

TABLE LIII

CAUSE OF GREATEST CONCERN AND LSIA, ACTIVE PROFESSORS

| LSIA | Cause of Concern | | | | |
	Health	Finances	Children	Lack of Being Useful	Total
Low	16	13	8	4	41
Medium	5	15	9	10	39
High	16	17	24	18	75
Total	37	45	41	32	155

Chi Square = 13.5;   df = 6, significant at the .036 level

Item 5: Of the following items, which one causes you the greatest amount of concern?
(1) Health (my own or spouse's)
(2) Finances
(3) Children
(4) Age and death
(5) Lack of being useful

TABLE LIV

ACTIVE PROFESSORS, HOW RANK COMMUNITY AND LSIA

LSIA	How Rank Community			
	Excellent	Good	Fair to Poor	Total
Low	13	20	9	42
Medium	10	23	8	41
High	34	40	5	79
Total	57	83	22	162

Chi Square = 9.3; df = 4, probability level .054

Item 12: Would you rank the community you now live in as:
     (1) An excellent place to live
     (2) A good place to live
     (3) A fair place to live
     (4) A poor place to live

test on this item. Table LV, page 127, presents the distribution.

Satisfaction with profession and LSIA intuitively should relate strongly. Test of this item with the responses of 160 active professors yielded a relationship significant at the .050 level. The direction of the relation clearly favors the most satisfied with higher scores on LSIA. Table LVI, page 128, presents this distribution.

Self reported smoking, no specific smoking instrument or form was specified, produced a relationship with probability level of .055. It appears that the relationship with smoking is negative to higher scores on the LSIA with the largest number of those with high LSIA being in the no column on smoking. A total of 162 respondents, active professors provided the responses for the test of this item. Table LVI, page 129, presents this distribution. A related item, cigarette smoking, is presented directly below.

Cigarette smoking was negatively related to high scores on LSIA. This relationship was significant at the .006 level. A total of 162 active professors provided the responses for this test. Comparing this distribution with the distribution immediately preceding on smoking, it can be seen that among the high LSIA group more of the smokers, percentage-wise, do not smoke cigarettes than in the other categories. The distribution on cigarette smoking among active professors appears in Table LVII, page 130.

Income bracket and LSIA tend to be positively related among active professors. The responses of 159 provided a relationship significant at the .050 level. The group scoring highest on LSIA was the highest income group. This group was also the modal group in terms of income. This distribution is presented in Table LVIII, page 131.

TABLE LV

NUMBER OF LIVING CHILDREN AND LSIA, ACTIVE PROFESSORS

	Number of Living Children				
LSIA	None	One	Two	Three or More	Total
Low	9	7	15	7	37
Medium	4	11	10	10	36
High	11	35	14	11	71
Total	24	53	39	28	144

Chi Square = 14.2; df = 6, significant at the .028 level.

Item 15: Number of living children?

TABLE LVI

ACTIVE PROFESSORS' SATISFACTION WITH PROFESSION AND LSIA

LSIA	Satisfaction With Profession		Total
	Very Satisfied	Less Than Very Satisfied	
Low	17	23	40
Medium	23	18	41
High	52	27	79
Total	92	58	160

Chi Square = 5.9;   df = 2, significant at the .050 level

Item 50: To what extent do you feel satisfied with your profession?
    (1) Very satisfied, would pick same profession again
    (2) Generally satisfied, would pick same profession again
    (3) Mildly dissatisfied, would not pick same profession again
    (4) Very dissatisfied, would not pick same profession again

TABLE LVII

ACTIVE PROFESSORS' SMOKING AND LSIA

| LSIA | Smoking | | |
	Yes	No	Total
Low	19	23	42
Medium	14	27	41
High	19	60	79
Total	52	110	162

Chi Square = 5.8; df = 2, probability level .055

Item 59: Do you smoke?
    (1) Yes
    (2) No

TABLE LVIII

ACTIVE PROFESSORS' CIGARETTE SMOKING AND LSIA

| LSIA | Cigarette Smoking | | |
	Yes	No	Total
Low	14	28	42
Medium	11	30	41
High	8	71	79
Total	33	129	162

Chi Square = 10.5;   df = 2, significant at the .006 level

Item 60: Do you smoke cigarettes?
          (1) Yes
          (2) No

TABLE LIX

ACTIVE PROFESSORS, INCOME BRACKET AND LSIA

| | Income Bracket | | | |
LSIA	10,000 or less	10,000-15,000	Over 15,000	Total
Low	7	21	11	39
Medium	5	16	20	41
High	13	22	44	79
Total	25	59	75	159

Chi Square = 9.5; df = 4, significant at the .050 level

Item 73: What is your income bracket?
 (1) Under $5,000 per year
 (2) 5,000-7,500 per year
 (3) 7,600-10,000 per year
 (4) 10,000-15,000 per year
 (5) Over 15,000 per year

In the test of H_4) seven out of 74 items proved significant for a figure of approximately 9.5 percent significant. With a narrowed base of 53 items the figure rises to approximately 13.2 percent. In any case, the hypothesis is sustained in terms of criteria established in the present study. A summary of the significant items is found in Table LX below.

TABLE LX

SIGNIFICANT DIFFERENCES BETWEEN ACTIVE PROFESSORS
IN RANK ON LSIA AND DISTRIBUTION
ALONG THE VARIABLE ITEMS

Item	Statement
5.	Of the following items, which one causes you the greatest amount of concern? health, finance, children, age and death, or lack of being useful.
12.	How would you rank the community you now live in?
15.	Number of living children
50.	To what extent do you feel satisfied with your profession?
59.	Do you smoke?
60.	Do you smoke cigarettes?
73.	What is your income bracket?

Test of Hypothesis Five

H_5) There will be significant differences between active clergy-
men in rank on PIL as they are distributed with respect to the variable
items.

How the clergyman ranked the community he now lives in was signif-
icantly distributed along PIL at the .049 level. Nearly two-thirds of
the active clergymen ranked their community less than an excellent
place to live. Of those who did rank their community excellent, only
a very few scored in the low PIL category. The clergy typically must
live in housing provided by the church and in the community he serves.
This decreases his mobility and means that he as a professional fre-
quently must live in circumstances less than his professional status
would indicate if he were in some other profession. This can be seen
in Table LXI, page 134. A total of 103 active clergymen responded to
this item.

Number of years employed full time in profession related positive-
ly to PIL. The responses of 104 active clergymen provided a signifi-
cant relationship at the .038 level. The relationship clearly demon-
strates the tendency for number of years to relate directly with higher
PIL score. Table LXII provides the distribution of this data.

How well a clergyman keeps up with the current literature in his
field provided a significant relationship of .032. The responses of
105 active clergymen were used in the test of this item. There was a
direct relationship between keeping up very well and a higher PIL
score. Responses were skewed in the direction of keeping up very well.
Nevertheless, the tendency for the direct relationship is clear. Table
LXIII, page 136, provides this distribution.

TABLE LXI

HOW RANK COMMUNITY AND PIL, ACTIVE CLERGYMEN

PIL	How Rank Community		
	Excellent	Less Than Excellent	Total
Low	5	24	29
Medium	11	21	32
High	19	23	42
Total	35	68	103

Chi Square = 6.0;   df = 2, significant at the .049 level

Item 12: Would you rank the community you now live in as:
   (1) An excellent place to live
   (2) A good place to live
   (3) A fair place to live
   (4) A poor place to live

TABLE LXII

NUMBER OF YEARS EMPLOYED FULL TIME IN PROFESSION
AND PIL, ACTIVE CLERGYMEN

| PIL | Number of Years Employed | | | |
	Low	Medium	High	Total
Low	11	9	9	29
Medium	13	10	10	33
High	5	14	23	42
Total	29	33	42	104

Chi Square = 10.1;   df = 4, significant at the .038 level

Item 46: Please indicate the number of years employed full time in your profession.

TABLE LXIII

ACTIVE CLERGYMEN, HOW WELL KEEP UP WITH
CURRENT LITERATURE AND PIL

PIL	How Well Keeps Up With the Current Literature in Own Field		
	Very Well	Less Than Very Well	Total
Low	18	11	29
Medium	25	8	33
High	38	5	43
Total	81	24	105

Chi Square = 6.8; df = 2, significant at the .032 level

Item 48: With regard to the current literature in your field: how well do you keep up?
    (1) Very well
    (2) Quite well
    (3) Slightly
    (4) Not at all

Satisfaction with profession and PIL were related by the responses of 102 active clergymen at the .001 level of significance. The direction of the relationship is positive. Those answering very satisfied with profession had a tendency toward higher PIL scores while those answering less than very satisfied had depressed PIL scores. Table LXIV presents this distribution.

Clergymen who felt younger than their years tended to have higher PIL scores than those who felt the same or worse. The responses of 104 active clergymen yielded a significant relationship at the .007 level. The distribution of this item is presented on Table LXV, page 139.

Ease of joining a community organization tested significant at the .014 level with the responses of 105 active clergymen. Those reporting it easy to join a community organization tend to score higher on PIL than those reporting average ease or difficulty in joining. Table LXVI, page 140, has this distribution.

The last item that tested significantly among active clergymen on PIL was notion of what is worthwhile in life. This item tested significant at the .0001 level using the responses of 103 active clergymen. The direction of the relationship is clear as can be seen in Table LXVII (page 141). Clergymen tending to have a clear notion of what is worthwhile in life as opposed to those with a less than clear notion tend to score higher on PIL than the others.

A summary of these variable items that related significantly among active clergymen along PIL may be seen in Table LXVIII, page 142.

The test of this hypothesis was similar to tests for preceding hypotheses with the exception that only responses of active clergymen were used and the measure of morale was PIL. A total of 7 items

TABLE LXIV

ACTIVE CLERGYMEN'S SATISFACTION WITH PROFESSION AND PIL

| PIL | Satisfaction | | Total |
	Very Satisfied	Less Than Very Satisfied	
Low	8	19	27
Medium	14	19	33
High	32	10	42
Total	54	48	102

Chi Square = 16.5;   df = 2, significant at the .001 level

Item 50: To what extent do you feel satisfied with your profession?
    (1) Very satisfied, would pick same profession again
    (2) Generally satisfied, would pick same profession again
    (3) Mildly dissatisfied, would not pick same profession
    (4) Very dissatisfied, would not pick same profession again

TABLE LXV

ACTIVE CLERGYMEN'S COMPARATIVE AGE AND PIL

| PIL | Comparative Feelings of Age | | |
	Younger	Same or Older	Total
Low	16	13	29
Medium	17	16	33
High	35	7	42
Total	68	36	104

Chi Square = 10.2;   df = 2, significant at the .007 level

Item 54: Do you feel older or younger than your years?
        (1) Older
        (2) Younger
        (3) Same

TABLE LXVI

ACTIVE CLERGYMEN'S EASE OF JOINING A COMMUNITY
ORGANIZATION AND PIL

| PIL | Ease of Joining | | Total |
	Easy	Difficult or Average	
Low	10	19	29
Medium	21	12	33
High	29	14	43
Total	60	45	105

Chi Square = 8.5;   df = 2, significant at the .014 level

Item 63: Are you the sort of person who finds it easy or difficult to join an
organization in the community?
(1) Easy
(2) Difficult
(3) About average

TABLE LXVII

ACTIVE CLERGYMEN'S CLEAR NOTION OF WHAT IS
WORTHWHILE IN LIFE AND PIL

| PIL | Notion of What Is Worthwhile in Life | | |
	Clear	Less Than Clear	Total
Low	10	18	28
Medium	26	6	32
High	40	3	43
Total	76	27	103

Chi Square = 30.1;   df = 2, significant at the .001 level

Item 71: Nowadays there seems to be a great deal of discussion about what is worthwhile
in life. How do you feel about this? Do you have a clear notion about what is
worth while in life or a very uncertain notion about what is worthwhile in life?
(1) Clear notion
(2) Fairly clear
(3) Uncertain
(4) Very uncertain

related significantly out of a total of 74. This gives the figure of

9.5 percent. With a narrowed base of 43 items the figure rises to

approximately 16 percent. In either case H_5 is sustained.

TABLE LXVIII

SIGNIFICANT DIFFERENCES BETWEEN ACTIVE CLERGYMEN
IN RANK ON PIL AND DISTRIBUTION
ALONG THE VARIABLE ITEMS

Item	Statement
12.	How rank community now live in.
46.	Number of years employed full time in profession.
48.	How well keep up with current literature in own field.
50.	To what extent do you feel satisfied with your profession?
54.	Do you feel older or younger than your years?
63.	Are you the sort of person who finds it easy or difficult to join an organization in the community?
71.	Clarity of notion of what is worthwhile in life.

Test of Hypothesis Six

H_6) There will be significant differences between active profes-

sors in rank on PIL as they are distributed with respect to the vari-

able items.

In the test of this hypothesis 15 variable items distributed significantly among active professors along PIL. The first item in this series was how active professors ranked the community they live in presently and PIL. This item tested significantly at the .034 level with the responses of 162 active professors. The direction clearly indicates that those ranking their community as an excellent place tend to score higher on PIL than those ranking their community less than excellent. Table LXIX presents this distribution.

Deaths of close friends and close relatives other than family tested probability level of .058. The responses of 163 active professors were used in the test of this item. The direction was negative. The fewer the deaths, the higher the PIL score tended to be. Table LXX, page 145, presents this distribution.

The responses of 157 active professors were used in the test of the item relating the statement about parents taking care of adult children when sick. This item was significant at the .044 level with higher PIL scores being made by those agreeing with this orientation. Table LXXI, page 146, presents this item.

How well the respondent kept up with current literature in his own field related positively at the .038 level. The responses of 162 active professors were used in the test of this item. This distribution is presented in Table LXXII, page 147.

Satisfaction with profession and PIL were related significantly at the .0001 level. The responses of 160 active professors were used in this test. The distribution clearly presents the positive nature of this relationship with the very satisfied tending toward higher PIL scores. Table LXXIII, page 148, presents this distribution.

TABLE LXIX

HOW RANK COMMUNITY AND PIL, ACTIVE PROFESSORS

| PIL | How Rank Community | | | |
---	Excellent	Good	Fair to Poor	Total
Low	13	22	7	42
Medium	18	40	12	70
High	26	21	3	50
Total	57	83	22	162

Chi Square = 10.4;   df = 4, significant at the .034 level

Item 12: Would you rank the community you now live in as:
          (1) An excellent place to live
          (2) A good place to live
          (3) A fair place to live
          (4) A poor place to live

TABLE LXX

DEATHS OF CLOSE FRIENDS AND RELATIVES AND PIL, ACTIVE PROFESSORS

PIL	Deaths				
	None	One	Two	More Than Two	Total
Low	19	12	8	3	42
Medium	25	28	11	6	70
High	21	8	10	11	50
Total	65	48	29	20	163

Chi Square = 12.2; df = 6, probability level .058

Item 18: About how many other close relatives and close friends have died in the last ten years?

TABLE LXXI

ACTIVE PROFESSORS, PARENTS TAKING CARE OF ADULT
CHILDREN WHEN SICK AND PIL

| PIL | Taking Care of Adult Children | | |
	Agree	Disagree	Total
Low	32	8	40
Medium	42	26	68
High	39	10	49
Total	113	44	157

Chi Square = 6.2; df = 2, significant at the .044 level

Item 23: Parents should take care of their grown children in whatever way necessary
when they are sick.
(1) Agree
(2) Disagree

TABLE LXXII

CURRENT LITERATURE AND PIL, ACTIVE PROFESSORS

PIL	How Well Keep Up With Current Literature			Total
	Very Well	Quite Well	Slightly or Not at All	
Low	2	27	13	42
Medium	16	45	9	70
High	9	33	8	50
Total	27	105	30	162

Chi Square = 10.1;   df = 4, significant at the .038 level

Item 48: With regard to the current literature in your field: how well do you keep up?
(1) Very well
(2) Quite well
(3) Slightly
(4) Not at all

TABLE LXXIII

ACTIVE PROFESSORS' SATISFACTION WITH PROFESSION AND PIL

| PIL | Satisfaction | | Total |
---	Very Satisfied	Less Than Very Satisfied	
Low	12	29	41
Medium	41	28	69
High	39	11	50
Total	92	68	160

Chi Square = 22.1; df = 2, significant at the .0001 level

Item 50: To what extent do you feel satisfied with your profession?
(1) Very satisfied, would pick same profession again
(2) Generally satisfied, would pick same profession again
(3) Mildly dissatisfied, would not pick same profession again
(4) Very dissatisfied, would not pick same profession again

Active professors who report that their health is better than the health of people their own age tend toward higher PIL scores than those who state that their health is the same or worse. This item tested significantly at the .002 level. The responses of 162 active professors were used in the test of this item. Table LXXIV, page 150, clearly presents the directionality of this distribution.

Reported ease of joining a community organization tested significant at the .0001 level among active professors along PIL. The responses of 158 active professors was used in the test of this item. The direction of this distribution is positive, ease is positively related to higher PIL scores. This can be seen in Table LXXV, page 151.

How often a professor entertains or is entertained by friends was positively related to PIL. This item tested significant at the .036 level with the responses of 162 active professors. Table LXXVI, page 152, presents this distribution.

Another item, not entirely unrelated to the immediately preceding item on entertaining, is number of friends preferred. Number of friends preferred among active professors related positively and significantly to PIL at the .033 level. The responses of 162 active professors were used in this test. This distribution is presented in Table LXXVII, page 153.

The importance of belief in a religious philosophy was positively and significantly related at the .043 level in the responses of 159 active professors. The direction of this relationship is clear in Table LXXVIII, page 154.

TABLE LXXIV

ACTIVE PROFESSORS' COMPARATIVE HEALTH AND PIL

	Comparative Health		
PIL	Better	Same or Worse	Total
Low	20	22	42
Medium	29	41	70
High	37	13	50
Total	86	76	162

Chi Square = 13.1; df = 2, significant at the .002 level

Item 52: Would you say that your health is better or worse than the health of
other people your same age?
(1) Better
(2) Same
(3) Worse

TABLE LXXV

EASE OF JOINING A COMMUNITY ORGANIZATION
AND PIL, ACTIVE PROFESSORS

| PIL | Ease of Joining a Community Organization | | | |
	Easy	Difficult	Average	Total
Low	6	15	19	40
Medium	17	14	37	68
High	29	6	15	50
Total	52	35	71	158

Chi Square = 25.3;   df = 4, significant at the .0001 level

Item 63: Are you the sort of person who finds it easy or difficult to join an
organization in the community?
(1) Easy
(2) Difficult
(3) Average

TABLE LXXVI

HOW OFTEN ENTERTAIN AND PIL, ACTIVE PROFESSORS

| PIL | How Often Entertain | | | | |
	Once a Week or More	A Few Times a month	Once a Month	Less Than Once a Month	Total
Low	10	15	6	11	42
Medium	30	12	18	10	70
High	15	19	7	9	50
Total	55	46	31	20	162

Chi Square = 13.5;   df = 6, significant at the .036 level

Item 64: About how often do you entertain, or how often are you entertained by friends?
(1)   About once a week or more
(2)   A few times a month
(3)   Once a month
(4)   Once a year
(5)   A few times a year
(6)   Almost never or never

TABLE LXXVII

ACTIVE PROFESSORS' PREFERENCE OF FRIENDS AND PIL

PIL	Number of Friends Preferred		
	Many	Few	Total
Low	13	29	42
Medium	31	39	70
High	29	21	50
Total	73	89	162

Chi Square = 6.8;   df = 2, significant at the .033 level

Item 65: As you define friends, which one of the following conditions do you prefer most?
(1) Prefer having many friends
(2) Prefer having only a few close friends
(3) Undecided

TABLE LXXVIII

IMPORTANCE OF BELIEF IN RELIGIOUS PHILOSOPHY
AND PIL, ACTIVE PROFESSORS

| PIL | Belief in Religious Philosophy | | | |
	Very Important	Moderately Important	Not Important	Total
Low	16	9	16	41
Medium	32	15	21	68
High	32	12	6	50
Total	80	36	43	159

Chi Square = 9.8;   df = 4, significant at the .043 level

Item 67: How important is it to you to personally believe in some religious philosophy?
   (1) Very important
   (2) Moderately important
   (3) Not particularly important
   (4) Definitely not important

The relative importance of religion measured by the respondents'

declaration that religion was more important now than five or ten years

ago also tended to be positively related to PIL. The responses of 160

active professors used in this test obtained a level of significance of

.039 on this item. The directionality of this item is clearly present-

ed in Table LXXIX, page 156.

Belief in life after death among active professors and PIL related

positively at the .015 level. A low number of active professors disbe-

lieved in life after death. The directionality of this relationship is

clearly seen in Table LXXX, page 157. The responses of 148 active pro-

fessors were used in the test of this item.

A clear notion of what is worthwhile in life related positively

and significantly at the .0001 level with the responses of 159 active

professors. The direction of this is presented clearly in Table LXXXI.

Ambition and PIL were positively related in the responses of 153

active professors. This item tested significant at the .018 level.

This item is presented in Table LXXXII, page 159.

The concluding item in this series was income bracket and PIL.

Three clear-cut brackets developed. They were $7,500 and less, $7,600-

15,000 and over $15,000. Those in the highest bracket represented not

only those tending toward higher PIL scores but also the modal bracket.

Approximately 47 percent of the sample of active professors were in the

over $15,000 category with 37 percent in the over $7,600 but less than

$15,000. The remaining 18 percent were in the less than $7,600 cate-

gory. This item was significant at the .001 level. This may be seen

in Table LXXXIII, page 160.

TABLE LXXIX

RELATIVE IMPORTANCE OF RELIGION AND PIL, ACTIVE PROFESSORS

| PIL | Relative Importance of Religion | | | |
	More	Less	Same	Total
Low	11	7	23	41
Medium	10	16	43	69
High	20	8	22	50
Total	41	31	88	160

Chi Square = 10.1;   df = 4, significant at the .039 level

Item 68: Is religion more important to you now or less important than it was five to
ten years ago?
(1) More important
(2) Less important
(3) About the same

TABLE LXXX

ACTIVE PROFESSORS' BELIEF IN LIFE AFTER DEATH AND PIL

| PIL | Belief in Life After Death | | Total |
	Yes	No	
Low	22	14	36
Medium	47	15	62
High	44	6	50
Total	113	35	148

Chi Square = 8.4;   df = 2, significant at the .015 level

Item 69: Do you believe in life after death?
    (1) Yes
    (2) No

TABLE LXXXI

ACTIVE PROFESSORS' CLEAR NOTION OF WHAT IS
WORTHWHILE IN LIFE AND PIL

PIL	Notion of What Is Worthwhile in Life		
	Clear	Less Than Clear	Total
Low	13	28	41
Medium	43	26	69
High	37	12	49
Total	93	66	159

Chi Square = 18.4;   df = 2, significant at the .0001 level

Item 71: Nowadays there seems to be a great deal of discussion about what is worthwhile
in life. How do you feel about this? Do you have a clear notion about what is
worthwhile in life or a very uncertain notion about what is worthwhile in life?
(1) Clear notion
(2) Fairly clear
(3) Uncertain
(4) Very uncertain

TABLE LXXXII

AMBITION AND PIL, ACTIVE PROFESSORS

PIL	Importance of Getting Ahead in Life			
	Very Important	Fairly Important	Not Important	Total
Low	7	24	7	38
Medium	24	37	7	68
High	22	15	10	47
Total	53	76	24	153

Chi Square = 11.9;   df = 4, significant at the .018 level

Item 72: How important, to you personally, has it been to get ahead in life?
    (1) Very important
    (2) Fairly important
    (3) Not very important
    (4) Definitely not important

TABLE LXXXIII

INCOME BRACKET AND PIL, ACTIVE PROFESSORS

	Income Bracket			
PIL	$7,500 and less	$7,600-15,000	Over $15,000	Total
Low	1	23	17	41
Medium	13	28	28	69
High	11	8	30	49
Total	25	59	75	159

Chi Square = 19.3;   df = 4, significant at the .001 level

Item 73: What is your income bracket?
        (1) Under $5,000 per year
        (2) $5,000 to 7,500 per year
        (3) $7,600 to 10,000 per year
        (4) $10,000 to 15,000 per year
        (5) Over $15,000 per year

A summary of items relating significantly to PIL among the active professors can be seen in Table LXXXIV. In this series, a total of 15 items out of 74 related significantly. This makes a figure of approximately 21 percent. With a base narrowed to 53, the figure rises to approximately 28 percent. In either case the hypothesis is sustained.

A summary of items significant among both groups and both measures of morale are found in Table LXXXV, page 163.

Test of Hypothesis Seven

H_7) There will be no difference between active clergy and active professors in means on LSIA.

The test of this hypothesis was the "t" statistic applied to the means of the respective groups comprised of 120 active clergymen and 152 active professors. The results of this test indicated that there was no significant difference in the means of the two groups. H_7 could not be rejected. Table LXXXVI, page 164, presents this test.

Test of Hypothesis Eight

H_8) There will be no difference between the active clergymen and active professors in means on PIL.

The test of this hypothesis included the responses of 120 active clergymen and 152 active professors. The resultant "t" statistic was not significant. It was concluded that this hypothesis could not be rejected. The results of this test may be seen in Table LXXXVII, page 165.

TABLE LXXXIV

SIGNIFICANT ITEMS AMONG ACTIVE PROFESSORS
IN RANK ON PIL AND DISTRIBUTION
ALONG THE VARIABLE ITEMS

Item Number	Item Statement
12.	How rank community now live in.
18.	How many relatives and close friends have died in last ten years.
23.	Parents should take care of their grown children in whatever way necessary when they are sick.
48.	How well keep up with current literature.
50.	Satisfaction with profession.
52.	State health is better than health of other people same age.
63.	Ease of joining a community organization.
64.	How often entertain.
67.	Importance of believing in some religious philosophy.
68.	Relative importance of religion compared to five or ten years ago.
69.	Belief in life after death.
71.	Clarity of notion of what is worthwhile in life.
72.	How important to you personally has it been to get ahead in life?
73.	Income bracket.

TABLE LXXXV

SUMMARY OF SIGNIFICANT ITEMS ON MEASURES OF MORALE

Item	PIL			LSIA		
	Both	Clergy	Professors	Both	Clergy	Professors
1.	1*					
5.						1
10.					1	
12.	1	1	1	1		1
15.						1
18.	1		1			
23.		1				
36.	1					
38.	1					
45.**	1	1				
46.		1				
48.	1	1	1	1	1	
50.	1	1	1	1		1
51.				1		
52.	1		1			
53.	1			1		
54.	1	1				
59.***						1
60.***				1		1
63.	1	1	1		1	
64.			1			
65.			1			
67.	1		1			
68.	1		1			
69.	1		1			
71.	1	1	1	1	1	
72.	1		1			
73.			1	1		1
Total	17	8	15	8	4	7

*1 = Significant relationship in that category with that measure of morale.

**Item 45 relevant only to clergy; hence not used except in H9.

***Items 59 and 60 were not included in the study of retired professionals. hence not included in base of 26 comparable items.

TABLE LXXXVI

GROSS TEST OF CORRELATES BOTH PROFESSIONS BOTH
MEASURES OF MORALE, PIL AND LSIA

Item	Active Professional	Retired Professional
1.	Age	1
5.	Cause of greatest concern	0
10.	Type of setting lived in from age 20 to present	0
12.	How rank community presently living in	1
15.	Number of living children	0
18.	Number of deaths of close relatives and friends	0
23.	Parents should help adult children	1
36.	Children willing to help parents	1
38.	Adult children should live close to parents	1
45.	Years a clergyman in Oklahoma	0
46.	Number of years employed full time in profession	0
48.	How well keep up with current literature	1
50.	Satisfaction with profession	1
51.	Say health is good	1
52.	Say health is better than others same age	1
53.	Report never felt better	1
54.	Report feel younger	1
63.	Ease of joining a community organization	0
64.	How often entertain	1
65.	Preference for number of friends	1
67.	Importance of believing in some religious philosophy	1
68.	State religion more important now than five or ten years	0
69.	Belief in life after death	1
71.	Clarity of notion of what is worthwhile in life	1
72.	Ambition	0
73.	Income	1
Total	26 B.P.D. = .023	17

1=Item tests significant on a measure of morale with retired sample.
0=Item does not test significantly on a measure of morale with retired
   sample.

TABLE LXXXVII

TEST OF DIFFERENCE ON MEASURES OF MORALE BETWEEN
ACTIVE CLERGY AND ACTIVE PROFESSORS

Population	Mean	SD	N	T	Level of Significance
LSIA					
Active Clergy	15.12	1.98	120	.43	n.s.
Active Professors	14.93	2.98	152		
PIL					
Active Clergy	118.8	9.9	120	.26	n.s.
Active Professors	117.2	9.6	152		

Test of Hypothesis Nine

H_9) The correlates of measures of morale between active profes-
sionals and retired professionals will be the same (in terms of the
population of the present study and the retired counterpart of the
population of the present study).

Microscopic analyses of this hypothesis yielded little. These
included within profession comparisons on specific measures. It was
determined that two modes of analysis would disclose the relationship
between the active professionals and retired professionals. One of
these modes will be called the "gross" analysis. In the gross analysis
either measure of morale will be considered the same and no differenti-
ation will be made between professions. The only distinction will be
made between active professionals and inactive professionals. The
second mode of analysis is in terms of "salient" items. The results of
the "gross mode of analysis" will be discussed first.

"Gross Analysis". The items found significant in terms of either
measure of morale (PIL or LSIA among either active profession) were
considered the "base" against which the correlates of morale were com-
pared with retired professionals. This comparison yielded a base of
26 items. A total of 17 of these items were also items testing signif-
icant among the retired professionals. Using stringent assumptions of
the binomial probability distribution, that any correlate on the active
sample had a 50/50 chance of being a correlate among the inactive pro-
fessionals (B.P.D. = .023 that 17 out of 26 will test significant), the
"gross analysis" hypothesis is considered sustained (see Table LXXXVI).

"Salient Items Analysis". Correlates among the active sample were
again considered the base. A "salient" item was one which tested

significant in more than one test. Specifically, this meant that an item must be significant in at least 2 out of 3 possible tests across the measure of morale indicated or, 4 out of 6 possible tests in the case of salient items across both measures of morale. Thus there are three categories of "salient" items. There are those items that are salient across PIL, those that are salient across LSIA, and those that are salient across both measures of morale. Those that are salient across both measures of morale are those items with highest salience. An index of relative salience was also developed. This measure was simply a number indicating that the item was significant across that many possibilities. In the case of salient items across both measures together, PIL and LSIA, the highest salience possible would be 6. The highest salience actually achieved was 5. The lowest salience was 4. In the case of salient items across PIL or LSIA separately, the highest possible salience was 3. An item not achieving at least 2 on these was not a salient item. See Tables LXXXVIII, LXXXIX, and XC, pages 168, 169, and 170.

There were five salient items across LSIA and both professions that could be compared with the retired sample. (Smoking behavior, while a salient item among active professionals, was not on the retired schedule so could not be used for comparison. This drops the number of comparative items to 5.) Of these, four of the five were also items which proved significant among the retired sample. B.P.D. of this, however, would be .032 if all five were significant among the retired sample assuming .50 chance of an item being significant. When 4 out of 5 are correct, B.P.D. = 15.6 percent, which exceeds the 5 percent or less criteria for the acceptance level.

TABLE LXXXVIII

ITEMS SALIENT ACROSS BOTH MEASURES OF
MORALE AND BOTH PROFESSIONS

Active Professionals Item		Index of Salience	Retired Professionals
12.	How rank community now live in	5	1
48.	How well keep up with current literature	5	1
50.	Satisfaction with profession	5	1
63.	Ease of joining an organization in the community	4	0
71.	Clarity of notion of what is worthwhile in life	5	1
	Total 5	B.P.D. = .16	4

TABLE LXXXIX

ITEMS SALIENT ACROSS PIL BOTH PROFESSIONS

Active Professionals Item	Index of Salience	Retired Professionals
12. How rank community now live in	3	0
18. How many other close relatives and close friends died in last ten years	2	0
45. Smoking	2	n.a.*
48. How well keep up with current literature	3	1
50. Satisfaction with profession	3	1
52. Would say health is better	2	1
54. Feel younger than years	2	1
63. Ease of joining an organization	3	0
67. Importance of religious philosophy	2	1
68. Relative importance of religion	2	0
69. Belief in life after death	2	0
71. Clarity of notion of what is worthwhile in life	3	1
72. Ambition	2	0
Total 12 B.P.D. = .32		6

*Item 45 excluded because it included in either test only the responses of the clergymen.

TABLE XC

ITEMS SALIENT ACROSS LSIA BOTH PROFESSIONS

Active Professionals Item		Index of Salience	Retired Professionals
12.	How rank community now live in	2	1
48.	How well keep up with current literature	2	0
50.	Satisfaction with profession	2	1
60.	Smoking	2	n.a.*
71.	Clarity of what is worthwhile in life	2	1
73.	Income bracket	2	1
	Total 5 (6)	B.P.D. = .16	4

*n.a. = item not applicable to retired sample, hence not used to calculate B.P.D.

In the test of salient items on PIL, out of 12 items possible, only 6 were significant among the retired clergymen and professors. B.P.D. of this is only approximately 32 percent. This exceeds the 5 percent or less criteria for acceptance.

In the test of items salient across both measures of morale, and both professions, five items were salient among the active professors. Of these five items, four were also items proving significant among the retired sample. B.P.D. of this is approximately 16 percent. This exceeds the 5 percent criteria for acceptance.

If the multiplicative law of probability is invoked, significance would change greatly. For example, if it is considered that the significant items have already been screened through the .05 level, then (.32) X (.05) = .016. This is clearly within the range of acceptance. Reconsidering the other salient item analyses, (.16) X (.05) = .008. So that of these salient items tests significance ranges from .016 to .008. The hypothesis was not considered sustained as such but as restated; in a general way the correlates among the active and retired are the same. Further comment of this may be found in Chapter IV of the present study.

Test of Hypothesis Ten

H_{10}) Active professionals will have a higher mean on LSIA than retired professionals.

In the test of this hypothesis, the active professionals were compared to the retired professionals, both between professions and within professions. As can be seen in Table XCI, page 172, significance at the .05 level or below was attained in every comparison except in the comparison between active professors and the retired clergy. In this comparison the direction was as hypothesized but probability was only at the .10 level. (See Table LXXXVII, page 165, for comparison of active clergy and active professors; see Appendix D for other comparisons.)

In view of the test H_{10} was accepted.

TABLE XCI

MEAN DIFFERENCE ON LSIA BETWEEN ACTIVE PROFESSIONALS
AND RETIRED PROFESSIONALS

Population	Mean	SD	N	T	Level of Significance (One-Tail)
Active Clergy	15.12	1.98	120		
				1.92	.05
Retired Clergy	14.06	3.43	85		
Active Clergy	15.12	1.98	120		
				2.33	.01
Retired Professors					
Active Professors	14.93	2.98	152		
				1.78	.05
Retired Professors	13.90	3.53	109		
Active Professors	14.93	2.98	152		
				1.41	.10
Retired Clergy	14.06	3.43	85		
All Active Professionals	15.01	2.59	272		
				2.55	.01
All Retired Professionals	13.97	3.48	194		

Test of Hypothesis Eleven

H_{11}) Active professionals will have a higher mean on PIL than retired professionals.

In the test of this hypothesis, the direction was that predicted with the exception of the comparison between the active professors and the retired clergy. The retired clergy had a higher mean on PIL but the difference was not significant. The only comparison significant at the .05 level or lower was that between active clergy and retired professors. The hypothesis was not accepted. Table XCII, page 174, presents these comparisons. (See Table LXXXVII, page 165, for comparison of active clergy and active professors; see Appendix D for other comparisons.)

Test of Hypothesis Twelve

H_{12}) Active employment will contribute positively to high morale as measured by PIL or LSIA.

In the test of this hypothesis, significant items were compared with the comparable sample. This included four tests on LSIA, one with the retired and active clergymen, two with the retired and active professors, and one with both active and retired clergymen and professors. Tests with PIL included two with retired and active clergymen and three with retired and active professors.

Income was a significant item among the retired clergy and significant in terms of the "gross analysis" of the present study. Table XCIII presents a breakdown of the percentages of the respective groups, retired versus active clergymen in terms of the high LSIA category. From this is derived the percentage variation of retirement versus

TABLE XCII

MEAN DIFFERENCE ON PIL BETWEEN ACTIVE PROFESSIONALS
AND RETIRED PROFESSIONALS

Population	Mean	SD	N	T	Level of Significance (One-Tail)
Active Clergy	118.8	9.9	120		
Retired Clergy	118.65	14.91	85	.06	n.s.
Active Clergy	118.8	9.9	120		
Retired Professors	114.12	13.36	109	2.12	.025
Active Professors	117.2	9.6	152		
Retired Professors	114.12	13.36	109	1.49	.10
Active Professors	117.2	9.6	152		
Retired Clergy	118.65	14.91	85	-.60	n.s.
All Active Professionals	117.93	9.76	272		
All Retired Professionals	116.10	14.20	194	1.13	n.s.

employment and income as these independent variables affect the dependent variable, high morale as measured by LSIA.

TABLE XCIII

RETIRED AND ACTIVE CLERGYMEN EFFECT OF INCOME
AND RETIREMENT ON HIGH MORALE
AS MEASURED BY LSIA

	Active Income		Retired Income	
	Low	High	Low	High
High LSIA Percent	35	55	25	65
N	(20)	(42)	(32)	(17)

Effects Parameters:

Active Employment = 0
Income   = .30
r   = .275
s   = .40

	Low	High	Low	High
Actual distribution	.35	.55	.25	.65
Distribution estimated by the additive model	.275	.70	.275	.575

r = random shocks toward high LSIA
s = random shocks away from high LSIA

As can be seen in Table XCIII above the effect of employment and income do not bear an additive relationship. The predicted model in terms of this additive model deviates too much from the actual

distribution. The additive model states that employment has no effect but that income has considerable effect, explaining 30 percent of the variance. Random shocks toward high LSIA leave 27.5 percent of the variance unexplained, and random shocks away from high LSIA leave 40 percent of the variance unexplained. Below in Table XCIV is a multiplicative model which predicts the actual distribution much more closely.

TABLE XCIV

RETIRED AND ACTIVE CLERGYMEN, A MULTIPLICATIVE
MODEL OF THE EFFECTS OF INCOME AND EMPLOYMENT
ON HIGH MORALE AS MEASURED BY LSIA

	Active Income		Retired Income	
	Low	High	Low	High
High LSIA				
Percent	35	55	25	65
Predicted Distribution	35	54	25	66
Effects:				
Income = .46				
Employment = .15				
Random Shock Components = .39				

The multiplicative model predicts with a high degree of precision the actual distribution. Those with low income and who are retired fit the additive model fairly well but fit the multiplicative model even better. The additive model fails to predict the percentage of high

income and retired with high LSIA by underestimating considerably.

Likewise the additive model fails to predict the situation of the

actively employed clergymen by underestimating those employed with low

income and overestimating those with high income. The effects of high

income is underestimated for the retired and overestimated for the

employed. This suggests that high income makes up for loss of employ-

ment among the retired but that employment helps to make up for lowered

income among the clergymen of low salary.

The next significant item to test the effect of active employment

upon high morale as measured by LSIA was how the community presently

lived in was ranked by professors. Table XCV presents this.

TABLE XCV

RETIRED AND ACTIVE CLERGYMEN, EFFECT OF
HOW RANK COMMUNITY ON HIGH MORALE
AS MEASURED BY LSIA

| | Active How Rank Community | | Retired How Rank Community | |
	Low	High	Low	High
High LSIA Percent	48	60	20	45
N	(83)	(57)	(40)	(69)
Predicted Distribution	.445	.63	.23	.415

Effects Parameters:
  Rank Community   = .185
  Active employment = .215
  r   = .23
  s   = .368
Comparative multiplicative model presents predicted distribution:

	.33	.41	.25	.55

As can be seen above in Table XCV, the additive model, while not completely precise, is a much better fit than the multiplicative model which leads to some rather gross errors. In terms of the additive model it can be seen that how the clergymen ranked the community accounted for 18.5 percent of the variance, active employment accounts for 21.5 percent of the variance. Twenty-three percent of the unexplained variance is random shocks toward high LSIA and 36.8 percent of the unexplained variance is random shocks away from high LSIA. The additive model seems to account for the distribution quite adequately.

Professors of both the active group and retired group distributed significantly on LSIA across notion of what is worthwhile in life. Table XCVI presents this below.

TABLE XCVI

RETIRED AND ACTIVE PROFESSORS, EFFECT OF CLARITY OF
NOTION OF WHAT IS WORTHWHILE IN LIFE AND EMPLOYMENT
ON HIGH MORALE AS MEASURED BY LSIA

| | Active Clarity of Notion | | Retired Clarity of Notion | |
	Low	High	Low	High
High LSIA Percent	49	52	33	38
N	(134)	(25)	(36)	(72)
Predicted Distribution	.485	.525	.335	.375

Effects Parameters:
  Notion of what is worthwhile = .04
  Employment   = .15
  r   = .335
  s   = .475

The additive model of Table XCVI presents a neat fitting picture of the relationship of the variables with only what appears to be random error of very small magnitude. Notion of what is worthwhile contributes a scant 4 percent to variance explained while active employment contributes 15 percent to explained variance. Unexplained variance components of random shocks toward high LSIA and random shocks away from high LSIA are 33.5 percent and 47.5 percent respectively.

The last item for a comparison on LSIA was satisfaction with the profession. This item was salient across both professions and both the active and retired professionals. Presentation of this test is in Table XCVII, page 180.

Satisfaction accounts for the greatest amount of variance in this model with a figure of 26 percent. Profession, clergymen or professor, made little difference accounting for only 1.8 percent of the variance. Employment accounted for 16.8 percent of the variance. Random shocks toward and away from high LSIA accounted for 18.5 percent of the variance and 40 percent of the variance respectively. Comparison of the actual distribution with the expected distribution indicates that with the exception of two slight discrepancies, the model is a rather close fit. In the case of the retired clergymen with low LSIA it overpredicts. In the case of the professors who are employed and have high LSIA it overpredicts.

Although not significantly, the additive model overpredicts in five of the eight computations.

Two items were significant and comparable between retired and active clergymen on PIL. One of these was how well the professional kept up with the current literature in his own field, the other was

TABLE XCVII

RETIRED AND ACTIVE PROFESSIONALS CLERGYMEN AND
PROFESSORS EFFECT OF SATISFACTION WITH
PROFESSION AND EMPLOYMENT ON HIGH
MORALE AS MEASURED BY LSIA

| | Active Satisfaction | | | | Retired Satisfaction | | | |
| | Professors | | Clergymen | | Professors | | Clergymen | |
	Low	High	Low	High	Low	High	Low	High
High LSIA Percent	40	56	35	59	17	47	12	47
N	(68)	(92)	(48)	(54)	(36)	(70)	(24)	(61)
Effects Parameters:								
Satisfaction = .26								
Profession = .018								
Employment = .168								
r = .185								
s = .40								
Actual Distribution	.40	.56	.35	.59	.17	.47	.12	.47
Predicted Distribution	.353	.613	.371	.631	.185	.445	.203	.463
Difference	.047	.053	.021	.041	.015	.025	.083	.007

satisfaction with profession. These are found respectively in Table

XCVIII, below, and Table XCIX, page 182.

TABLE XCVIII

RETIRED AND ACTIVE CLERGYMEN EFFECTS OF KEEPING
UP WITH THE CURRENT LITERATURE AND RETIREMENT
ON HIGH MORALE AS MEASURED BY PIL

	Active, Keeping up With the Current Literature		Retired, Keeping up With the Current Literature	
	No	Yes	No	Yes
High PIL Percent	21	59	12	50
N	(48)	(54)	(17)	(25)

Effects Parameters:

Effect of Keeping up = .38
Employment = .09
r = .12
s = .41

| Actual Distribution | .21 | .59 | .12 | .50 |
| Predicted Distribution | .21 | .59 | .12 | .50 |

The additive model predicts precisely the actual distribution in

Table XCVIII above. The effect of keeping up with the current litera-

ture in own field explains 38 percent of the variance, the effect of

employment is only 9 percent of the explained variance. Unexplained

variance components include random shocks toward and away from high

PIL of 12 percent and 41 percent respectively.

Table XCIX below presents the effects of employment and satisfaction with profession on high morale as measured by PIL among active and retired clergymen.

TABLE XCIX

RETIRED AND ACTIVE CLERGYMEN EFFECTS OF
SATISFACTION WITH PROFESSION AND
EMPLOYMENT ON HIGH MORALE AS
MEASURED BY PIL

	Active Satisfaction		Retired Satisfaction	
	Low	High	Low	High
High PIL Percent	33	48	17	51
N	(15)	(28)	(24)	(61)
Effects Parameters:				
Satisfaction = .245				
Employment = .065				
r = .218				
s = .47				
Actual Distribution	.33	.48	.17	.51
Predicted Distribution	.283	.528	.218	.463
Predicted Distribution of Multiplicative Model	.33	.48	.21	.65

Over-all, the additive model is more satisfactory than the multi-
plicative model for assessing the effects of satisfaction with profes-
sion and employment on high morale as measured by PIL among clergymen.
On the other hand, the multiplicative model seems to be more effective
with the active clergymen. The multiplicative model is defective in
predicting the retired, high satisfaction group only. It greatly
misses the mark there, though. In the additive model satisfaction
accounts for 24.5 percent of the variance, employment 6.5 percent of
the variance, and unexplained variance components of random shocks
toward and away from high PIL of 21.8 percent and 47 percent respec-
tively.

Three items were significant and comparable between active and
retired professors on PIL. Employment again has very little effect on
high PIL as measured across self reported health. Self reported health
explains 16.5 percent of the variance with unexplained variance com-
ponents of random shocks toward high PIL of 16 percent and random
shocks away from high PIL of 58.8 percent. This can be seen in Table C
(page 184).

The additive model in Table C is a good fit for the variables of
reported health and employment on high PIL.

TABLE C

RETIRED AND ACTIVE PROFESSORS EFFECTS OF
RETIREMENT AND SELF REPORTED HEALTH
ON HIGH MORALE AS MEASURED BY PIL

	Active Health		Retired Health	
	Low	High	Low	High
High PIL Percent	24	42	17	32
N	(86)	(70)	(41)	(68)
Effects Parameters:				
Actual Distribution	.24	.42	.17	.32
Predicted Distribution	.245	.41	.16	.325

Effects Parameters:

Health   = .165
Employment = .085
r   = .16
s   = .588

The next item was the importance of religious philosophy which was significant among professors. Table CI presents this item.

TABLE CI

RETIRED AND ACTIVE PROFESSORS EFFECTS OF
EMPLOYMENT AND IMPORTANCE OF RELIGIOUS
PHILOSOPHY ON HIGH MORALE AS
MEASURED BY PIL

	Active Importance of Religion		Retired Importance of Religion	
	Low	High	Low	High
High PIL Percent	17	39	18	31
N	(35)	(113)	(34)	(74)
Effects Parameters:				
Religion = .175				
Employment = .035				
r = .158				
s = .63				
Actual Distribution	.17	.39	.18	.31
Predicted Distribution	.193	.368	.158	.333

The magnitude of the variance explained by employment is so small as to be insigificant at only 3.5 percent. Importance of religion contributed 17.5 percent of the explained variance in this model. Random shocks toward high PIL and away from high PIL contributed 15.8 percent and 63 percent, respectively. The model was an acceptable fit.

The predicted distribution did not deviate significantly from the actual distribution.

The final comparable significant item between active and retired professionals on PIL was clarity of notion of what is worthwhile in life. This can be seen below in Table CII.

TABLE CII

RETIRED AND ACTIVE PROFESSORS EFFECTS OF
EMPLOYMENT AND CLARITY OF NOTION OF
WHAT IS WORTHWHILE IN LIFE ON HIGH
MORALE AS MEASURED BY PIL

| | Active, Clarity of Notion | | Retired, Clarity of Notion | |
	Low	High	Low	High
High PIL Percent	28	44	11	35
N	(134)	(25)	(36)	(72)
Effects Parameters:				
Clarity of Notion = .20				
Employment = .13				
r = .13				
s = .54				
Actual Distribution	.28	.44	.11	.35
Predicted Distribution	.26	.46	.13	.33

Deviance of this additive model on clarity of notion and high PIL from the actual distribution is not significant. Clarity of notion contributed 20 percent to the explained variance, and employment contributed 13 percent. Random shocks toward and away from high PIL were 13 percent and 54 percent respectively.

With the exception of income bracket, employment had a positive contribution, however, in many cases not highly significant, on high morale as measured by PIL and LSIA. This obtained in the case of 3 out of 4 tests with LSIA. On all items using PIL as the measure of morale, employment had a magnifying effect on morale. This included five items. Only on one of these items, however, was the variance explained by employment in any way impressive. This item was notion of what is worthwhile in life with employment explaining 13 percent of the variance. A summary of all these measures is presented in Table CIII, page 188.

Considering the small amount of variance explained by employment on PIL, caution is indicated in interpretation. However, and in view of the B.P.D. = .017, with 8 out of 9 items testing in direction expected, H_{12} is considered sustained.

TABLE CIII

SUMMARY OF EFFECTS OF EMPLOYMENT
ON HIGH MORALE

Item	Effect	Profession
LSIA		
Income	0	Clergymen
How Rank Community	.185	Clergymen
Clarity of Notion of Worthwhile	.15	Professors
Satisfaction With Profession	.26	Clergymen and Professors
PIL		
Keeping up With Literature	.09	Clergymen
Satisfaction With Profession	.065	Clergymen
Self Reported Health	.085	Professors
Importance of Religion	.035	Professors
Clarity of Notion of Worthwhile	.13	Professors

Total Items = 9   Total in Direction Expected = 8

B.P.D. = .017

Summary

In the present chapter twelve hypotheses were tested using the
responses of the sample of active professionals, clergymen and profes-
sors together and separately to find significant correlates of PIL and
LSIA which were the measures of morale in the present study. A number
of significant correlates were found on both measures of morale and
within both professions as well as within both professions together.
These results were used to compare the sample of active professionals
with their counterpart; a sample of retired professionals, clergymen
and professors from the same boundaries. It was predicted that the
sample of active professionals would score significantly higher on
measures of morale than the retired professionals. Although the direc-
tion of the mean differences was in the direction expected, the "t"
statistic tested significantly on LSIA but not on PIL.

It was determined then, in a general way, comparing the active and
retired professionals, that the correlates of high morale as measured
by PIL or LSIA were the same among both groups. Tests of the effects
of employment on morale were than made. These tests indicated that
employment has a positive effect upon morale but probably not to the
extent that might be expected among groups of lower status than the
professional sample of the present study. Other groups do not have the
same opportunity structures as clergymen and professors.

CHAPTER IV

SUMMARY AND CONCLUSIONS

Activity theory of aging maintains that sources of meaning and
consequent morale remain pretty much the same throughout life. Thus
high morale among the aging and others is dependent upon active in-
volvement in those activities productive of morale. It could be
expected in terms of the activity theory framework that the correlates
of morale would be the same for an aging population as for the younger
of the same population.[1] On the other hand, disengagement theory
specifies that morale should reflect the relative fit or adjustment of
the individual to the social system. Thus morale among the aging would
be reflected in the past and present relative adjustment of an individ-
ual to his culture and society and not dependent upon continuing
involvement in the activities productive of morale.[2] The present
study was not an attempt to prove either the activity theory or the
disengagement theory. Rather, either theory offered theoretical guide-
lines.

A research strategy and hypotheses were developed in order to get
at two questions: 1) Are the correlates of morale the same for differ-
ing age cohorts? and 2) Is there a decline in morale among the aged as

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[1]For a statement of the activity theory of aging see, Havighurst
and Albrecht, 1953.

[2]Disengagement theory is stated in Cumming and Henry, 1961.

compared with the younger of a given population?

Research Strategy

A mailed questionnaire survey was made of 578 active profession-
als, clergymen and professors of a southwestern state. These clergymen
and professors were representative of a previous study made of the
retired population from the same state.[3] The professionals of the
present study are basically middle class and are different than other
classes of professionals in several respects. The retired profession-
als are probably atypical of retired people in general in that the
retired professionals, clergy and professors, are frequently able to
participate in their profession after formal retirement in ways not
available to other retired people. This is especially true of the
retired clergy who may continue to conduct religious services and
otherwise engage in professional activities at their own discretion.
Emeritus professors may lecture from time to time and also write or
continue research after formal retirement.

A return rate of 61 percent was achieved. In view of the expecta-
tions associated with the mailed questionnaire, it was considered
adequate. Interpretation and conclusions are made with corresponding
due caution.

The data collection instruments consisted of a number of variable
items reflecting items relevant for the morale of an aging individual.
Two measures of morale, the Purpose-in-Life Test (PIL) and the Life

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[3]The retired population, or retired professionals, refers to the
sample of retired clergy and professors in Acuff's work (1967).

Satisfaction Index A (LSIA), were used. The PIL is a twenty-item scale purportedly measuring purpose-in-life or meaning as reflected by the idea of "will to live."[4] The LSIA is a twenty-item scale measuring satisfaction with life. The items of the LSIA appear to be more relevant to persons who have lived longer or who have encountered the major experiences of life expected in American society. The LSIA was not designed for a younger population and the results seem to indicate this. In the present study, the low number of correlates with the LSIA and the reduced reliability coefficient seem to reflect that the LSIA was not designed for a younger population.[5]

The variable item questionnaire had been given to the population of retired professionals in a previous study and was found to be an adequate data gathering instrument.[6] The PIL and LSIA have both been given a number of times in a number of settings with varied populations. The PIL and LSIA were measures of meaning and adjustment respectively in the previous study of retired professionals used in comparison with the active professionals of the present study. In the present study, both PIL and LSIA were subjected to a variety of analyses. These analyses consisted in factor analyses of both scales separately, a test of reliability of each scale, and Pearson product-moment correlation between PIL and LSIA.[7]

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[4]"Manual of Instructions for the Purpose in Life Test."

[5]"The Measurement of Life Satisfaction."

[6]Acuff, 1967.

[7]For factor analysis see, Horst, 1965.

The Factor Analyses

In the case of PIL, all items loaded sufficiently well on one factor for the scale to be considered a one factor scale. Varimax rotation of this produced four underlying dimensions of PIL. These dimensions were: 1) Excitement in Life, 2) Non-Alienation, 3) Love of Life, and 4) Reason for Existence. This rotation of PIL closely approximated simple structure.

Only the responses of the active professionals, clergymen and professors, were used in the factor analyses. Comparisons of these two groups, active clergymen and active professors, yielded some differences. For the clergymen the factor, "Excitement in Life" extracted more variance than the other three factors. With the active professors "Excitement in Life" and "Non-Alienation" extracted the same amount of variance but more than the other two factors.

Factor analyses of LSIA indicated that LSIA was not a one factor scale. Subsequent varimax rotation yielded seven factors. Some of these factors were positive, some negative, and some bi-polar. The LSIA was supposed to be a four or five factor scale. In spite of this, however, the LSIA did yield a close approximation to simple structure with the seven factors.

Tests of Scale Reliability

The test of reliability was the Kuder-Richardson consistency formula.[8] Responses of both the active clergymen and active professors were used in this test. The reliability coefficient produced by PIL

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[8]Roscoe, p. 106.

with the responses of 272 active professionals was r = .97 (120 active clergymen and 152 active professors). The reliability coefficient produced by LSIA was r = .80. The responses of the same 272 active professionals were used in this test.

Correlation Between PIL and LSIA

Pearson product-moment correlation between LSIA and PIL was inconclusive. PIL and LSIA were modestly correlated within the total sample of responses of 120 active clergymen and 152 active professors. PIL and LSIA were negatively correlated within the active clergy sample and positively correlated within the sample of active professors.

Conclusions Concerning Data Collection Instruments

The factor analyses and the test of reliability indicated that the PIL would be a satisfactory instrument. Subsequent use of the PIL in the present study proved it to be so. The PIL was correlated to more items among either the active clergymen or the active professors than the LSIA. In every case the number of correlates of PIL was greater than those expected by chance. In the comparison of active professionals to retired professionals the PIL also proved useful. Item correlates to PIL among active professionals tended to be correlates to PIL among retired professionals.

LSIA on the surface appeared to be disappointing as an instrument for measuring morale among the active professionals. The low reliability coefficient among active professionals, the low loadings on the factor analysis, and the low number of correlates to the variable items among active professionals pointed to difficulty with the LSIA.

However, the LSIA proved to be superior in locating the difference between active professionals and retired professionals. In dichotomous multivariate analysis of active professionals, clergymen and professors versus retired professionals, clergymen and professors, in three out of four comparisons LSIA was significantly responsive to the effects of employment versus retirement. In tests of difference between means, retired professionals versus active professionals the LSIA was sensitive to employment versus retirement in every case except the comparison between retired clergymen and active professors. In this case the direction was as predicted.

In comparing the PIL and LSIA, the PIL seems to be sensitive to a larger range of items than the LSIA. PIL also is probably more effective with younger groups than LSIA. On the other hand, PIL is insensitive to the effects of employment versus retirement while LSIA is most sensitive to this difference.

The Hypotheses

Six hypotheses were developed to facilitate the analysis of data and six hypotheses were developed to compare active and retired professionals.

H_1) There will be significant differences between active clergymen and active professors in rank on LSIA as they are distributed with respect to the variable items. (accepted)

H_2) There will be significant differences between active clergymen and active professors in rank on PIL as they are distributed with respect to the variable items. (accepted)

H_3) There will be significant differences between the active clergymen in rank on LSIA as they are distributed with respect to the variable items. (rejected)

H_4) There will be significant differences between active professors in rank on LSIA as they are distributed with respect to the variable items. (accepted)

H_5) There will be significant differences between active clergymen on PIL as they are distributed with respect to the variable items. (accepted)

H_6) There will be significant differences between active professors in rank on PIL as they are distributed with respect to the variable items. (accepted)

H_7) There will be no differences between active clergy and active professors in means on LSIA. (accepted)

H_8) There will be no differences between active clergy and active professors in means on PIL. (accepted)

H_9) The correlates of measures of morale between active professionals and retired professionals will be the same. (accepted)

H_{10}) Active professionals will have a higher mean on LSIA than retired professionals. (accepted)

H_{11}) Active professionals will have a higher mean on PIL than retired professionals. (rejected)

H_{12}) Active employment will contribute positively to high morale as measured by PIL or LSIA. (accepted)

The Findings

A total of 22 variable items were found correlated to the PIL

among active professionals. A total of 13 items were correlated with LSIA among active professionals. Due to overlap there was a total of 28 variable items correlated with the measures of morale, PIL or LSIA among active professionals, clergymen or professors. Of these 28 items, 26 were directly comparable with the retired clergymen and retired professors. It was discovered that 17 of the comparable 26 items were also correlates of the PIL or LSIA among the retired professionals as well, thus sustaining the hypothesis that the correlates of morale were the same among the retired and active professionals.

In spite of the fact that the item correlates were as diverse as age on the one hand to attitudinal variables concerning personal health to belief in life after death, certain item correlates were outstanding among both active professionals and retired professionals. These most salient items included how the professional ranked the community presently lived in, how well he kept up with the current literature in his own profession, satisfaction with profession, and clarity of notion of what is worthwhile in life. These items appear to be modal representatives of three important sources of morale. The first source is community lived in. The community in which one lives is typically reflective of one's attainment in life and represents the kind of people with which one is inevitably associated. The item on community ranking was related across both measures of morale and among both clergymen and professors on PIL but not among the active clergy on LSIA. Protestant clergymen typically must live in the community they serve and in housing provided by their congregation. A clergyman as an educated professional is thus constrained to live in conditions frequently incongruent to his position as a professional. The professor

on the other hand generally has more choice about his living arrange-
ments. The professor can usually find some satisfactory community and
is generally responsible for providing his own housing. The PIL ap-
pears to be a more sensitive instrument compared to the LSIA. This is
the most probable reason the PIL detected the relationship on community
in which one lives more clearly than the LSIA. On the other hand,
clergymen apparently do not respond to the two measures of morale in
the same way. It is possible that the PIL is very sensitive to a gen-
eralized attitude or outlook on life among the clergy. A clergyman who
scores high on PIL may have a general tendency to positively evaluate
all the circumstances of his life. Thus, there would be a positive
correlation between PIL and ranking of community.

The second source of morale located as a salient item has to do
with profession. Two items, keeping up with the current literature in
own profession and satisfaction with profession, are associated with
this source. One's profession is generally the source of sustenance
which provides the life style of an individual and determines the free-
dom of action an individual may have. Satisfaction with profession
should be a good general indicator of the efficacy with which one's
profession provided for the good things of life however defined. Keep-
ing up with the current literature provides a measure of the interest
built up over the years in one's profession as well as an indirect
measure of general satisfaction with profession.

The last source of morale located as a salient item has to do with
an orientational attitude. This item (notion of what is worthwhile in
life) indicates that the individual has specific criteria by which to
judge his life as well as specific criteria giving direction to his

life. It seems intuitively obvious that people who do not know what they want in life will also not know when they get it. Morale supposedly stems from satisfaction of human desires and needs. Morale should then be positively related to not only getting what one wants but in knowing what one wants out of life. This seems equivalent to the notion that one must make a commitment not only to a means but to a goal in life in order to achieve high morale.

Other item correlates to the measures of morale were less salient than those discussed above. Items salient to PIL in particular reflected items related to the above and also religious items such as belief in life after death, relative importance of religion, and importance of having a personal religious philosophy. Subjective feelings of health also were related to PIL. Items salient across LSIA were the same items that were most salient with the exception of smoking behavior (negatively related to LSIA) and income which was positively related to LSIA. It might be assumed that some of the item correlates were spurious due to the chance expectations of having significant correlations among 5 percent of the items. However, of 26 items which were comparable between the active professionals and the retired professionals, 17 of these items were significantly related to measures of morale among the retired sample as well as to the active sample. This left a total of 9 items significantly related to measures of morale among the active sample which were not significantly related to the retired professionals. If there are spurious correlates, it would be suspected that they would be found among these 9. Two item correlates among the active professionals which were comparable but irrelevant to the retired professionals were those about ambition and ease of joining a

community organization. Ambition seems intuitively correlated with the measures of morale. It is suspected that this is not a spurious correlation. Ease of joining a community organization also appears intuitively related to morale. Joining community organizations may help the younger active professionals to forge links with the community and provide for social anchorages which help sustain morale in later life after retirement.

Number of years in profession and number of years a clergyman in Oklahoma were significantly related to measures of morale among the active professionals but not among the retired. These could be statistical artifacts of the wider variation in years of employment among the active professionals. As such, they could be spurious correlations. Other items that could be spurious correlates among the active professionals include attitudinal items. It would be difficult to locate the truly spurious correlates if any, since all the item correlates have been thought theoretically to be related to morale.

Some of the most significant findings are related to the question concerning the supposed decrease in morale among the retired as opposed to the employed. A test of the difference between means on measures of morale indicated that in every test between the retired professionals and the active professionals the active professionals had significantly higher morale on LSIA as the measure of morale except in the comparison of active professors and retired clergy. In this comparison, the direction was as suspected, the professors did have higher morale as measured by LSIA but the level of significance was only .10. Comparisons between the retired and active professionals on PIL yielded only one significantly different mean. That was the comparison between the

active clergy and the retired professors. In all other comparisons
between active and retired professionals with the exception of the com-
parison between active professors and retired clergy, the direction was
as suspected. Although the mean difference was not significant, active
professionals had higher means on PIL than the retired professionals.
Among the active professionals, mean differences between the clergy and
professors were insignificant. The clergy, however, did score higher
on both measures of morale.

Subsequent comparisons of the retired professionals with the
active professionals were made on items significantly relating to
either measure of morale. In 3 out of 4 comparisons with LSIA as the
measure of morale employment contributed significantly to high morale.
Income was the item across which employment appeared to make no contri-
bution to morale. Using a different model, however, it was found that
employment acted as a depressant to high morale among those with a high
income. In only one comparison out of 5 was employment found to be
significantly related to high morale as measured by PIL. However, in
all 5 cases the direction of the influence of employment was positive
and as predicted. In any case, however, the retired professionals
appear to be no different than other retired persons in that there is
a relative decline in their level of morale. The difference between
these retired professionals and other retired people is that these
retired professionals have higher morale on the average after retire-
ment than the average person does before retirement.

Conclusions

It was concluded that the correlates of morale were the same for

the retired professionals as for the active professionals. Concomitant to this, there is also a relative decline in morale among retired professionals compared to the active professionals. At least this is the case with the retired clergy and professors of one southwestern state. These conclusions would seem to lend support to the activity theory of aging. On the other hand, the retired professionals appear to have made a better adjustment to retirement in terms of morale than average people. These retired professionals also appear to have higher morale in retirement than others do when active. This lends support to the hypothesis that adjustment to society when active means better adjustment when retired.

Opportunity structure after retirement for these professionals may be the reason for continued high morale. If this is the case, then further support for the activity theory will be gained. It may be, though, that these professionals have a better chance to prepare for retirement than average people. Although the salary level for the active professionals was not so high as for other classes of professionals, it was considerably higher than that received by the average individual. These professionals can be classed as successful by any criteria. It may be that retirement and high morale are simply evidence of further successful coping with life for these professionals. Future research should attempt to answer this question of opportunity structure in retirement versus continuation of successful coping. This should help clarify the contributions of activity theory and disengagement theory to the understanding of aging.

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APPENDIX A

LETTERS AND QUESTIONNAIRE

OKLAHOMA STATE UNIVERSITY · STILLWATER

Department of Sociology   74074
(405)372-6211, Exts. 7020, 7021

July 9, 1971

Dear   :

    You have been selected as part of a larger sample for participation in our continuing studies of retired and active professionals. Our previous work in this area has already resulted in a number of articles published in various professional journals. Your cooperation is sincerely solicited.

    In a few days, you will receive a packet containing a questionnaire booklet, another questionnaire, and a stamped addressed envelope. Your early response will greatly facilitate our work. Needless to say, you will remain anonymous in this study. Should you desire information about the study after publication, we will be delighted to inform you where this information may be found.

    Thank you in advance for your cooperation.

                        Sincerely,

                        /s/ Gene Acuff

                        Gene Acuff, Ph.D.
                        Professor and Head

GA:cl

OKLAHOMA STATE UNIVERSITY · STILLWATER

Department of Sociology   74074
(405)372-6211, Exts. 7020, 7021

October 6, 1971

Dear   :

     Some weeks ago you and 600 other randomly selected professionals
were mailed two questionnaires from this department. Our response was
most gratifying. However, we failed to find your return among our
responses. Perhaps you returned and we did not note this or perhaps
you are concerned that you remain anonymous. Our identifying mark was
a number at the lower left hand corner of the return envelope. The
questionnaires were separated from the envelope upon receipt, thus
ensuring that you remain anonymous.

     If you will, please fill out and return the questionnaire. If
you for some reason decide against this please drop a card indicating
why you do not wish to do so. Your cooperation will be most appreci-
ated.

                              Respectfully yours,

                              /s/ H. Charles Lewis

                              H. Charles Lewis
                              Coordinator
                              Professional Studies Research

HCL:ap

INSTRUCTIONS:
    PLEASE READ EACH ITEM THOROUGHLY AND ANSWER EACH ITEM AS IT
APPLIES TO YOU. IN THE EVALUATION STATEMENTS ANSWER IN TERMS OF YOUR
OWN SITUATION AND VALUES. WRITE IN ANY REMARKS YOU CARE TO MAKE AFTER
ANY ITEM. NOTE SPECIFIC INSTRUCTIONS AT THE END OF EACH ITEM.
    AFTER FILLING OUT THIS BOOKLET, NOTE THE ATTACHED PURPOSE IN LIFE
SCALE. INSTRUCTIONS FOR THE PURPOSE IN LIFE SCALE ACCOMPANY THE SCALE.
HOWEVER, YOU NEED NOT SIGN YOUR NAME TO ANY OF THESE SHEETS. ALSO,
ANSWER PART B OF THE PURPOSE IN LIFE SCALE ONLY IF YOU WISH.

1. Age to nearest birthday_____.

2. What is the highest academic degree you have received_____.

3. Do you look forward to the time when you can retire?_____.

4. Do you envision retirement as complete withdrawal from professional
   activity?_____.

5. Of the following items, which one causes you the greatest amount
   of concern? (check one)

   (1) health (my own or spouse's)_____.
   (2) finances . . . . _____.
   (3) children . . . . _____.
   (4) age and death . . . . . . _____.
   (5) lack of being useful . . _____.

6. Place of birth:_____; _____; _____; _____;
                       if born   write in   write in   write in
                       on farm community county   state
                       check

7. In which type of setting did you live most of your life to <u>20</u>
   <u>years of age</u>. (check one)

   (1) rural . . . . _____.
   (2) town under 10,000 . . . . _____.
   (3) city under 50,000 . . . . _____.
   (4) city 50,000 to 100,000 . _____.
   (5) city 100,000 and over . . _____.

8. The state where you lived most of your life up to age 20.

   _____ (write in)

9. The state where you have lived most of your life from age 20 to
   the present.
                         _____. (write in)

10. In which type of setting have you lived most of your life from age 20 to the present. (check one)

    (1) rural . . . . _____ .
    (2) town under 10,000 . . . . _____ .
    (3) city under 50,000 . . . . _____ .
    (4) city 50,000 to 100,000 . _____ .
    (5) city 100,000 and over . . _____ .

11. How long have you lived in the community you now live in? (check one)

    (1) less than one year . . . . _____ .
    (2) one through four years . . . . _____ .
    (3) five through nine years . . . . _____ .
    (4) ten through nineteen years . . . . . _____ .
    (5) twenty through twenty-nine years . . _____ .
    (6) thirty years and over--not all life , _____ .
    (7) all of life . . . . _____ .

12. Would you rank the community you now live in as: (check one)

    (1) an excellent place to live . . . . . _____ .
    (2) a good place to live . . . . _____ .
    (3) a fair place to live . . . . _____ .
    (4) a poor place to live . . . . _____ .

13. Concerning your present living arrangement, check the one best fitting your situation.

    (1) live alone . . . . _____ .
    (2) live with spouse only . . . . _____ .
    (3) live with spouse and children . . . . _____ .
    (4) single parent living with children . _____ .
    (5) live with others than the above . . . _____ .

14. Marital status (check one)

    (1) never married . . . . _____ .
    (2) married only once and spouse is living _____ .
    (3) widower . . . . _____ .
    (4) divorced . . . . _____ .
    (5) married more than once . . . . _____ .

15. Number of living children . . . . (write in)_____ .

16. Number of deceased children . . . . (write in)_____ .

17. Number of deaths in your family in the last 10 years (write in number of each category that has died in the last 10 years)

    (1) wife . . . . _____.
    (2) children . . . . _____.
    (3) parents . . . . _____.
    (4) total number of deaths in last ten years   _____.

18. About how many other close relatives and close friends have died in the last 10 years (write in number) _____.
if none check_____.

19. Frequency of contact with any of your children not living with you by personal visit.(if you have children in this category check one)

    (1) daily . . . . _____.
    (2) less than daily but more than weekly . _____.
    (3) weekly . . . . _____.
    (4) monthly . . . . _____.
    (5) less than monthly . . . . _____.
    (6) yearly . . . . _____.
    (7) almost never or never . . . . _____.

20. Frequency of contact with any of your children not living with you by personal visit. (if you have children in this category check one)

    (1) daily . . . . _____.
    (2) less than daily but more than weekly . _____.
    (3) weekly . . . . _____.
    (4) monthly . . . . _____.
    (5) less than monthly but more than yearly _____.
    (6) yearly . . . . _____.
    (7) almost never or never . . . . _____.

21. If you have adult children not living with you, what is the average distance of your children from home? (for example, John lives 50 miles away and Mary lives 100 miles from home. The average distance of your children from home would be 75 miles.) (check one)

    (1) under 50 miles . . . . . _____.
    (2) 50 to 500 miles . . . . . _____.
    (3) 500 to 1,000 miles . . . _____.
    (4) over 1,000 miles . . . . _____.

22. Children should take care of their parents, in whatever way necessary when the parents are sick. (check one)

    (1) agree_____. (2) disagree_____.

23. Parents should take care of their grown children in whatever way necessary when they are sick. (check one) (1) agree_____.
(2) disagree_____.

24. Children should give their parents financial help. (check one)

    (1) agree_____. (2) disagree_____.

25. Parents should give their grown children financial help. (check one) (1) agree_____. (2) disagree_____.

26. If children live nearby after they grow up, their parents should visit them at least once a week. (check one)
    (1) agree_____. (2) disagree_____.

27. If children live nearby after they grow up, they should visit their parents at least once a week. (check one)
    (1) agree_____. (2) disagree_____.

28. Children who live at a distance should write to their parents at least once a week. (check one) (1) agree_____. (2) disagree _____.

29. Parents should write to their children who live at a distance at least once a week. (check one) (1) agree_____.
    (2) disagree_____.

30. The children should feel responsible for their parents after the children are grown. (check one) (1) agree_____. (2) disagree _____.

31. Parents should feel responsible for their grown children. (check one) (1) agree_____. (2) disagree_____.

32. If you have grown children, have any of your children helped out when either you or your spouse was sick? (check one)
    (1) need present and met_____. (2) need present and not met _____. (3) never such need _____.

33. If you have grown children, have any of them given you advice on business or money matters? (check one) (1) need present and met _____. (2) need present and not met_____. (3) never such need_____.

34. If you have grown children, have you helped them in any way when someone was sick in their family? (check one) (1) need present and met_____. (2) need present and not met_____. (3) never such need_____.

35. If you have grown children, have you given any of your children advice on business or money matters? (check one) (1) need present and met_____. (2) need present and not met_____. (3) never such need_____.

36. If you have grown children, how willing would you say they would be to make sacrifices for you? (check one) (1) moderately willing _____. (2) very willing_____. (3) not willing_____.

37. If you have grown children, have any of your children ever offered financial assistance to you? (check one) (1) need present and met _____. (2) need present and not met_____. (3) never such need_____.

38. Married children, when possible, should live close (within a day's drive or less) to their parents. (check one)
(1) agree_____. (2) disagree_____.

39. How much education did your father, step-father or the person primarily responsible for you before adulthood have? (check one)

(1) professional education (Ph.D., M.D., M. A., etc.) . _____.
(2) 4 year college graduate . . . . _____.
(3) 1-3 years of college . . . . _____.
(4) high school graduate . . . . _____.
(5) 10-11 years of school . . . . _____.
(6) 7-9 years of school . . . . _____.
(7) under 7 years of school . . . . _____.

IF AN EDUCATOR FROM STATE UNIVERSITY OR COLLAGE ANSWER 40, 41, and 42 THEN CONTINUE WITH 46.

40. What is your academic rank? (Check appropriate one or ones)

(1) administrator, such as Dean of College . . _____.
(2) head of a department or division . . . . . _____.
(3) full professor . . . . _____.
(4) associate professor . . . . _____.
(5) assistant professor . . . . _____.
(6) instructor . . . . _____.
(7) other, explain_____.

41. How many years have you been employed in education?_____.

42. How many years have you been employed in Oklahoma higher education?_____.

IF A CLERGYMAN, ANSWER 43, 44, and 45 THEN CONTINUE WITH 46.

43. Indicate your one major area of activity during most of your professiona life. (check one)

(1) pastoral . . . . _____.
(2) military chaplain . . . . _____.
(3) administration (above local church) . . . . _____.
(4) evangelist . . . . _____.
(5) educational (with local church) . . . . . . _____.
(6) administration (in church related college) _____.
(continued on next page)

(7) educational (with church related college) . _____.

(8) institutional chaplain . . . . _____.

(9) missionary . . . . _____.

44. If most of your life as a clergyman has been spent with a church congregation, indicate the size of the <u>adult</u> membership of the largest congregation you have served.

(1) less than 100 _____.

(2) 100-200 . . . _____.

(3) 200-300 . . . _____.

(4) 300-400 . . . _____.

(5) 400-500 . . . _____.

(6) over 500 . . _____.

45. How many years have you been a clergyman in Oklahoma? _____.

46. Please indicate the number of years employed full time in your profession. _____.

47. This question has to do with membership in a professional organization. (check the appropriate response)

(1) I have no membership in a professional organization _____.

(2) I have membership in a professional organization but never attend meetings . . . . _____.

(3) I have membership in professional organizations and do attend meetings . . . . _____.

(4) I consider myself highly active in professional organizations . . . . _____.

48. With regard to the current literature in your field: how well do you keep up?

(1) very well . . . _____.

(2) quite well . . _____.

(3) slightly . . . _____.

(4) not at all . . _____.

49. All things considered, with whom would you say that you spend most of your time? (check one)

(1) alone . . . . _____.

(2) with people in my profession . . . . _____.

(3) with people in other professions . . . . _____.

(4) with non-professional people . . . . _____.

(5) with relatives other than spouse and children . . . _____.

(6) with spouse and children . . . . _____.

(7) with spouse . . . . _____.

50. To what extent do you feel satisfied with your profession? (check one)

    (1) very satisfied, would pick same profession again . _____.

    (2) generally satisfied, would pick same profession
        again . . . . _____.

    (3) mildly dissatisfied, would not pick same profession
        again . . . . _____.

    (4) very dissatisfied, would not pick same profession
        again . . . . _____.

51. In general, would you say your health is good, fair, or poor? (check one)

    (1) good_____. (2) fair_____. (3) poor_____.

52. Would you say that your health is better or worse than the health of other people your same age? (check one)

    (1) better_____. (2) same_____. (3) worse_____.

53. I have never felt better in my life. (check one)

    (1) agree_____. (2) disagree_____.

54. Do you feel older or younger than your years? (check one)

    (1) older_____. (2) younger_____. (3) same_____.

55. If I can't feel better soon, I would just as soon die. (check one)

    (1) agree_____. (2) disagree_____.

56. My health is beginning to be a burden to me. (check one)

    (1) agree_____. (2) disagree_____.

57. I feel just miserable most of the time. (check one)

    (1) agree_____. (2) disagree_____.

58. If spouse is living, would you say her health is good, fair, or poor? (check one)

    (1) good_____. (2) fair_____. (3) poor_____.

59. Do you smoke? (check one)

    (1) yes_____. (2) no_____.

60. Do you smoke cigarettes? (check one)

    (1) yes_____. (2) no_____.

61. Do you drink alcoholic beverages? (check one)

(1) yes_____. (2) no_____.

62. How many times a week are you engaged in civic activities such as Lions, Kiwanis, Rotary, etc.? (check one)

(1) one . . . . _____.
(2) two . . . . _____.
(3) three . . . . . . _____.
(4) four . . . . _____.
(5) five or more . . _____.
(6) none . . . . . . _____.

63. Are you the sort of person who finds it easy or difficult to join an organization in the community? (check one)

(1) easy_____. (2) difficult_____. (3) about average_____.

64. About how often do you entertain, or how often are you entertained by friends? (check one)

(1) about once a week ore more . . _____.
(2) a few times a month . . . . . . _____.
(3) once a month . . . . _____.
(4) once a year . . . . _____.
(5) a few times a year . . . . . . _____.
(6) almost never or never . . . . . _____.

65. As you define friends, which one of the following conditions do you prefer most? (check one)

(1) prefer having many friends . . . . _____.
(2) prefer having only a few close friends . . _____.
(3) undecided . . . . _____.

66. In terms of persons (other than relatives) with whom you interact most frequently, are they mostly, (check one)

(1) younger than I am _____.
(2) older than I am . _____.
(3) my own age . . . _____.

67. How important is it to you personally to believe in some religious philosophy? (check one)

(1) very important . . . . . . _____.
(2) moderately important. . . . _____.
(3) not particularly important _____.
(4) definitely not important . _____.

68. Is religion more important to you now or less important than it was five to ten years ago? (check one)

    (1) more important . . . _____.
    (2) less important . . . _____.
    (3) about the same . . . _____.

69. Do you believe in life after death? (check one)

    (1) yes_____. (2) no_____.

70. Of what specific religious faith, if any, are you a member? (write in specific church or religion)_____.

71. Nowadays there seems to be a great deal of discussion about what is worthwhile in life. How do you feel about this? Do you have a clear notion about what is worth while in life or a very uncertain notion about what is worthwhile in life? (check one)

    (1) clear notion_____.   (3) uncertain_____.
    (2) fairly clear_____.   (4) very uncertain_____.

72. How important, to you personally, has it been to get ahead in life? (check one)

    (1) very important . . . . _____.
    (2) faily important . . . . _____.
    (3) not very important . . . . . . _____.
    (4) definitely not important . . . _____.

73. What is your income bracket? (check one)

    (1) under $5,000 per year . . _____.
    (2) $5,000-7,500 per year . . _____.
    (3) 7,600-10,000 per year . . _____.
    (4) 10,000-15,000 per year . _____.
    (5) over 15,000 per year . . _____.

74. What is the approximate total value of your estate in terms of net worth? (check one)

    (1) $10,000-20,000 . . . . . _____.
    (2) $20,000-30,000 . . . . . _____.
    (3) $30,000-40,000 . . . . . _____.
    (4) $40,000-50,000 . . . . . _____.
    (5) $50,000-60,000 . . . . . _____.
    (6) $60,000-70,000 . . . . . _____.
    (7) over $70,000 . . . . . . _____.

75. Is most of your income derived from your profession or other interests? (check one)

    (1) most of income derived from practice of profession _____.
    (2) most of income derived from other sources . . . . _____.

Here are some statements about life in general that people feel differently about. Would you read each statement on the list, and if you agree with it, put a check mark in the space under "AGREE". If you do not agree with a statement, put a check mark in the space under "DISAGREE". If you are not sure one way or the other, put a check mark in the space under "?". PLEASE BE SURE TO ANSWER EVERY QUESTION ON THE LIST.

	AGREE	DISAGREE	?
1. As I grow older, things seem better than I thought they would be.			
2. I have gotten more of the breaks in life than most of the people I know.			
3. This is the dreariest time of my life.			
4. I am just as happy as when I was younger.			
5. My life could be happier than it is now.			
6. These are the best years of my life.			
7. The best years of my life are yet to come.			
8. Most of the things I do are boring or monotonous.			
9. I expect some interesting and pleasant things to happen to me in the future.			
10. The things I do are as interesting to me as they ever were.			
11. I feel old and somewhat tired.			
12. I feel my age, but it does not bother me.			
13. As I look back on my life, I am fairly well satisfied.			
14. I would not change my past life if I could.			
15. Compared to other people my age, I've made a lot of foolish decisions.			

AGREE DISAGREE ?

16. Compared to other people my age
I make a good appearance.

_____ _____ _____

17. When I think back over my life,
I didn't get most of the important
things I wanted.

_____ _____ _____

18. I have made plans for things I'll
be doing a month or a year from now.

_____ _____ _____

19. Compared to other people, I get
down in the dumps too often.

_____ _____ _____

20. I've gotten pretty much what I
expected out of life.

_____ _____ _____

21. In spite of what people say, the
lot of the average man is getting
worse, not better.

_____ _____ _____

22. Other things being equal, I expect
that the future will bring me the
things I really want out of life.

_____ _____ _____

APPENDIX B

THE PURPOSE IN LIFE TEST

For each of the following statements, circle the number that would be most nearly true for you. Note that the numbers always extend from one extreme feeling to its opposite kind of feeling. "Neutral" implies no judgement either way. Try to use this rating <u>as little</u> as possible.

1. I am usually:
   1   2   3   4   5   6   7
   completely   (neutral)   exuberant
   bored   enthusiastic

2. Life to me seems:
   7   6   5   4   3   2   1
   always   (neutral)   completely
   exciting   routine

3. In life I have:
   1   2   3   4   5   6   7
   no goals or   (neutral)   very clear
   aims at all   goals and aims

4. My personal existence is:
   1   2   3   4   5   6   7
   utterly meaningless, (neutral)   very purposeful
   without purpose   and meaningful

5. Every day is:
   7   6   5   4   3   2   1
   constantly new   (neutral)   exactly the same
   and different

6. If I could choose, I would:
   1   2   3   4   5   6   7
   prefer never to   (neutral)   like nine more lives
   have been born   just like this one

7. After retiring:
   1   2   3   4   5   6   7
   I would like to do (neutral)   I would like to completely
   some of the exciting   loaf the rest of my life
   things I have always
   wanted to do

8. In achieving life goals I have:
   1   2   3   4   5   6   7
   made no progress (neutral)   progressed to complete
   whatever   fulfillment

9. My life is:
   1   2   3   4   5   6   7
   empty, filled only (neutral)   running over with
   with despair   exciting things

10. If I should die today, I would feel that my life has been:
    7   6   5   4   3   2   1
    very worthwhile   (neutral)   completely worthless

11. In thinking of my life, I:

       1   2   3   4   5   6   7

     often wonder   (neutral)   always see a reason

     why I exist   for being here

12. As I view the world in relation to my life, the world:

       1   2   3   4   5   6   7

     completely   (neutral)   fits meaningfully

     confuses me   with my life

13. I am a:

       1   2   3   4   5   6   7

     very irresponsible (neutral)   very responsible person

     person

14. Concerning man's freedom to make his own choices, I believe man is:

       1   2   3   4   5   6   7

     absolutely free to   (neutral)   completely bound by limi-

     make all life choices   tations of heredity and

                                          environment

15. With regard to death, I am:

       1   2   3   4   5   6   7

     prepared and   (neutral)   unprepared and frightened

     unafraid

16. With regard to suicide, I have:

       1   2   3   4   5   6   7

     thought of it seri- (neutral)   never given it a second

     ously as a way out   thought

17. I regard my ability to find a meaning, purpose, or mission in life as:

       7   6   5   4   3   2   1

     very great   (neutral)   practically none

18. My life is:

       7   6   5   4   3   2   1

     in my hands and I   (neutral)   out of my hands and con-

     am in control of it   trolled by external factors

19. Facing my daily tasks is:

       7   6   5   4   3   2   1

     a source of pleasure (neutral)   a painful and boring

     and satisfaction   experience

20. I have discovered:

       7   6   5   4   3   2   1

     no mission or   (neutral)   clear-cut goals and a

     purpose in life   satisfying life purpose

APPENDIX C

FACTOR ANALYSES TABLES

TABLE CIV

FACTOR ANALYSES OF PIL, PRINCIPAL
AXIS ANALYSIS FACTOR II

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm			
2. Exciting life	-.38	.31	-.46
3. Clear goals		-.30	
4. Purposeful existence		-.39	
5. Every day new	-.39	.32	-.37
6. Want nine more lives same			
7. After retiring want activity	-.34	.32	
8. Progress toward life goals		-.33	
9. Life is full			
10. Life worthwhile			
11. Reason for existence	.47	-.31	.31
12. World fits meaningfully	.42		.32
13. Responsible	.34		.45
14. Freedom	.35	.38	.37
15. Unafraid of death		-.46	
16. Suicide (negative)			
17. Ability to find meaning			
18. In control of life	.52	.59	.52
19. Daily tasks satisfying	-.31		
20. Discovered clear goals			

TABLE CV

FACTOR ANALYSES OF PIL PRINCIPAL
AXIS ANALYSIS FACTOR III

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm			
2. Exciting life	.35	-.49	.31
3. Clear goals	-.45		-.39
4. Purposeful existence			
5. Every day new		-.30	
6. Want nine more lives same	.37		.34
7. After retiring want activity	.50		.44
8. Progress toward life goals			
9. Life is full			
10. Life worthwhile			
11. Reason for existence			
12. World fits meaningfully			
13. Responsible		.53	
14. Freedom		.55	
15. Unafraid of death	-.33		-.51
16. Suicide (negative)	.41		.42
17. Ability to find meaning			
18. In control of life		.38	
19. Daily tasks satisfying			
20. Discovered clear goals	-.30		

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TABLE CVI

FACTOR ANALYSES OF PIL PRINCIPAL
AXIS ANALYSIS FACTOR IV

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm			
2. Exciting life			
3. Clear goals			
4. Purposeful existence			
5. Every day new			
6. Want nine more lives same		.57	
7. After retiring want activity			
8. Progress toward life goals	.50		-.31
9. Life is full			
10. Life worthwhile			
11. Reason for existence	-.41		.38
12. World fits meaningfully	-.36		.45
13. Responsible	.56		-.46
14. Freedom			
15. Unafraid of death	-.39		.30
16. Suicide (negative)		.63	
17. Ability to find meaning			.30
18. In control of life	.30		
19. Daily tasks satisfying			
20. Discovered clear goals		-.30	-.30

TABLE CVII

FACTOR ANALYSES OF PIL VARIMAX ROTATION
ANALYSIS FACTOR I

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm	.71	.32	.67
2. Exciting life	.77	.02*	.73
3. Clear goals	.48	.41	.54
4. Purposeful existence	.61	.55	.59
5. Every day new	.78	.07	.72
6. Want nine more lives same	.42	.18	.28
7. After retiring want activity	.05	.24	.11
8. Progress toward life goals	.37	.74	.38
9. Life is full	.59	.45	.62
10. Life worthwhile	.27	.68	.25
11. Reason for existence	.12	.70	.12
12. World fits meaningfully	.13	.25	.02
13. Responsible	.03	.12	.11
14. Freedom	-.05	.03	.02
15. Unafraid of death	.12	.68	.17
16. Suicide (negative)	.12	-.01	.10
17. Ability to find meaning	.40	.44	.40
18. In control of life	-.02	.05	.06
19. Daily tasks satisfying	.66	.43	.65
20. Discovered clear goals	.64	.44	.64

*Underscoring of an item indicates that the item failed to meet
criteria of .30 loading or better.

TABLE CVIII

FACTOR ANALYSES OF PIL VARIMAX ROTATION
ANALYSIS FACTOR II

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm		.52	
2. Exciting life		.86	
3. Clear goals		.32	.34
4. Purposeful existence	.35	.42	
5. Every day new		.79	
6. Want nine more lives same			
7. After retiring want activity			
8. Progress toward life goals			.48
9. Life is full		.62	
10. Life worth while	.65		.36
11. Reason for existence	.83		
12. World fits meaningfully	.72		
13. Responsible			.76
14. Freedom			.48
15. Unafraid of death			
16. Suicide (negative)			
17. Ability to find meaning	.41	.48	
18. In control of life	.55		.67
19. Daily tasks satisfying		.56	
20. Discovered clear goals		.45	.39

TABLE CIX

FACTOR ANALYSES PIL VARIMAX ROTATION
ANALYSIS FACTOR III

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm			.30
2. Exciting life			.32
3. Clear goals	-.37		-.32
4. Purposeful existence			
5. Every day new			
6. Want nine more lives same	.47	.30	.53
7. After retiring want activity	.65	.45	.56
8. Progress toward life goals			
9. Life is full			
10. Life worth while			
11. Reason for existence			
12. World fits meaningfully			.42
13. Responsible			
14. Freedom		.67	
15. Unafraid of death			
16. Suicide (negative)	.59		.52
17. Ability to find meaning			
18. In control of life		.82	.36
19. Daily tasks satisfying			
20. Discovered clear goals		.31	

TABLE CX

FACTOR ANALYSES OF PIL VARIMAX ROTATION
ANALYSIS FACTOR IV

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. Enthusiasm			
2. Exciting life			
3. Clear goals	.45		
4. Purposeful existence	.30		.47
5. Every day new			
6. Want nine more lives same		.69	
7. After retiring want activity			
8. Progress toward life goals	.61		
9. Life is full	.31		.31
10. Life worthwhile			.52
11. Reason for existence			.75
12. World fits meaningfully		.35	.58
13. Responsible	.75		
14. Freedom			
15. Unafraid of death			.66
16. Suicide (negative)		.74	
17. Ability to find meaning			.61
18. In control of life	.61		
19. Daily tasks satisfying			
20. Discovered clear goals	.37		

TABLE CXI

FACTOR ANALYSES OF LSIA PRINCIPAL AXIS
ANALYSIS FACTOR II

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others			
3. Dreariest time of life	-.41		-.47
4. Happy as when younger			
5. Life could be happier	.45		.42
6. Best years of life		-.36	
7. Things done boring	-.43	-.41	-.46
8. Expect interesting future	-.59		-.59
9. Things done are as interesting	-.46		
10. Feel old and tired			
11. Feel my age but no bother			
12. Retrospectively satisfied	.35		.33
13. Would not change past life	.39		.46
14. Foolish decisions		.36	
15. Good appearance	.30		
16. Plans for future		.62	
17. Didn't get most of important		.61	
18. Get down in dumps			
19. Gotten expectations	.35	.51	.41
20. Lot of average man	.32		

TABLE CXII

FACTOR ANALYSES OF LSIA PRINCIPAL AXIS
ANALYSIS FACTOR III

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others			-.46
3. Dreariest time of life		.45	
4. Happy as when younger			
5. Life could be happier		-.41	
6. Best years of life	-.46		-.34
7. Things done boring			
8. Expect interesting future		.70	
9. Things done are as interesting		-.31	.33
10. Feel old and tired			
11. Feel my age but no bother	.37		
12. Retrospectively satisfied			
13. Would not change past life	.35	-.46	.30
14. Foolish decisions		.46	
15. Good appearance			.33
16. Plans for future		.37	
17. Didn't get most of important			.41
18. Get down in dumps	.58		.53
19. Gotten expectations			
20. Lot of average man	.58		.34

TABLE CXIII

FACTOR ANALYSES OF LSIA PRINCIPAL AXIS
ANALYSIS FACTOR IV

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			-.34
2. More breaks than others	.30	-.53	
3. Dreariest time of life		.36	
4. Happy as when younger		.33	
5. Life could be happier	-.39		-.33
6. Best years of life			-.40
7. Things done boring		.42	-.31
8. Expect interesting future	.44		.46
9. Things done are as interesting		.40	
10. Feel old and tired			
11. Feel my age but no bother	.43		
12. Retrospectively satisfied	.33	-.33	
13. Would not change past life			
14. Foolish decisions			
15. Good appearance			
16. Plans for future	.43		.56
17. Didn't get most of important		.41	
18. Get down in dumps		.44	
19. Gotten expectations	.32		
20. Lot of average man			

TABLE CXIV

FACTOR ANALYSES OF LSIA PRINCIPAL AXIS
ANALYSIS FACTOR V

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others	.60		.38
3. Dreariest time of life		.36	
4. Happy as when younger			
5. Life could be happier			
6. Best years of life			
7. Things done boring			
8. Expect interesting future			
9. Things done are as interesting		-.35	
10. Feel old and tired		.53	
11. Feel my age but no bother		.31	.46
12. Retrospectively satisfied	-.42	.44	
13. Would not change past life			
14. Foolish decisions			-.36
15. Good appearance	.60		
16. Plans for future			
17. Didn't get most of important			-.45
18. Get down in dumps			
19. Gotten expectations			
20. Lot of average man	.30	-.39	.35

TABLE CXV

FACTOR ANALYSES OF LSIA PRINCIPAL AXIS
ANALYSIS FACTOR VI

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others			
3. Dreariest time of life			
4. Happy as when younger	.37	-.38	
5. Life could be happier			
6. Best years of life	.41	-.38	
7. Things done boring			
8. Expect interesting future			
9. Things done are as interesting			
10. Feel old and tired			
11. Feel my age but no bother		.32	
12. Retrospectively satisfied		-.36	-.45
13. Would not change past life		.32	-.42
14. Foolish decisions	.81		.34
15. Good appearance	.51	-.31	.44
16. Plans for future			
17. Didn't get most of important			
18. Get down in dumps			.37
19. Gotten expectations			
20. Lot of average man		.51	.42

TABLE CXVI

FACTOR ANALYSES OF LSIA PRINCIPAL AXIS
ANALYSIS FACTOR VII

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others			
3. Dreariest time of life	-.42		-.39
4. Happy as when younger			
5. Life could be better			
6. Best years of life			
7. Things done boring			
8. Expect interesting future			
9. Things done are as interesting		.35	.35
10. Feel old and tired			-.47
11. Feel my age but no bother		.54	.44
12. Retrospectively satisfied			
13. Would not change past life			
14. Foolish decisions			
15. Good appearance			
16. Plans for future			
17. Didn't get most of important	.72		
18. Get down in dumps		-.49	
19. Gotten expectations			
20. Lot of average man			

TABLE CXVII

FACTOR ANALYSES OF LSIA VARIMAX ROTATION
ANALYSIS FACTOR I

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better	.32	.76	.39
2. More breaks than others		.34	
3. Dreariest time of life	.48		
4. Happy as when younger	.56		.64
5. Life could be happier			
6. Best years of life	.46	.81	.48
7. Things done boring	.73		.62
8. Expect interesting future	.48		
9. Things done are as interesting	.76		.77
10. Feel old and tired	.31		
11. Feel my age but no bother			
12. Retrospectively satisfied			
13. Would not change past life			
14. Foolish decisions			
15. Good appearance			
16. Plans for future			
17. Didn't get most of important			.32
18. Get down in dumps			
19. Gotten expectations			
20. Lot of average man			

TABLE CXVIII

FACTOR ANALYSES OF LSIA VARIMAX ROTATION
ANALYSIS FACTOR II

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others		-.33	
3. Dreariest time of life			
4. Happy as when younger		.58	
5. Life could be happier			
6. Best years of life			
7. Things done boring			
8. Expect interesting future			
9. Things done are as interesting			
10. Feel old and tired			
11. Feel my age but no bother			
12. Retrospectively satisfied	.75		
13. Would not change past life	.49		
14. Foolish decisions			
15. Good appearance			
16. Plans for future	.56	.38	
17. Didn't get most of important		.77	
18. Get down in dumps			.70
19. Gotten expectations	.72	.34	
20. Lot of average man			.74

TABLE CXIX

FACTOR ANALYSES OF LSIA VARIMAX ROTATION
ANALYSIS FACTOR III

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			-.59
2. More breaks than others			-.68
3. Dreariest time of life			
4. Happy as when younger			
5. Life could be happier		-.67	
6. Best years of life			-.34
7. Things done boring			
8. Expect interesting future		.45	
9. Things done are as interesting			
10. Feel old and tired	-.39		
11. Feel my age but no bother			
12. Retrospectively satisfied			
13. Would not change past life		-.68	
14. Foolish decisions			
15. Good appearance			-.57
16. Plans for future			
17. Didn't get most of important			.42
18. Get down in dumps	.79	-.38	
19. Gotten expectations		-.38	
20. Lot of average man	.70		

TABLE CXX

FACTOR ANALYSES OF LSIA VARIMAX ROTATION
ANALYSIS FACTOR IV

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others			
3. Dreariest time of life	.48		
4. Happy as when younger			
5. Life could be happier			-.56
6. Best years of life	-.38		
7. Things done boring		.67	
8. Expect interesting future	.41	.31	.71
9. Things done are as interesting		.77	
10. Feel old and tired			
11. Feel my age but no bother	.68		
12. Retrospectively satisfied			
13. Would not change past life			
14. Foolish decisions			
15. Good appearance			
16. Plans for future			.38
17. Didn't get most of important			
18. Get down in dumps			
19. Gotten expectations			
20. Lot of average man		.40	

TABLE CXXI

FACTOR ANALYSES OF LSIA VARIMAX ROTATION
ANALYSIS FACTOR V

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better	.49		
2. More breaks than others	.85		
3. Dreariest time of life		.75	
4. Happy as when younger			
5. Life could be happier			
6. Best years of life			-.30
7. Things done boring		.37	
8. Expect interesting future		.40	
9. Things done are as interesting			
10. Feel old and tired		.70	
11. Feel my age but no bother			.62
12. Retrospectively satisfied			
13. Would not change past life			
14. Foolish decisions			-.65
15. Good appearance	.57		
16. Plans for future			-.37
17. Didn't get most of important			
18. Get down in dumps		.30	
19. Gotten expectations			
20. Lot of average man			

TABLE CXXII

FACTOR ANALYSES LSIA VARIMAX ROTATION
ANALYSIS FACTOR VI

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better		.36	
2. More breaks than others			
3. Dreariest time of life			
4. Happy as when younger	.37		
5. Life could be happier			-.34
6. Best years of life	.41		
7. Things done boring			
8. Expect interesting future			
9. Things done are as interesting			
10. Feel old and tired			
11. Feel my age but no bother			
12. Retrospectively satisfied			-.67
13. Would not change past life			-.63
14. Foolish decisions	.81		
15. Good appearance	.51		
16. Plans for future		.35	-.51
17. Didn't get most of important			
18. Get down in dumps			
19. Gotten expectations			-.64
20. Lot of average man		.35	

TABLE CXXIII

FACTOR ANALYSES LSIA VARIMAX ROTATION
ANALYSIS FACTOR VII

Item	Professors (n=152)	Clergy (n=120)	Both (n=272)
1. As grow older things better			
2. More breaks than others		.41	
3. Dreariest time of life			-.68
4. Happy as when younger			
5. Life could be happier			
6. Best years of life			
7. Things done boring			-.37
8. Expect interesting future			-.32
9. Things done are as interesting			
10. Feel old and tired			-.72
11. Feel my age but no bother		.79	
12. Retrospectively satisfied			
13. Would not change past life			
14. Foolish decisions			
15. Good appearance			
16. Plans for future			
17. Didn't get most of important	.89		
18. Get down in dumps		-.38	
19. Gotten expectations			
20. Lot of average man			

APPENDIX D

TABLES COMPARING STUDIES OF ACTIVE AND

RETIRED PROFESSIONALS

TABLE CXXIV

MEAN DIFFERENCE ON LSIA BETWEEN THE KANSAS CITY
STUDY AND ACTIVE AND RETIRED PROFESSIONALS

Population	Mean	SD	N	T	Level of Significance (One-Tail)
Active Clergy	15.12	1.98	120	4.18	.0005
Kansas City Study*	12.40	4.40	90		
Active Professors	14.93	2.98	152	3.56	.0005
Kansas City Study	12.40	4.40	90		
Retired Professors	13.90	3.53	109	2.38	.01
Kansas City Study	12.40	4.40	90		
Retired Clergy	14.06	3.43	85	2.81	.01
Kansas City Study	12.40	4.40	90		
All Retired Clergy	13.97	3.48	194	2.96	.01
Kansas City Study	12.40	4.40	90		

*Neugarten, p. 139.

TABLE CXXV

MEAN DIFFERENCE ON PIL BETWEEN THE ORIGINAL STUDY
OF PIL AND ACTIVE AND RETIRED PROFESSIONALS

Population	Mean	SD	N	T	Level of Significance (One-Tail)
Active Clergy	118.8	9.9	120		
				.09	n.s.
Original Study[*]	118.0	12.81	58		
Active Professors	117.2	9.6	152		
				-.10	n.s.
Original Study	118.0	12.81	58		
Retired Professors	114.12	13.36	109		
				-1.84	.05
Original Study	118.00	12.81	58		
Retired Clergy	118.65	14.91	85		
				.28	n.s.
Original Study	118.00	12.81	58		
All Retired Professionals	116.10	14.20	194		
				-.96	n.s.
Original Study	118.00	12.81	58		

[*]Crumbaugh and Maholick, 1964, p. 201.

TABLE CXXVI

FACTOR ANALYSES PIL BISERIAL CORRELATION BETWEEN
CLERGY AND PROFESSORS OR ROTATED FACTORS

Factor	rbi	t	df	Level of Significance (One-Tail)
I	.39	1.804	18	.05
II	.10	.02	18	n.s.
III	.29	1.290	18	n.s.
IV	0	0	18	n.s.

VITA *2*

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